

#### Safety Data Sheet

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

Revision date:

Rules and Regulations
Date of issue: 11/09/2014

CLM-4896-S

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

1.1. Product identifier

Product form : Mixtures

Product name. : DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE

Product code : CLM-4896-S

#### 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 <a href="mailto:cilsales@isotope.com">cilsales@isotope.com</a> 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. 4 (Oral)
 H302

 Acute Tox. 4 (Dermal)
 H312

 Acute Tox. 4 (Inhalation:vapour)
 H332

 Eye Irrit. 2
 H319

 Full text of H-phrases: see section 16

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

F; R11

Full text of R-phrases: see section 16

#### **Classification (GHS-US)**

Flam. Liq. 2 H225 Acute Tox. 4 (Oral) H302 Acute Tox. 4 (Dermal) H312 Acute Tox. 4 (Inhalation) H332 Eye Irrit. 2A H319

#### Adverse physicochemical, human health and environmental effects

Lungs, Blood, Kidney, Liver, Central nervous system.

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#### 2.2. Label elements

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

Hazard pictograms (CLP)





GHS02

S02 GHS07

Signal word (CLP) : Danger

Hazardous ingredients : ACETONITRILE UNLABELED

Hazard statements (CLP) : H225 - Highly flammable liquid and vapor

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H319 - Causes serious eye irritation

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
P270 - Do no eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area

#### **GHS-US** labeling

Signal word (GHS-US)

Hazard pictograms (GHS-US)





GHS02

: Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H319 - Causes serious eye irritation

Precautionary statements (GHS-US) : P210 - Keep away from heat, hot surfaces, sparks, open flames. - 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 P270 - Do no 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+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

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
P312 - Call a POISON CENTER/doctor/physician if you feel unwell

P330 - If swallowed, rinse mouth

P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P370+P378 - In case of fire: Use Carbon dioxide., Alcohol resistant foam., Dry chemical. for

extinction

P403+P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/container to Comply with applicable regulations.

#### 2.3. Other hazards

No additional information available

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#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
ACETONITRILE UNLABELED	(CAS No) 75-05-8 (EC no) 200-835-2 (EC index no) 608-001-00-3	99.9873	F; R11
DL-NORCOTININE (3',4',5'-13C3, 99%)	(CAS No) 17708-87-1	0.0127	Xn; R20/21/22 Xi; R36/37/38
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ACETONITRILE UNLABELED	(CAS No) 75-05-8 (EC no) 200-835-2 (EC index no) 608-001-00-3	99.9873	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319
DL-NORCOTININE (3',4',5'-13C3, 99%)	(CAS No) 17708-87-1	0.0127	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist),

Name	Product identifier	%	Classification (GHS-US)
ACETONITRILE UNLABELED	(CAS No) 75-05-8	99.9873	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319

H332

Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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 : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

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 : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER/doctor/physician if you feel unwell.

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

Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Harmful in contact with skin.

Symptoms/injuries after eye contact : Causes eye irritation.

Symptoms/injuries after ingestion : 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 : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

#### 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.

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#### **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**

#### 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.

#### Methods and material for containment and cleaning up

For containment

: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations.

#### Reference to other sections

No additional information available

#### SECTION 7: Handling and storage

#### Precautions for safe handling

Additional hazards when processed

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

: No naked lights. No smoking. Use only non-sparking tools. Use only outdoors or in a well-Precautions for safe handling

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before

breaks and at the end of workday.

#### 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 refrigerated (-5 C to 5 C). Protect from light.

: Heat sources. Incompatible materials

#### Specific end use(s)

No additional information available

#### **SECTION 8: Exposure controls/personal protection**

#### **Control parameters**

DL-NORCOTININE (3',4',5'-1	DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.000000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen.	
ACETONITRILE UNLABELED	) (75-05-8)		

ACETONITRILE UNLABELEI	NLABELED (75-05-8)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.0000000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen.	
USA OSHA	OSHA PEL (TWA) (ppm)	40.000000000 ppm	
USA OSHA	OSHA PEL (STEL) (ppm)	60.000000000 ppm	

#### **Exposure controls**

Personal protective equipment

: Gas mask with filter type NO at conc. in air >. Protective clothing. Protective goggles. Selfcontained breathing apparatus. Gloves.



Hand protection

: Wear suitable protective clothing and gloves.

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

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Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance

at the work place.

Respiratory protection : Wear approved mask.

#### 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.

Molecular mass : 165.17

Color : Colourless.

Odor : ether-like.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : -48 °C (-54°F)

Freezing point : No data available

Boiling point : 81 - 82 °C (178 - 180 °F)

Flash point : 2.0 °C (35.6 °F) - closed cup

Self ignition temperature : 523 °C (973 °F)

Decomposition temperature : No data available

Flammability (solid, gas) : Highly flammable liquid and vapor

Vapor pressure : 73.18 hPa (54.89 mmHg) at 15°C (59 °F), 119.81 hPa (89.86 mmHg) at 25°C(77 °F)

Relative vapor density at 20 °C : 1.42 - (Air = 1.0) Relative density : No data available Solubility : Water: 100 %

Log Pow : -0.34

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 : 4.4 - 16 vol %

#### 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

Acids, Bases, Oxidizing agents, Reducing agents, Alkali metals.

#### 10.6. Hazardous decomposition products

May release flammable gases.

#### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

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

DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE	
LD50 oral rat	2460 mg/kg
LD50 dermal rabbit	2000 mg/kg

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DL-NORCOTININE (3',4',5'-13C3, 99%) 100 (	IG/MI_IN ACETONITRII E
LC50 inhalation rat (mg/l)	≥ 26.8 mg/l
LC50 inhalation rat (ppm)	7551 ppm - 8h
ATE (oral)	500.000 mg/kg body weight
ATE (dermal)	1100.000 mg/kg body weight
ATE (gases)	4500.000 ppmV/4h
ATE (vapors)	11.000 mg/l/4h
ATE (dust, mist)	1.500 mg/l/4h
ACETONITRILE UNLABELED (75-05-8)	
LD50 oral rat	2460 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (mg/l)	≥ 26.8 mg/l
LC50 inhalation rat (ppm)	7551 ppm - 8h
ATE (oral)	500.000 mg/kg body weight
ATE (dermal)	2000.000 mg/kg body weight
ATE (gases)	4500.000 ppmV/4h
ATE (vapors)	11.000 mg/l/4h
ATE (dust, mist)	1.500 mg/l/4h
DL-NORCOTININE (3',4',5'-13C3, 99%) (1770	8-87-1)
ATE (oral)	500.000 mg/kg body weight
ATE (dermal)	1100.000 mg/kg body weight
ATE (dust, mist)	1.500 mg/l/4h
Skin corrosion/irritation	: Not classified
	Skin - rabbit - No skin irritation
Serious eye damage/irritation	: Causes serious eye irritation.
,	Eyes - Rabbit - Irritating to eyes
Respiratory or skin sensitization	: Did not cause sensitization on laboratory animals.
	Buehler Test - guinea pig - Did not cause sensitisation on laboratory animals.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: No evidence of carcinogenicity in animal studies (when indicated).
Reproductive toxicity	: Animal testing did not show any effects on fertility.
Specific target organ toxicity (single exposure)	: Not classified
specific target organ toxicity (single exposure)	The substance or mixture is not classified as specific target organ toxicant.
Specific target organ toxicity (repeated	: Not classified
exposure)	The substance or mixture is not classified as specific target organ toxicant.
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.

### **SECTION 12: Ecological information**

Symptoms/injuries after eye contact

Symptoms/injuries after ingestion

### **Toxicity**

DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE	
LC50 fish 1	1640.00 mg/l Pimephales promelas (fathead minnow) - 96h
EC50 Daphnia 1	3600 mg/l Daphnia magna (Water flea) - 48h
NOEC (chronic)	640 mg/l Daphnia magna (Water flea) - 14d
ACETONITRILE UNLABELED (75-05-8)	
LC50 fish 1	1640.00 mg/l Pimephales promelas (fathead minnow) - 96h
EC50 Daphnia 1	3600 mg/l Daphnia magna (Water flea) - 48h
NOEC (chronic)	640 mg/l Daphnia magna (Water flea) - 14d

: Swallowing a small quantity of this material will result in serious health hazard.

: Causes eye irritation.

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	12.2.	<b>Persistence</b>	and deg	radability
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DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE		RILE	
	Persistence and degradability	Biodegradability	Result: - Readily biodegradable.

#### **ACETONITRILE UNLABELED (75-05-8)**

Persistence and degradability Biodegradability Result: - Readily biodegradable.

#### DL-NORCOTININE (3',4',5'-13C3, 99%) (17708-87-1)

Persistence and degradability Not available.

#### 12.3. Bioaccumulative potential

# DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE Log Pow -0.34

#### **ACETONITRILE UNLABELED (75-05-8)**

7.0-7.0-1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	
Log Pow	-0.34
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).

No bioaccumulation is to be expected (log Pow <= 4).

#### DL-NORCOTININE (3',4',5'-13C3, 99%) (17708-87-1)

Bioaccumulative potential Not available.

#### 12.4. Mobility in soil

Bioaccumulative potential

#### DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE

Ecology - soil Not expected to absorb on soil.

#### **ACETONITRILE UNLABELED (75-05-8)**

Ecology - soil Not expected to absorb on soil.

#### DL-NORCOTININE (3',4',5'-13C3, 99%) (17708-87-1)

Ecology - soil Not available.

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Other adverse effects : Avoid release to the environment.

#### **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 of contents/container to Comply with applicable 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) : 1648 DOT NA no. UN1648

### 14.2. UN proper shipping name

DOT Proper Shipping Name : Acetonitrile

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

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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.

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

33 1648

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

#### Transport by sea

DOT Vessel Stowage Location : B - (i

: 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 : 127

#### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5L

(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

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<b>SECTION 15: Regulatory information</b>	SECTION 15: Regulatory information	
15.1. US Federal regulations	15.1. US Federal regulations	
DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE		
Listed on SARA Section 313 (Specific toxic c	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	
ACETONITRILE UNLABELED (75-05-8)		
Listed on SARA Section 313 (Specific toxic c	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

#### 15.2. International regulations

#### **CANADA**

#### DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE

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

#### **ACETONITRILE UNLABELED (75-05-8)**

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

#### **National regulations** 15.2.1.

No additional information available

#### 15.3. US State regulations

DL-NORCOTININE (3',4',5'-13C3, 99%) 100 UG/ML IN ACETONITRILE()	
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 State of California to cause cancer, birth defects, or any other reproductive harm.

#### **ACETONITRILE UNLABELED (75-05-8)**

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 State of California to cause cancer, birth defects, or any 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. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
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
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin

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H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
R11	Highly flammable
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
F	Highly flammable
Xi	Irritant
Xn	Harmful

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

incapacitation or possible residual injury unless prompt

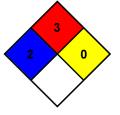
medical attention is given.

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

ambient conditions.

: 0 - Normally stable, even under fire exposure conditions, NFPA reactivity

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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