



CAMBRIDGE ISOTOPE LABORATORIES

PRODUCT AND COMPANY IDENTIFICATION

Product Name: SET OF CHLOROPHENOLIC MIXES FOR METHOD 1653A
UNLABELED

Catalog No: EM-4180

Company: Cambridge Isotope Laboratories Inc.
50 Frontage Road
Andover, MA. 01810
USA

Telephone: 1-800-322-1174 International information 1-978-749-8000
Emergency: 1-800-424-9300 International Emergency 1-202-483-7616

HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Highly flammable

Toxic

Irritant

GHS Classification(s)

Flammable Liquid – Cat 2

Acute Toxicity (Oral) – Cat 3

Acute Toxicity (Dermal) – Cat 3

Acute Toxicity (Inhalation) – Cat 3

Skin Irritation – Cat 2

Eye irritation – Cat 2

Specific Target Organ Toxicity (Single Exposure) – Cat 1

GHS Label elements, including precautionary statements



Pictograms

Signal word

Danger

Hazard statement(s)

See individual Safety Data Sheets

COMPOSITION

Each kit contains four ampoules: REGULATED CHLOROPHENOLICS FOR METHOD1653A UNLABELED IN METHANOL (1)
REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE (1)
OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL (1)
OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE (1)



REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 25/01/2016

Revision date:

Version: 1.0

EM-4181

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures
Product name : REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL
Product code : EM-4181

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Inhalation)	H331
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 1	H370

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11
T; R23/24/25
Xi; R36/38

Full text of R-phrases: see section 16

Classification (GHS-US)

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Inhalation:vapour)	H331
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT SE 1	H370

Adverse physicochemical, human health and environmental effects

Eyes, Kidney, Liver, Heart, Central nervous system.

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2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS08

GHS06

Signal word (CLP) :

Danger

Hazardous ingredients :

100% METHANOL UNLABELED

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapor
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H370 - Causes damage to organs (eye, kidneys, liver, heart, central nervous system)

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P260 - Do not breathe mist, fume, spray, vapors
P264 - Wash both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02

GHS08

GHS06

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H370 - Causes damage to organs (eye, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) :

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe fume, mist, spray, vapors
P261 - Avoid breathing fume, mist, spray, vapors
P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P311 - Call a POISON CENTER or doctor/physician
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)
P330 - If swallowed, rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P361 - Remove/Take off immediately all contaminated clothing
P362 - Take off contaminated clothing and wash before reuse

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P363 - Wash contaminated clothing before reuse
 P370+P378 - In case of fire: Use Alcohol resistant foam., Carbon dioxide., Dry chemical., Water spray for extinction
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed
 P403+P235 - Store in a well-ventilated place. Keep cool
 P405 - Store locked up
 P501 - Dispose of contents/container to Comply with applicable regulations.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
100% METHANOL UNLABELED	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	98.9984	F; R11 T; R23/24/25 T; R39/23/24/25
PENTACHLOROPHENOL UNLABELED	(CAS No) 87-86-5 (EC no) 201-778-6 (EC index no) 604-002-00-8	0.1252	Xn; R22 Xi; R36 N; R51/53
3,4,5-TRICHLOROCATECHOL UNLABELED	(CAS No) 56961-20-7	0.1252	Xn; R22 Xi; R36 Xi; R38 N; R50
3,4,5,6-TETRACHLOROCATECHOL UNLABELED	(CAS No) 1198-55-6	0.1252	Xn; R22 Xi; R41
3,4,5,6-TETRACHLOROGUAIACOL UNLABELED	(CAS No) 2539-17-5	0.1252	Xn; R22 Xi; R36/37/38
3,4,6-TRICHLOROCATECHOL UNLABELED	(CAS No) 32139-72-3	0.1252	Xn; R22 Xi; R36 Xi; R38 N; R50
2,4,6-TRICHLOROPHENOL UNLABELED	(CAS No) 88-06-2 (EC no) 201-795-9 (EC index no) 604-018-00-5	0.0626	Xn; R22 Xi; R36 Xi; R38 N; R51/53 N; R50
2,3,4,6-TETRACHLOROPHENOL UNLABELED	(CAS No) 58-90-2 (EC no) 200-402-8 (EC index no) 604-013-00-8	0.0626	Xn; R22 Xi; R36 N; R51/53
2,4,5-TRICHLOROPHENOL UNLABELED	(CAS No) 95-95-4 (EC no) 202-467-8 (EC index no) 604-017-00-X	0.0626	Xn; R22 Xi; R36 Xi; R38 N; R50/53
3,4,5-TRICHLOROGUAIACOL UNLABELED	(CAS No) 57057-83-7	0.0626	Xn; R22 Xi; R36/37/38
3,4,6-TRICHLOROGUAIACOL UNLABELED	(CAS No) 57057-83-7	0.0626	Xn; R22 Xi; R36/37/38
4,5,6-TRICHLOROGUAIACOL UNLABELED	(CAS No) 2668-24-8	0.0626	Xn; R22 Xi; R36/37/38
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
100% METHANOL UNLABELED	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	98.9984	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 STOT SE 1, H370

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
PENTACHLOROPHENOL UNLABELED	(CAS No) 87-86-5 (EC no) 201-778-6 (EC index no) 604-002-00-8	0.1252	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
3,4,5-TRICHLOROCATECHOL UNLABELED	(CAS No) 56961-20-7	0.1252	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400
3,4,5,6-TETRACHLOROCATECHOL UNLABELED	(CAS No) 1198-55-6	0.1252	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10)
3,4,5,6-TETRACHLOROGUAIACOL UNLABELED	(CAS No) 2539-17-5	0.1252	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
3,4,6-TRICHLOROCATECHOL UNLABELED	(CAS No) 32139-72-3	0.1252	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400
2,4,6-TRICHLOROPHENOL UNLABELED	(CAS No) 88-06-2 (EC no) 201-795-9 (EC index no) 604-018-00-5	0.0626	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
2,3,4,6-TETRACHLOROPHENOL UNLABELED	(CAS No) 58-90-2 (EC no) 200-402-8 (EC index no) 604-013-00-8	0.0626	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
2,4,5-TRICHLOROPHENOL UNLABELED	(CAS No) 95-95-4 (EC no) 202-467-8 (EC index no) 604-017-00-X	0.0626	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,4,5-TRICHLOROGUAIACOL UNLABELED	(CAS No) 57057-83-7	0.0626	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
3,4,6-TRICHLOROGUAIACOL UNLABELED	(CAS No) 57057-83-7	0.0626	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
4,5,6-TRICHLOROGUAIACOL UNLABELED	(CAS No) 2668-24-8	0.0626	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Name	Product identifier	%	Classification (GHS-US)
100% METHANOL UNLABELED	(CAS No) 67-56-1	98.9984	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 STOT SE 1, H370
PENTACHLOROPHENOL UNLABELED	(CAS No) 87-86-5	0.1252	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of R-, H- and EUH-phrases: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a POISON CENTER or doctor/physician.
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media	: For small fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: Vapors may form explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray to cool unopened containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
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6.1.1. For non-emergency personnel

Emergency procedures	: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
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6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For containment	: Contain spillage, then collect with non-combustible absorbent material. Disposal should be in accordance with applicable Federal, State and local regulations.
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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling	: No naked lights. No smoking. Use only non-sparking tools.
Hygiene measures	: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
Storage conditions	: Store at room temperature away from light and moisture.
Incompatible materials	: Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.000000000 ppm Headache. Eye damage. Danger of cutaneous absorption.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250.000000000 ppm Headache Eye damage. Danger of cutaneous absorption.

PENTACHLOROPHENOL UNLABELED (87-86-5)

Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	0.500000000 mg/m ³ Central Nervous System impairment. Upper Respiratory Tract & Eye irritation.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.500000000 mg/m ³ Skin notation

100% METHANOL UNLABELED (67-56-1)

Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.000000000 ppm Headache. Eye damage. Danger of cutaneous absorption.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250.000000000 ppm Headache Eye damage. Danger of cutaneous absorption.
USA OSHA	OSHA PEL (TWA) (ppm)	200.000000000 ppm Skin notation.
USA OSHA	OSHA PEL (STEL) (ppm)	250.000000000 ppm Skin notation.

8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves. Protective clothing. Respiratory protection of the dependent type.



Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 32.0 g/mol
Color	: Colourless.
Odor	: Pungent.
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -98 °C (-144 °F)
Freezing point	: No data available
Boiling point	: 64.7 °C (148.5 °F)
Flash point	: 9.7 °C (49.5 °F) - closed cup
Self ignition temperature	: 455 °C (851 °F) at 1,013 hPa (760 mmHg)
Decomposition temperature	: No data available

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Flammability (solid, gas)	: Highly flammable liquid and vapor
Vapor pressure	: 546.6 hPa (410.0 mmHg) at 50.0 °C (122.0 °F)
Relative vapor density at 20 °C	: 1.11
Relative density	: No data available
Density	: 0.791 g/ml at 25 °C (77 °F)
Solubility	: Water: Completely miscible
Log Pow	: -0.77
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 6 - 36 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals. Reducing agents, Acids.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 inhalation rat (ppm)	64000 ppm 4 h
ATE (oral)	100.000 mg/kg body weight
ATE (dermal)	300.000 mg/kg body weight
ATE (gases)	700.000 ppmV/4h
ATE (vapors)	3.000 mg/l/4h
ATE (dust, mist)	0.500 mg/l/4h

PENTACHLOROPHENOL UNLABELED (87-86-5)	
LD50 oral rat	27.0 mg/kg
LC50 inhalation rat (mg/l)	355 mg/m ³
ATE (oral)	27.000 mg/kg body weight
ATE (dermal)	300.000 mg/kg body weight
ATE (vapors)	0.355 mg/l/4h
ATE (dust, mist)	0.355 mg/l/4h

2,4,6-TRICHLOROPHENOL UNLABELED (88-06-2)	
LD50 oral rat	820 mg/kg
ATE (oral)	820.000 mg/kg body weight

3,4,5-TRICHLOROCATECHOL UNLABELED (56961-20-7)	
ATE (oral)	500.000 mg/kg body weight

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3,4,5,6-TETRACHLOROCATECHOL UNLABELED (1198-55-6)	
ATE (oral)	500.000 mg/kg body weight
3,4,5,6-TETRACHLOROGUAIACOL UNLABELED (2539-17-5)	
LD50 oral rat	1690 - 4004 mg/kg
ATE (oral)	1690.000 mg/kg body weight
2,3,4,6-TETRACHLOROPHENOL UNLABELED (58-90-2)	
LD50 dermal rabbit	250 mg/kg
ATE (oral)	500.000 mg/kg body weight
ATE (dermal)	250.000 mg/kg body weight
100% METHANOL UNLABELED (67-56-1)	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 inhalation rat (ppm)	64000 ppm 4 h
ATE (oral)	100.000 mg/kg body weight
ATE (dermal)	300.000 mg/kg body weight
ATE (vapors)	3.000 mg/l/4h
2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)	
LD50 oral rat	820 mg/kg
ATE (oral)	820.000 mg/kg body weight
3,4,5-TRICHLOROGUAIACOL UNLABELED (57057-83-7)	
LD50 oral rat	2980 mg/kg
ATE (oral)	500.000 mg/kg body weight
3,4,6-TRICHLOROGUAIACOL UNLABELED (57057-83-7)	
LD50 oral rat	2980 mg/kg
ATE (oral)	500.000 mg/kg body weight
4,5,6-TRICHLOROGUAIACOL UNLABELED (2668-24-8)	
LD50 oral rat	2980 mg/kg
ATE (oral)	500.000 mg/kg body weight
3,4,6-TRICHLOROCATECHOL UNLABELED (32139-72-3)	
ATE (oral)	500.000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation. Skin - rabbit - Skin irritation - 24 h
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - rabbit - Eye irritation - 24 h
Respiratory or skin sensitization	: Not available No data available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Causes damage to organs (eye, kidneys, liver, heart, central nervous system). Causes damage to organs
Specific target organ toxicity (repeated exposure)	: Not classified No data available
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Toxic if swallowed. Toxic in contact with skin.
Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4181

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

LC50 fish 1	19000.00 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	24500.00 mg/l Daphnia magna (Water flea) - 48 h

PENTACHLOROPHENOL UNLABELED (87-86-5)

LC50 fish 1	0.16 - 0.5 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h
EC50 Daphnia 1	0.3 - 1.3 mg/l Daphnia magna (Water flea) - 48 h
ErC50 (algae)	10.30 mg/l Chlorella vulgaris (Fresh water algae) - 96 h
NOEC (chronic)	0.01 mg/l other fish - 24 h

2,4,6-TRICHLOROPHENOL UNLABELED (88-06-2)

LC50 fish 1	1.76 mg/l Jordanella floridae (flagfish) - 10 d
EC50 Daphnia 1	3.34 mg/l Daphnia magna (Water flea) - 48 h

3,4,5,6-TETRACHLOROCATECHOL UNLABELED (1198-55-6)

LC50 fish 1	1.27 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	2.23 mg/l Daphnia magna (Water flea) - 24 h
ErC50 (algae)	0.08 mg/l Pseudokirchneriella subcapitata - 96 h

2,3,4,6-TETRACHLOROPHENOL UNLABELED (58-90-2)

LC50 fish 1	0.29 - 0.38 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	0.09 mg/l Daphnia magna (Water flea) - 48 h

100% METHANOL UNLABELED (67-56-1)

LC50 fish 1	19000.00 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	24500.00 mg/l Daphnia magna (Water flea) - 48 h

2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)

LC50 fish 1	0.274 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	0.9 mg/l Immobilization Daphnia magna (Water flea) - 48 h

12.2. Persistence and degradability

PENTACHLOROPHENOL UNLABELED (87-86-5)

Persistence and degradability	Not available.
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2,4,6-TRICHLOROPHENOL UNLABELED (88-06-2)

Persistence and degradability	No data available.
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3,4,5-TRICHLOROCATECHOL UNLABELED (56961-20-7)

Persistence and degradability	Not available.
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3,4,5,6-TETRACHLOROCATECHOL UNLABELED (1198-55-6)

Persistence and degradability	Not available.
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3,4,5,6-TETRACHLOROGUAIACOL UNLABELED (2539-17-5)

Persistence and degradability	Not available.
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2,3,4,6-TETRACHLOROPHENOL UNLABELED (58-90-2)

Persistence and degradability	Not available.
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2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)

Persistence and degradability	No data available.
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3,4,5-TRICHLOROGUAIACOL UNLABELED (57057-83-7)

Persistence and degradability	Not available.
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3,4,6-TRICHLOROGUAIACOL UNLABELED (57057-83-7)

Persistence and degradability	Not available.
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4,5,6-TRICHLOROGUAIACOL UNLABELED (2668-24-8)

Persistence and degradability	Not available.
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3,4,6-TRICHLOROCATECHOL UNLABELED (32139-72-3)

Persistence and degradability	Not available.
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12.3. Bioaccumulative potential

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL	
Log Pow	-0.77
PENTACHLOROPHENOL UNLABELED (87-86-5)	
Bioconcentration factor (BCF REACH)	482
Log Pow	5.12
2,4,6-TRICHLOROPHENOL UNLABELED (88-06-2)	
BCF fish 1	0.0005 mg/l <i>Poecilia reticulata</i> (guppy) - 36 d
Bioconcentration factor (BCF REACH)	12180
3,4,5-TRICHLOROCATECHOL UNLABELED (56961-20-7)	
Bioaccumulative potential	Not available.
3,4,5,6-TETRACHLOROCATECHOL UNLABELED (1198-55-6)	
Bioaccumulative potential	Not available.
3,4,5,6-TETRACHLOROGUAIACOL UNLABELED (2539-17-5)	
Bioaccumulative potential	Not available.
2,3,4,6-TETRACHLOROPHENOL UNLABELED (58-90-2)	
Bioconcentration factor (BCF REACH)	588
Log Pow	4.45
100% METHANOL UNLABELED (67-56-1)	
Log Pow	-0.77
2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)	
BCF fish 1	0.0048 mg/l <i>Pimephales promelas</i> (fathead minnow) - 28 d
Bioconcentration factor (BCF REACH)	1900
3,4,5-TRICHLOROGUAIACOL UNLABELED (57057-83-7)	
Log Pow	3.77
Bioaccumulative potential	Not available.
3,4,6-TRICHLOROGUAIACOL UNLABELED (57057-83-7)	
Bioaccumulative potential	Not available.
4,5,6-TRICHLOROGUAIACOL UNLABELED (2668-24-8)	
Bioaccumulative potential	Not available.
3,4,6-TRICHLOROCATECHOL UNLABELED (32139-72-3)	
Bioaccumulative potential	Not available.

12.4. Mobility in soil

PENTACHLOROPHENOL UNLABELED (87-86-5)	
Ecology - soil	Not available.
2,4,6-TRICHLOROPHENOL UNLABELED (88-06-2)	
Ecology - soil	No data available.
3,4,5-TRICHLOROCATECHOL UNLABELED (56961-20-7)	
Ecology - soil	Not available.
3,4,5,6-TETRACHLOROCATECHOL UNLABELED (1198-55-6)	
Ecology - soil	Not available.
3,4,5,6-TETRACHLOROGUAIACOL UNLABELED (2539-17-5)	
Ecology - soil	Not available.
2,3,4,6-TETRACHLOROPHENOL UNLABELED (58-90-2)	
Ecology - soil	Not available.
2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)	
Ecology - soil	No data available.
3,4,5-TRICHLOROGUAIACOL UNLABELED (57057-83-7)	
Ecology - soil	Not available.

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3,4,6-TRICHLOROGUAIACOL UNLABELED (57057-83-7)

Ecology - soil : Not available.

4,5,6-TRICHLOROGUAIACOL UNLABELED (2668-24-8)

Ecology - soil : Not available.

3,4,6-TRICHLOROCATECHOL UNLABELED (32139-72-3)

Ecology - soil : Not available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT) : 1230
DOT NA no. : UN1230

14.2. UN proper shipping name

DOT Proper Shipping Name : Methanol
Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid
6.1 - Poison inhalation hazard



DOT Symbols : + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group, I - Proper shipping name appropriate for international and domestic transportation

Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II

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Class (ADR) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 336
Classification code (ADR) : FT1
Danger labels (ADR) : 3 - Flammable liquids
6.1 - Toxic substances



Orange plates : 

Tunnel restriction code : D/E
Limited quantities (ADR) : 1L
EAC : •2WE
APP : A(fl)
Excepted quantities (ADR) : E2

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"
MFAG-No : 131

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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PENTACHLOROPHENOL UNLABELED (87-86-5)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
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100% METHANOL UNLABELED (67-56-1)

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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15.2. International regulations

CANADA

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

Listed on the Canadian DSL (Domestic Substances List) inventory.

100% METHANOL UNLABELED (67-56-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

REGULATED CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL()

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List WARNING! This product contains a chemical known by the state of California to cause birth defects or other reproductive harm.
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PENTACHLOROPHENOL UNLABELED (87-86-5)

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
WARNING! This product contains a chemical known by the state of California to cause cancer.

100% METHANOL UNLABELED (67-56-1)

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
WARNING! This product contains a chemical known by the state of California to cause birth defects or other reproductive harm.

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases::

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin

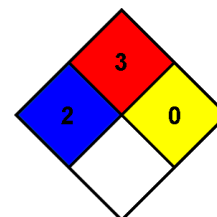
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H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H370	Causes damage to organs
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
R11	Highly flammable
R22	Harmful if swallowed
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R38	Irritating to skin
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R41	Risk of serious damage to eyes
R50	Very toxic to aquatic organisms
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

- NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 3 Serious Hazard
- Physical : 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



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Date of issue: 25/01/2016

Revision date:

Version: 1.0

EM-4182

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures
Product name. : REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE
Product code : EM-4182

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225
Eye Irrit. 2 H319
STOT SE 3 H336

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11
Xi; R36
R66
R67

Full text of R-phrases: see section 16

Classification (GHS-US)

Flam. Liq. 2 H225
Eye Irrit. 2A H319
STOT SE 3 H336

Adverse physicochemical, human health and environmental effects

Liver, Kidney.

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2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash both hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves

EUH phrases

: EUH066 - Repeated exposure may cause skin dryness or cracking

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US) :

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash Both hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P337+P313 - If eye irritation persists: Get medical advice/attention
P370+P378 - In case of fire: Use Alcohol resistant foam., Carbon dioxide., Dry chemical., Water spray for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to Comply with applicable regulations.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
ACETONE UNLABELED	(CAS No) 67-64-1 (EC no) 200-662-2 (EC index no) 606-001-00-8	99.936	F; R11 Xi; R36 R67 R66
3,4,5-TRICHLOROSYRINGOL UNLABELED	(CAS No) 2539-26-6	0.064	Xi; R36/37/38

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ACETONE UNLABELED	(CAS No) 67-64-1 (EC no) 200-662-2 (EC index no) 606-001-00-8	99.936	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
3,4,5-TRICHLOROSYRINGOL UNLABELED	(CAS No) 2539-26-6	0.064	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Name	Product identifier	%	Classification (GHS-US)
ACETONE UNLABELED	(CAS No) 67-64-1	99.936	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Move out of dangerous area. Consult a physician and show this safety data sheet.
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Harmful if swallowed, inhaled or absorbed through skin.
Symptoms/injuries after inhalation	: Harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.
Symptoms/injuries after skin contact	: Harmful if absorbed through skin. Prolonged or repeated contact can result in drying of the skin which may result in skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: Vapors may form explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray to cool unopened containers.
Protection during firefighting	: Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
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6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required. Avoid breathing vapors. In case of leaking gas fire, eliminate all ignition sources if safe to do so. Evacuate the danger area.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For containment : Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling : No naked lights. No smoking. Use only non-sparking tools.
Hygiene measures : Wash hands before eating and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
Storage conditions : Store at room temperature away from light and moisture.
Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	500.0000000000 ppm Eye & Upper Respiratory irritation, Central Nervous System impairment.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	750.0000000000 ppm Eye & Upper Respiratory irritation, Central Nervous System impairment.
ACETONE UNLABELED (67-64-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	500 ppm Eye & Upper Respiratory irritation, Central Nervous System impairment.
Italy - Portugal - USA ACGIH	ACGIH STEL (mg/m ³)	Eye & Upper Respiratory irritation, Central Nervous System impairment.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	750 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	750 ppm The acetone STEL does not apply to the cellulose acetate fiber industry.
USA OSHA	OSHA PEL (STEL) (ppm)	100 ppm The acetone STEL does not apply to the cellulose acetate fiber industry.

8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves. Respiratory protection of the dependent type. Protective clothing.



Hand protection : Wear suitable protective clothing and gloves.
Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection : Wear suitable protective clothing. Wear suitable gloves.
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE EM-4182

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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Physical state	: Liquid
Appearance	: Liquid, clear.
Molecular mass	: 58.08 g/mol (labeled)
Color	: Colourless.
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -94 °C (-137 °F)
Freezing point	: No data available
Boiling point	: 56 °C (133 °F) at 1,013 hPa (760 mmHg)
Flash point	: -17.0 °C (1.4 °F) - closed cup
Self ignition temperature	: 465 °C (869 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 533.3 hPa at 39.5 °C (103.1 °F)
Critical pressure	: 245.3 hPa (184.0 mmHg) at 20.0°C (68.0 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.791 g/ml at 25 °C (68.0 °F)
Solubility	: Water: Completely miscible
Log Pow	: -0.24
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 2 - 13 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Bases, Oxidizing agents, Reducing agents. Reacts violently with phosphorous oxychloride.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE	
LD50 oral rat	5800 mg/kg
LC50 inhalation rat (mg/l)	50100 mg/m ³ 8 h
ATE (oral)	5800.000 mg/kg body weight
ATE (vapors)	50.100 mg/l/4h
ATE (dust, mist)	50.100 mg/l/4h
LD50 Dermal Guinea Pig	7,426 mg/kg

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ACETONE UNLABELED (67-64-1)	
LD50 oral rat	5800 mg/kg
LC50 inhalation rat (mg/l)	50100 mg/m ³ 8 h
ATE (oral)	5800.000 mg/kg body weight
ATE (vapors)	50.100 mg/l/4h
ATE (dust, mist)	50.100 mg/l/4h

Skin corrosion/irritation	: Not classified skin - rabbit - Mild skin irritation - 24 h
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - rabbit - Eye irritation - 24 h
Respiratory or skin sensitization	: Chronic exposure may cause dermatitis. No data available
Germ cell mutagenicity	: Not available.
Carcinogenicity	: This product is or contains a component that is not classifiable as to its carcinogenicity on its IARC, ACGIH, NTP, or EPA classification.
Reproductive toxicity	: Not available.
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness. May cause damage to organs.
Specific target organ toxicity (repeated exposure)	: Not classified No data available
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.
Symptoms/injuries after skin contact	: Harmful if absorbed through skin. Prolonged or repeated contact can result in drying of the skin which may result in skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE	
LC50 fish 1	5540.00 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	13500.00 mg/l Daphnia magna (Water flea) - 48 h

ACETONE UNLABELED (67-64-1)	
LC50 fish 1	5540 mg/l Oncorhynchus mykiss (rainbow trout) -96h
EC50 Daphnia 1	13500 mg/l Daphnia magna (Water flea) - 48h

12.2. Persistence and degradability

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE	
Persistence and degradability	Not available.

12.3. Bioaccumulative potential

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE	
Log Pow	-0.24
Bioaccumulative potential	Not available.

3,4,5-TRICHLOROSYRINGOL UNLABELED (2539-26-6)	
Log Pow	3.779

ACETONE UNLABELED (67-64-1)	
Log Pow	-0.24

12.4. Mobility in soil

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE	
Ecology - soil	Not available.

12.5. Results of PBT and vPvB assessment

No additional information available

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE EM-4182

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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.6. Other adverse effects

Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT) : 1090
DOT NA no. UN1090

14.2. UN proper shipping name

DOT Proper Shipping Name : Acetone
Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II
Class (ADR) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Danger labels (ADR) : 3 - Flammable liquids



Orange plates : An orange rectangular label with a black border. It is divided into two horizontal sections. The top section contains the number '33' and the bottom section contains the number '1090'.

Tunnel restriction code : D/E
Limited quantities (ADR) : 1L
EAC : •2YE
Excepted quantities (ADR) : E2

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Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

MFAG-No : 127

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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ACETONE UNLABELED (67-64-1)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Delayed (chronic) health hazard
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15.2. International regulations

CANADA

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

REGULATED CHLOROPHENOLIC FOR METHOD 1653A UNLABELED IN ACETONE()

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.
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ACETONE UNLABELED (67-64-1)

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

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SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

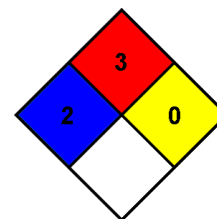
Full text of R-, H- and EUH-phrases::

Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
R11	Highly flammable
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

Safety Data Sheet

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Date of issue: 05/09/2014

Revision date:

Version: 1.0

EM-4183

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures
Product name : OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL
Product code : EM-4183

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-202-483-7616 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Inhalation)	H331
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 1	H370

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11
T; R23/24/25
Xi; R36/38

Full text of R-phrases: see section 16

Classification (GHS-US)

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Inhalation:vapour)	H331
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT SE 1	H370

Adverse physicochemical, human health and environmental effects

Eyes, Kidney, Liver, Heart, Central nervous system.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazardous ingredients

: 100% METHANOL

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapor
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H370 - Causes damage to organs (central nervous system, eye, heart, kidneys, liver)

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P260 - Do not breathe fume, mist, spray, vapors
P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapor
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H370 - Causes damage to organs (central nervous system, eye, heart, kidneys, liver) (Dermal, oral, Inhalation)

Precautionary statements (GHS-US)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating, lighting equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe fume, mist, spray, vapors
P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P311 - Call a POISON CENTER or doctor/physician
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P330 - If swallowed, rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P361 - Remove/Take off immediately all contaminated clothing
P362 - Take off contaminated clothing and wash before reuse
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use Alcohol resistant foam., Carbon dioxide., Dry chemical., Water

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

spray for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to Comply with applicable regulations.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
100% METHANOL	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	99.4034	F; R11 T; R23/24/25 Xi; R36/38 Xi; R39
4,5-DICHLOROCATECHOL UNLABELED (CHEM. PURITY 95-99%)	(CAS No) 3428-24-8 (Unlabeled) (EC no) 222-331-1	0.0628	Xi; R36/37/38 N; R50
4,5-DICHLOROGUAIACOL UNLABELED	(CAS No) 2460-49-3 (Unlabeled)	0.0628	Xi; R36/37/38
2,4-DICHLOROPHENOL UNLABELED	(CAS No) 120-83-2 (Unlabeled) (EC no) 204-429-6 (EC index no) 604-011-00-7	0.0628	C; R34
3,4-DICHLOROGUAIACOL UNLABELED	(CAS No) 77102-94-4 (Unlabeled)	0.0628	Xi; R36/37/38
4,6-DICHLOROGUAIACOL UNLABELED	(CAS No) 16766-31-7 (Unlabeled)	0.0628	Xi; R36/37/38
3,4-DICHLOROCATECHOL UNLABELED	(CAS No) 3978-67-4 (Unlabeled)	0.0628	Xi; R36/37/38 N; R50
3,6-DICHLOROCATECHOL UNLABELED	(CAS No) 3938-16-7 (Unlabeled)	0.0628	Xi; R36/37/38 N; R50
2,6-DICHLOROPHENOL UNLABELED	(CAS No) 87-65-0 (Unlabeled) (EC no) 201-761-3	0.0628	T; R23/25 C; R34 N; R51/53
4-CHLOROCATECHOL UNLABELED (CHEM. PURITY 90-95%)	(CAS No) 2138-22-9 (Unlabeled) (EC no) 218-381-9	0.0314	T; R23/25 C; R34 N; R51/53
4-CHLOROGUAIACOL UNLABELED (CHEM PURITY 85-90%)	(CAS No) 16766-30-6 (Unlabeled)	0.0314	Xi; R36/37/38
4-CHLOROPHENOL UNLABELED	(CAS No) 106-48-9 (Unlabeled) (EC no) 203-402-6 (EC index no) 604-008-00-0	0.0314	Xn; R20/21/22 N; R51/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
100% METHANOL	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	99.4034	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 1, H370
4,5-DICHLOROCATECHOL UNLABELED (CHEM. PURITY 95-99%)	(CAS No) 3428-24-8 (Unlabeled) (EC no) 222-331-1	0.0628	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400
4,5-DICHLOROGUAIACOL UNLABELED	(CAS No) 2460-49-3 (Unlabeled)	0.0628	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
2,4-DICHLOROPHENOL UNLABELED	(CAS No) 120-83-2 (Unlabeled) (EC no) 204-429-6 (EC index no) 604-011-00-7	0.0628	Acute Tox. 2 (Oral), H300 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3,4-DICHLOROQUAIACOL UNLABELED	(CAS No) 77102-94-4 (Unlabeled)	0.0628	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
4,6-DICHLOROQUAIACOL UNLABELED	(CAS No) 16766-31-7 (Unlabeled)	0.0628	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
3,4-DICHLOROCATECHOL UNLABELED	(CAS No) 3978-67-4 (Unlabeled)	0.0628	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400
3,6-DICHLOROCATECHOL UNLABELED	(CAS No) 3938-16-7 (Unlabeled)	0.0628	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400
2,6-DICHLOROPHENOL UNLABELED	(CAS No) 87-65-0 (Unlabeled) (EC no) 201-761-3	0.0628	Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
4-CHLOROCATECHOL UNLABELED (CHEM. PURITY 90-95%)	(CAS No) 2138-22-9 (Unlabeled) (EC no) 218-381-9	0.0314	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
4-CHLOROQUAIACOL UNLABELED (CHEM PURITY 85-90%)	(CAS No) 16766-30-6 (Unlabeled)	0.0314	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
4-CHLOROPHENOL UNLABELED	(CAS No) 106-48-9 (Unlabeled) (EC no) 203-402-6 (EC index no) 604-008-00-0	0.0314	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 1 (Inhalation:dust,mist), H330 Aquatic Chronic 2, H411

Name	Product identifier	%	Classification (GHS-US)
100% METHANOL	(CAS No) 67-56-1	99.4034	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 1, H370

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a POISON CENTER or doctor/physician.
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media : For small fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : May form flammable/explosive vapor-air mixture.
Reactivity : Vapors may form explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions : Use water spray to cool unopened containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For containment : Contain spillage, then collect with non-combustible absorbent material. Disposal should be in accordance with applicable Federal, State and local regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling : No naked lights. No smoking. Use only non-sparking tools.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
Storage conditions : Store at room temperature away from light and moisture.
Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.0000000000 ppm Headache. Eye damage. Danger of cutaneous absorption.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250.0000000000 ppm Headache Eye damage. Danger of cutaneous absorption.
100% METHANOL (67-56-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.0000000000 ppm Headache. Eye damage. Danger of cutaneous absorption.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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100% METHANOL (67-56-1)		
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250.000000000 ppm Headache Eye damage. Danger of cutaneous absorption.
USA OSHA	OSHA PEL (TWA) (ppm)	200.000000000 ppm Skin notation.
USA OSHA	OSHA PEL (STEL) (ppm)	250.000000000 ppm Skin notation.

8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves. Protective clothing. Respiratory protection of the dependent type.



Hand protection : protective gloves.

Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 32.0
Color	: Colourless.
Odor	: No data available.
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -98 °C (-144 °F)
Freezing point	: No data available
Boiling point	: 64.7 °C (148.5 °F)
Flash point	: 11.0 °C (51.8 °F) - closed cup
Self ignition temperature	: 455 °C (851 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapor
Vapor pressure	: 546.6 hPa (410.0 mmHg) at 50.0 °C (122.0 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: Completely miscible
Log Pow	: -0.77
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 6 - 36 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

Stable if stored under recommended conditions.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals. Reducing agents, Acids.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 inhalation rat (ppm)	64000 ppm 4 h
ATE (oral)	100.000 mg/kg body weight
ATE (dermal)	300.000 mg/kg body weight
ATE (gases)	700.000 ppmV/4h
ATE (vapors)	3.000 mg/l/4h
ATE (dust, mist)	0.500 mg/l/4h

100% METHANOL (67-56-1)	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 inhalation rat (ppm)	64000 ppm 4 h
ATE (oral)	100.000 mg/kg body weight
ATE (dermal)	300.000 mg/kg body weight
ATE (vapors)	3.000 mg/l/4h

4-CHLOROCATECHOL UNLABELED (CHEM. PURITY 90-95%) (2138-22-9 (Unlabeled))	
ATE (oral)	100.000 mg/kg body weight
ATE (dust, mist)	0.500 mg/l/4h

2,4-DICHLOROPHENOL UNLABELED (120-83-2 (Unlabeled))	
LD50 oral rat	47.0 mg/kg
ATE (oral)	47.000 mg/kg body weight
ATE (dermal)	300.000 mg/kg body weight

4-CHLOROPHENOL UNLABELED (106-48-9 (Unlabeled))	
LD50 oral rat	670 mg/kg
LC50 inhalation rat (mg/l)	11 mg/m ³
ATE (oral)	670.000 mg/kg body weight
ATE (dermal)	1100.000 mg/kg body weight
ATE (vapors)	0.011 mg/l/4h
ATE (dust, mist)	0.011 mg/l/4h

2,6-DICHLOROPHENOL UNLABELED (87-65-0 (Unlabeled))	
ATE (oral)	100.000 mg/kg body weight
ATE (dust, mist)	0.500 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Skin - rabbit - Skin irritation - 24 h

Serious eye damage/irritation : Causes serious eye irritation.
Eyes - rabbit - Eye irritation - 24 h

Respiratory or skin sensitization : Not available
No data available

Germ cell mutagenicity : Not available

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific target organ toxicity (single exposure)	: Causes damage to organs (central nervous system, eye, heart, kidneys, liver). Causes damage to organs
Specific target organ toxicity (repeated exposure)	: Not classified No data available
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Toxic if swallowed. Toxic in contact with skin.
Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL	
LC50 fish 1	19000.00 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	24500.00 mg/l Daphnia magna (Water flea) - 48 h
100% METHANOL (67-56-1)	
LC50 fish 1	19000.00 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	24500.00 mg/l Daphnia magna (Water flea) - 48 h
4-CHLOROCATECHOL UNLABELED (CHEM. PURITY 90-95%) (2138-22-9 (Unlabeled))	
LC50 fish 1	1.58 mg/l Pimephales promelas (fathead minnow) - 96 h
4,5-DICHLOROCATECHOL UNLABELED (CHEM. PURITY 95-99%) (3428-24-8 (Unlabeled))	
LC50 fish 1	0.89 mg/l Pimephales promelas (Fathead minnow) - 96 h
EC50 Daphnia 1	6.64 mg/l Daphnia magna (Water flea) - 24 h
ErC50 (algae)	0.45 mg/l Growth inhibition Pseudokirchneriella subcapitata - 96 h
2,4-DICHLOROPHENOL UNLABELED (120-83-2 (Unlabeled))	
LC50 fish 1	1.6 - 2.6 mg/l Lepomis macrochirus (Bluegill) - 96 h
EC50 Daphnia 1	2.7 - 3.9 mg/l Daphnia magna (Water flea) - 24 h
4-CHLOROPHENOL UNLABELED (106-48-9 (Unlabeled))	
LC50 fish 1	3.1 - 4.8 mg/l Lepomis macrochirus (Bluegill) - 96 h
EC50 Daphnia 1	2.8 - 8.6 mg/l Daphnia magna (water flea) - 24 h
2,6-DICHLOROPHENOL UNLABELED (87-65-0 (Unlabeled))	
LC50 fish 1	7.7 mg/l Poecilia reticulata (guppy) - 96 h
EC50 Daphnia 1	3.4 mg/l Daphnia magna (Water flea) - 48 h
ErC50 (algae)	9.7 mg/l - 96h, Growth inhibition Chlorella vulgaris (Fresh water algae) -

12.2. Persistence and degradability

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL	
Persistence and degradability	Not available.
100% METHANOL (67-56-1)	
Persistence and degradability	Not available.
4-CHLOROCATECHOL UNLABELED (CHEM. PURITY 90-95%) (2138-22-9 (Unlabeled))	
Persistence and degradability	Not available.
4,5-DICHLOROCATECHOL UNLABELED (CHEM. PURITY 95-99%) (3428-24-8 (Unlabeled))	
Persistence and degradability	Not available.
4-CHLOROGUAIACOL UNLABELED (CHEM PURITY 85-90%) (16766-30-6 (Unlabeled))	
Persistence and degradability	Not available.
4,5-DICHLOROGUAIACOL UNLABELED (2460-49-3 (Unlabeled))	
Persistence and degradability	Not available.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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2,4-DICHLOROPHENOL UNLABELED (120-83-2 (Unlabeled))	
Persistence and degradability	Not available.

4-CHLOROPHENOL UNLABELED (106-48-9 (Unlabeled))	
Persistence and degradability	Not available.

3,4-DICHLOROGUAIACOL UNLABELED (77102-94-4 (Unlabeled))	
Persistence and degradability	Not available.

4,6-DICHLOROGUAIACOL UNLABELED (16766-31-7 (Unlabeled))	
Persistence and degradability	Not available.

3,4-DICHLOROCATECHOL UNLABELED (3978-67-4 (Unlabeled))	
Persistence and degradability	Not available.

3,6-DICHLOROCATECHOL UNLABELED (3938-16-7 (Unlabeled))	
Persistence and degradability	Not available.

2,6-DICHLOROPHENOL UNLABELED (87-65-0 (Unlabeled))	
Persistence and degradability	Not available.

12.3. Bioaccumulative potential

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL	
Log Pow	-0.77
Bioaccumulative potential	Not available.

100% METHANOL (67-56-1)	
Log Pow	-0.77
Bioaccumulative potential	Not available.

4-CHLOROCATECHOL UNLABELED (CHEM. PURITY 90-95%) (2138-22-9 (Unlabeled))	
Bioaccumulative potential	Not available.

4,5-DICHLOROCATECHOL UNLABELED (CHEM. PURITY 95-99%) (3428-24-8 (Unlabeled))	
Bioaccumulative potential	Not available.

4-CHLOROGUAIACOL UNLABELED (CHEM PURITY 85-90%) (16766-30-6 (Unlabeled))	
Bioaccumulative potential	Not available.

4,5-DICHLOROGUAIACOL UNLABELED (2460-49-3 (Unlabeled))	
Bioaccumulative potential	Not available.

2,4-DICHLOROPHENOL UNLABELED (120-83-2 (Unlabeled))	
Log Pow	3.06

4-CHLOROPHENOL UNLABELED (106-48-9 (Unlabeled))	
Log Pow	2.39

3,4-DICHLOROGUAIACOL UNLABELED (77102-94-4 (Unlabeled))	
Bioaccumulative potential	Not available.

4,6-DICHLOROGUAIACOL UNLABELED (16766-31-7 (Unlabeled))	
Bioaccumulative potential	Not available.

3,4-DICHLOROCATECHOL UNLABELED (3978-67-4 (Unlabeled))	
Bioaccumulative potential	Not available.

3,6-DICHLOROCATECHOL UNLABELED (3938-16-7 (Unlabeled))	
Bioaccumulative potential	Not available.

2,6-DICHLOROPHENOL UNLABELED (87-65-0 (Unlabeled))	
Bioaccumulative potential	Not available.

12.4. Mobility in soil

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL	
Ecology - soil	Not available.

100% METHANOL (67-56-1)	
Ecology - soil	Not available.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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4-CHLOROCATECHOL UNLABELED (CHEM. PURITY 90-95%) (2138-22-9 (Unlabeled))	
Ecology - soil	Not available.
4,5-DICHLOROCATECHOL UNLABELED (CHEM. PURITY 95-99%) (3428-24-8 (Unlabeled))	
Ecology - soil	Not available.
4-CHLOROGUAIACOL UNLABELED (CHEM PURITY 85-90%) (16766-30-6 (Unlabeled))	
Ecology - soil	Not available.
4,5-DICHLOROGUAIACOL UNLABELED (2460-49-3 (Unlabeled))	
Ecology - soil	Not available.
2,4-DICHLOROPHENOL UNLABELED (120-83-2 (Unlabeled))	
Ecology - soil	Not available.
4-CHLOROPHENOL UNLABELED (106-48-9 (Unlabeled))	
Ecology - soil	Not available.
3,4-DICHLOROGUAIACOL UNLABELED (77102-94-4 (Unlabeled))	
Ecology - soil	Not available.
4,6-DICHLOROGUAIACOL UNLABELED (16766-31-7 (Unlabeled))	
Ecology - soil	Not available.
3,4-DICHLOROCATECHOL UNLABELED (3978-67-4 (Unlabeled))	
Ecology - soil	Not available.
3,6-DICHLOROCATECHOL UNLABELED (3938-16-7 (Unlabeled))	
Ecology - soil	Not available.
2,6-DICHLOROPHENOL UNLABELED (87-65-0 (Unlabeled))	
Ecology - soil	Not available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT)	: 1230
DOT NA no.	UN1230

14.2. UN proper shipping name

DOT Proper Shipping Name	: Methanol
Department of Transportation (DOT) Hazard Classes	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT)	: 3 - Flammable liquid 6.1 - Poison inhalation hazard



DOT Symbols	: + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group, I - Proper shipping name appropriate for international and domestic transportation
Packing group (DOT)	: II - Medium Danger

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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- DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Other information : No supplementary information available.

Overland transport

- Packing group (ADR) : II
Class (ADR) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 336
Classification code (ADR) : FT1
Danger labels (ADR) : 3 - Flammable liquids
6.1 - Toxic substances



Orange plates :

- Tunnel restriction code : D/E
Limited quantities (ADR) : 1L
EAC : •2WE
APP : A(fl)
Excepted quantities (ADR) : E2

Transport by sea

- DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
- DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"
MFAG-No : 131

Air transport

- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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100% METHANOL (67-56-1)

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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15.2. International regulations

CANADA

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL

Listed on the Canadian DSL (Domestic Substances List) inventory.

100% METHANOL (67-56-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL()

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List WARNING! This product contains a chemical known by the state of California to cause birth defects or other reproductive harm.
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100% METHANOL (67-56-1)

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
WARNING! This product contains a chemical known by the state of California to cause birth defects or other reproductive harm.

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases::

Acute Tox. 1 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 1
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN METHANOL EM-4183

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Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Corr. 1B	skin corrosion/irritation Category 1B
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H335	May cause respiratory irritation
H370	Causes damage to organs
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
R11	Highly flammable
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R23/25	Toxic by inhalation and if swallowed
R34	Causes burns
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R39	Danger of very serious irreversible effects
R50	Very toxic to aquatic organisms
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
C	Corrosive
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard

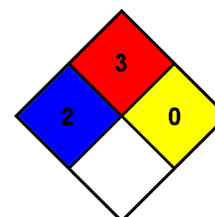
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 3 Serious Hazard

Physical

: 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 29/07/2014
EM-4184

Revision date:

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures
Product name : OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE
Product code : EM-4184

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225
Eye Irrit. 2 H319
STOT SE 3 H336

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11
Xi; R36
R66
R67

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225
Eye Irrit. 2A H319
STOT SE 3 H336

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash hands, forearms and face thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US) :

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash hands, forearms and face thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective clothing, protective gloves
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a doctor, a POISON CENTER if you feel unwell
P337+P313 - If eye irritation persists: Get medical advice/attention
P370+P378 - In case of fire: Use Water spray to extinguish
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

EM-4184

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
2,6-DICHLOROSYRINGEALDEHYDE UNLABELED	(CAS No) 76330-06-8 (Unlabeled)	0.1269	Xi; R37
5,6-DICHLOROVANILLIN UNLABELED	(CAS No) 18268-69-4	0.1269	Xi; R37
2-CHLOROSYRINGEALDEHYDE UNLABELED	(CAS No) 76341-69-0 (Unlabeled)	0.0635	Xi; R37
5-CHLOROVANILLIN UNLABELED	(CAS No) 19463-48-0	0.0635	Xi; R36/37/38
6-CHLOROVANILLIN UNLABELED	(CAS No) 18268-76-3 (Unlabeled)	0.0635	Xi; R37

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,6-DICHLOROSYRINGEALDEHYDE UNLABELED	(CAS No) 76330-06-8 (Unlabeled)	0.1269	STOT SE 3, H335
5,6-DICHLOROVANILLIN UNLABELED	(CAS No) 18268-69-4	0.1269	STOT SE 3, H335
2-CHLOROSYRINGEALDEHYDE UNLABELED	(CAS No) 76341-69-0 (Unlabeled)	0.0635	STOT SE 3, H335
5-CHLOROVANILLIN UNLABELED	(CAS No) 19463-48-0	0.0635	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
6-CHLOROVANILLIN UNLABELED	(CAS No) 18268-76-3 (Unlabeled)	0.0635	STOT SE 3, H335

Full text of R- and H- phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Move out of dangerous area. Consult a physician and show this safety data sheet.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.
Symptoms/injuries after skin contact	: Harmful if absorbed through skin. Prolonged or repeated contact can result in drying of the skin which may result in skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: Vapors may form explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray to cool unopened containers.
Protection during firefighting	: Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

EM-4184

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

Protective equipment : Avoid breathing dust, mist or spray.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For containment : Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
Storage conditions : Store at room temperature away from light and moisture.
Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	500.0000000 ppm Eye & Upper Respiratory irritation, Central Nervous System impairment.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	750 ppm Eye & Upper Respiratory irritation, Central Nervous System impairment.

8.2. Exposure controls

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection : Wear suitable protective clothing and gloves.
Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection : Wear suitable protective clothing. Wear suitable gloves.
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state : Liquid
Appearance : Liquid, clear.
Color : Colourless.
Odor : No data available
Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : -94 °C (-137 °F)
Freezing point : No data available

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point	: 56 °C (133 °F) at 1,013 hPa (760 mmHg)
Flash point	: -17 °C (1.4 °F) - closed cup
Auto-ignition temperature	: 465 °C (869 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapor
Vapor pressure	: 533.3 hPa at 39.5 °C (103.1 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: Completely miscible
Log Pow	: -0.24
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: 2 - 13 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Bases, Oxidizing agents, Reducing agents. Reacts violently with phosphorous oxychloride.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE	
LD50 oral rat	5800 mg/kg
LC50 inhalation rat (mg/l)	50100 mg/m ³ 8 h
ATE CLP (oral)	5800.000 mg/kg body weight
ATE CLP (vapors)	50.100 mg/l/4h
ATE CLP (dust, mist)	50.100 mg/l/4h
LD50 Dermal Guinea Pig	7,426 mg/kg

Skin corrosion/irritation	: Not classified skin - rabbit - Mild skin irritation - 24 h
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - rabbit - Eye irritation - 24 h
Respiratory or skin sensitization	: Chronic exposure may cause dermatitis. No data available
Germ cell mutagenicity	: Not available.
Carcinogenicity	: This product is or contains a component that is not classifiable as to its carcinogenicity on its IARC, ACGIH, NTP, or EPA classification.
Reproductive toxicity	: Not available.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness. May cause damage to organs.
Specific target organ toxicity – repeated exposure	: Not classified No data available
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.
Symptoms/injuries after skin contact	: Harmful if absorbed through skin. Prolonged or repeated contact can result in drying of the skin which may result in skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE	
LC50 fish 1	5540 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	13500 mg/l Daphnia magna (Water flea) - 48 h

12.2. Persistence and degradability

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE	
Persistence and degradability	Not available.
2-CHLOROSYRINGEALDEHYDE UNLABELED (76341-69-0 (Unlabeled))	
Persistence and degradability	No data available.
5-CHLOROVANILLIN UNLABELED (19463-48-0)	
Persistence and degradability	Not available.
6-CHLOROVANILLIN UNLABELED (18268-76-3 (Unlabeled))	
Persistence and degradability	No data available.
2,6-DICHLOROSYRINGEALDEHYDE UNLABELED (76330-06-8 (Unlabeled))	
Persistence and degradability	No data available.
5,6-DICHLOROVANILLIN UNLABELED (18268-69-4)	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE	
Log Pow	-0.24
Bioaccumulative potential	Not available.
2-CHLOROSYRINGEALDEHYDE UNLABELED (76341-69-0 (Unlabeled))	
Bioaccumulative potential	No data available.
5-CHLOROVANILLIN UNLABELED (19463-48-0)	
Bioaccumulative potential	Not available.
6-CHLOROVANILLIN UNLABELED (18268-76-3 (Unlabeled))	
Bioaccumulative potential	No data available.
2,6-DICHLOROSYRINGEALDEHYDE UNLABELED (76330-06-8 (Unlabeled))	
Bioaccumulative potential	No data available.
5,6-DICHLOROVANILLIN UNLABELED (18268-69-4)	
Bioaccumulative potential	No data available.

12.4. Mobility in soil

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE	
Ecology - soil	Not available.
2-CHLOROSYRINGEALDEHYDE UNLABELED (76341-69-0 (Unlabeled))	
Ecology - soil	No data available.
5-CHLOROVANILLIN UNLABELED (19463-48-0)	
Ecology - soil	Not available.

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

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6-CHLOROVANILLIN UNLABELED (18268-76-3 (Unlabeled))

Ecology - soil : No data available.

2,6-DICHLOROSYRINGEALDEHYDE UNLABELED (76330-06-8 (Unlabeled))

Ecology - soil : No data available.

5,6-DICHLOROVANILLIN UNLABELED (18268-69-4)

Ecology - soil : No data available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Product/Packaging disposal recommendations: : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 1090

DOT NA no. : UN1090

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Acetone

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 33

Classification code (ADR) : F1

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

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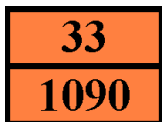
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (ADR) : 3 - Flammable liquids



Orange plates :



Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) : 11

EAC : •2YE

Excepted quantities (ADR) : E2

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

MFAG-No : 127

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L
CFR 175.75)

Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

15.2.1. National regulations

No additional information available

15.3. US State regulations

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE()

U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

OTHER CHLOROPHENOLICS FOR METHOD 1653A UNLABELED IN ACETONE

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
R11	Highly flammable
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R37	Irritating to respiratory system
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant

HMIS III Rating

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product