

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: 01/03/2016 Revision date: Version: 1.0 :

DLM-84

SECTION 1: Identification	of the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixtures
Product name.	: 5% ETHYLBENZENE + 2% TMS IN CHLOROFORM-D
Product code	: DLM-84
1.2. Relevant identified use	es of the substance or mixture and uses advised against
1.2.1. Relevant identified use	25
Main use category	: Professional use
Industrial/Professional use spec	: For professional use only.
1.2.2. Uses advised against	
No additional information available	
	of the safety data sheet
Cambridge Isotope Laboratories, I	
50 Frontage Road Andover, MA 01810	
USA	2 740 0000
USA: 1-800-322-1174 Int: 1-978 cilsales@isotope.com www.isoto	ope.com
Emergency telephone	number
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hu International: 1-703-741-5970 (24	
SECTION 2: Hazards iden	tification
2.1. Classification of the su	ubstance or mixture
Classification according to Regu	ulation (EC) No. 1272/2008 [CLP]
Acute Tox. 4 (Oral)	H302
Acute Tox. 3 (Inhalation)	H331
Acute Tox. 3 (Inhalation:dust,mist)	H331
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Carc. 2	H351
Repr. 2	H361
STOT RE 1	H372
Full text of H-phrases: see section	16
Classification according to Direct	ctive 67/548/EEC or 1999/45/EC
Carc.Cat.3; R40 Repr.Cat.3; R62 Repr.Cat.3; R63 F+; R12 T; R23 T; R48/23 Xn; R22 Xi; R36/38 R52	
Full text of R-phrases: see section	16
Classification (GHS-US)	

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Carc. 2	H351
Repr. 2	H361
STOT SE 3	H336
STOT RE 1	H372

Adverse physicochemical, human health and environmental effects

No additional information available

	lamonto	
	elements	
-	ing to Regulation (EC) No. 12	72/2008 [CLP]
Hazard pictogram	is (CLP)	
		GHS08 GHS06 GHS07
Signal word (CLP	•	: Danger
Hazardous ingred	lients	: ETHYLBENZENE UNLABELED, CHLOROFORM-D (D, 99.8%)
Hazard statement	ts (CLP)	 H224 - Extremely flammable liquid and vapor H302 - Harmful if swallowed H315 - Causes skin irritation H319 - Causes serious eye irritation H331 - Toxic if inhaled H336 - May cause drowsiness or dizziness H351 - Suspected of causing cancer H361 - Suspected of damaging fertility. Suspected of damaging the unborn child H372 - Causes damage to organs (stomach) through prolonged or repeated exposure
Precautionary sta	tements (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 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	3	
Hazard pictogram	ns (GHS-US)	
Signal word (GHS	2-119)	GHS08 GHS06 GHS07 : Danger
Hazard statemen	•	 H224 - Extremely flammable liquid and vapor H302 - Harmful if swallowed H315 - Causes skin irritation H319 - Causes serious eye irritation H331 - Toxic if inhaled H336 - May cause drowsiness or dizziness H351 - Suspected of causing cancer (Dermal, Inhalation, oral) H361 - stomach (Dermal, Inhalation, oral) H372 - Causes damage to organs (stomach) through prolonged or repeated exposure (Dermal, Inhalation, oral)
Precautionary sta	tements (GHS-US)	 P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood 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 dust, fume, gas, mist, spray, vapors 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

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P271 - Use only outdoors or in a well-ventilated area

P273 - Avoid release to the environment

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

P308+P313 - IF exposed or concerned: Get medical advice/attention

P311 - Call a POISON CENTER or doctor/physician

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

P314 - Get medical advice and attention if you feel unwell

P321 - Specific treatment (see Comply with applicable regulations. 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 P362 - Take off contaminated clothing and wash 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

Substances 3.1.

Not applicable 32 Mixturo

3.2. Mixtures			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
CHLOROFORM-D (D, 99.8%)	(CAS No) 865-49-6 (EC no) 200-663-8 (EC index no) 602-006-00-4	96.12	Carc.Cat.3; R40 T; R23 Xi; R36/38 Xn; R22 R67 Repr.Cat.3; R62 Repr.Cat.3; R63 R52 T; R48/23
ETHYLBENZENE UNLABELED	(CAS No) 100-41-4 (EC no) 202-849-4 (EC index no) 601-023-00-4	2.99	F; R11 Xn; R20
TETRAMETHYLSILANE 99.9%	(CAS No) 75-76-3 (EC no) 200-899-1	0.89	F+; R12
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
CHLOROFORM-D (D, 99.8%)	(CAS No) 865-49-6 (EC no) 200-663-8 (EC index no) 602-006-00-4	96.12	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Repr. 2, H361fd STOT SE 3, H336 STOT RE 1, H372
ETHYLBENZENE UNLABELED	(CAS No) 100-41-4 (EC no) 202-849-4 (EC index no) 601-023-00-4	2.99	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:vapour), H332 Carc. 2, H351

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Name	Product identifier	%	Classification (GHS-US)
CHLOROFORM-D (D, 99.8%)	(CAS No) 865-49-6	96.12	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 Repr. 2, H361 STOT SE 3, H336 STOT RE 1, H372 Aquatic Acute 3, H402
ETHYLBENZENE UNLABELED	(CAS No) 100-41-4	2.99	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Carc. 2, H351 Aquatic Acute 2, H401

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	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician
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	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2. Most important symptoms and effect	s, both acute and delayed
Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
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 sub	stance or mixture
Fire hazard	: Extremely flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
5.3. Advice for firefighters	
Firefighting instructions	: Wear self contained breathing apparatus for fire fighting if necessary.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	
6.1.1. For non-emergency personnel	
Emergency procedures	: Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
6.4.2 For omorrow recorded	
6.1.2. For emergency responders	· Avoid broathing Avoid broathing duct, mist or aprov
Protective equipment	: Avoid breathing Avoid breathing dust, mist or spray.
6.2. Environmental precautions	
	. Do not let product enter drains. Discharge into the environment must be avoided.
6.3. Methods and material for containment	• •
Methods for cleaning up	: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
6.4. Reference to other sections	
No additional information available	

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SECTION 7: Handling and storage			
7.1.	Precautions for safe handling		
Addition	al hazards when processed	:	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection.
Hygiene	emeasures	:	Do no eat, drink or smoke when using this product. Wash Both hands thoroughly after handling.
7.2.	Conditions for safe storage, includ	ling	any incompatibilities
Technic	al measures	:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage	conditions	:	Store at room temperature away from light and moisture.
Incompa	atible materials	:	Heat sources.
7.3.	Specific end use(s)		

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ETHYLBENZENE UNLABELED (100-41-4)				
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	100.0000000000 ppm Confirmed animal carcinogen with unknown relevance to humans		
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	125.0000000000 ppm Central Nervous System impairment. Upper Respiratory Tract irritation		
USA OSHA	OSHA PEL (TWA) (mg/m3)	435.000000000 mg/m ³		
USA OSHA	OSHA PEL (STEL) (mg/m3)	545.000000000 mg/m ³		

CHLOROFORM-D (D, 99.8%) (865-49-6)				
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	10.0000000000 ppm Confirmed animal carcinogen with unknown relevance to humans.		
USA NIOSH	NIOSH REL (STEL) (mg/m3)	9.78 mg/m³		
USA NIOSH	NIOSH REL (STEL) (ppm)	2 ppm		
USA OSHA	OSHA PEL (Ceiling) (mg/m3)	240 mg/m ³		
USA OSHA	OSHA PEL (Ceiling) (ppm)	50 ppm		

8.2. Exposure controls

Personal protective equipment

: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection
Eye protection

Skin and body protection

: Gloves.

- : Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH or EN 166.
- : Wear suitable protective clothing. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

: Wear appropriate NIOSH/MSHA approved respirator.

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 comp	onent of this mixture.		
Physical state	: Liquid		
Appearance	: Liquid, clear.		
Molecular mass	: 120.38 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	: -63 °C (-81 °F)		
Freezing point	: No data available		

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Boiling point	: 60.5 - 61.5 °C (140.9 - 142.7 °F)
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 213.3 hPa (160.0 mmHg) at 20.0 °C (68.0 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.5 g/mL at 25 °C (77 °F) (Labeled)
Solubility	: No data available
Log Pow	: 1.97
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	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1.ReactivityNo additional information available

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

Sparks. Heat. Direct sunlight. Overheating. Open flame.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon oxides, Hydrogen chloride gas. Silicon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Harmful if swallowed. Toxic if inhaled. Toxic if inhaled.

5% ETHYLBENZENE + 2% TMS IN CHLOROFORM-D	
ATE (oral)	500.000 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
ETHYLBENZENE UNLABELED (100-41	-4)
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	15433 mg/kg
ATE (oral)	3500.000 mg/kg body weight
ATE (dermal)	15433.000 mg/kg body weight
ATE (vapors)	11.000 mg/l/4h
CHLOROFORM-D (D, 99.8%) (865-49-6)	
LD50 oral rat	908 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (ppm)	500 ppm/4h
ATE (oral)	908.000 mg/kg body weight
ATE (gases)	500.000 ppmV/4h
ATE (vapors)	3.000 mg/l/4h
ATE (dust, mist)	0.500 mg/l/4h

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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Suspected of damaging fertility. Suspected of damaging the unborn child.
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Causes damage to organs (stomach) through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Harmful if swallowed. Toxic if inhaled.
Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
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.

SECTION 12: Ecological information

12.1. Toxicity

ETHYLBENZENE UNLABELED (100-41-4)		
LC50 fish 1	88.00 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h	
EC50 Daphnia 1	2.90 mg/l Daphnia magna (Water flea) - 48 h	
CHLOROFORM-D (D, 99.8%) (865-49-6)		
LC50 fish 1	162.00 mg/l Leuciscus idus (Golden orfe) - 48 h	
LC50 other aquatic organisms 1	97 mg/l Other fish - 96 h	
EC50 Daphnia 1	79.00 mg/l Daphnia magna (Water flea) - 48 h	
EC50 other aquatic organisms 1	51.6 mg/l Daphnia magna (Water flea) - 48 h	
LC50 fish 2	121 mg/l Danio rerio (Zebra fish) - 96 h	
LC50 other aquatic organisms 2	500 mg/l No information available - 24 h	
ErC50 (algae)	500.00 mg/l 24 h	
NOEC (chronic)	122 mg/l Oryzias latipes (Japanese rice fish) - 10 d	
NOEC chronic fish	24 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h	
NOEC chronic algae	120 mg/l Daphnia magna (Water flea) - 11 d	

12.2. Persistence and degradability

ETHYLBENZENE UNLABELED (100-41-4)	
Persistence and degradability	Not available.
TETRAMETHYLSILANE 99.9% (75-76-3)	
Persistence and degradability	Not available.
CHLOROFORM-D (D, 99.8%) (865-49-6)	
Persistence and degradability	Not available.
12.3. Bioaccumulative potential	
5% ETHYLBENZENE + 2% TMS IN CHLOR	OFORM-D
Log Pow	1.97
ETHYLBENZENE UNLABELED (100-41-4)	
Log Pow	2.92
Bioaccumulative potential	Not available.
TETRAMETHYLSILANE 99.9% (75-76-3)	
Bioaccumulative potential	Not available.
CHLOROFORM-D (D, 99.8%) (865-49-6)	
BCF fish 1	-0.11 mg/l Lepomis macrochirus (Bluegill) - 14 d
Bioconcentration factor (BCF REACH)	6
Log Pow	1.97
Bioaccumulative potential	Not available.
02/02/2016	EN (English LIS) 7/4

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 (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquid with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 5 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Tab 2 for UN2672). N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum. T7 - 4 178.274(d)(2) Normal	12.4. Mobility in soil	
TetraAMETHYLSILANE 99.9% (75-76-3) Not available. CHCOROPERIND (0, 99.8%) (865-49-6) Ecology - soll Not available. 21.5. Results of PBT and vPVB assessment No additional information available Not available. 12.5. Other adverse effects No additional information available Statistical information available 13.1. Waste treatment methods Statistical information available Regional legislation (waste) : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed disposed acrompany to disposed of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical informator equipped with an after burner and scrubber. Waste disposal company to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical informator equipped with an after burner and scrubber. SECTION 14: Transport information : Dispose of as nunsed product. SECTION 14: Transport information : UN No.(DOT) In accordance with ADR / RID / ADNR / IMDQ / (CAO / IATA 14.1. UN No.(DOT) : 6.1 - Poisson inhalation hazard : 6.1 - Poisson inhalation hazard : Class 6.1 - Poisson inhalation hazard : Class 6.1 - Poisson inhalation are adunted. Scrub for UAT22 (additional Requirement. One input with a vapor pressure less than or equal to 10.PPA at 50 (111 and 31 H-2). Oroposite 100	ETHYLBENZENE UNLABELED (100-41-4)	
Ecology - soil Not available. CHLORCORM-D (0, 99.8%) (665-45-6) Ecology - soil Ecology - soil Not available. 12.5. Results of PBT and vPvB assessment Not available 12.6. Other adverse effects Not available Sector Adverse effects No adverse effects No adverse effects No adverse effects Image: Sector Adverse effects No adverse effects Sector N133 Disposal conspit (value) : Offer surplus and non-recyclable solutions to a licensed disposal compary. Contact licensed isopsel or may to dispose of this match. Sector N143: Transport information : Dispose of as unused product. SECTION 143: Transport information : UN1888 UN-Na (COT) : 1888 DOT Proper Shipping name : Chloroform Department of Transportation (DOT) Hazard : 6.1 - Poison inhalation hazard Via 2. UN proper Shipping name : Chloroform Dot Special Provisions (49 CFR 172.102) : III - Monor Danger DOT Special Provisions (49 CFR 172.102) : III - Monor Danger DOT Special Provisions (49 CFR 172.102) : III - Monor Danger DOT Special Provisions (49 CFR 173.102) : III - Monor Danger DOT Special Provisions (49 CFR 173.	Ecology - soil	Not available.
Ecology - soil Not available. CHLCRCORM-D (0, 99.8%) (665-49-6) Ecology - soil Ecology - soil Not available. 12.5. Results of PBT and vPVB assessment No additional information available Image: solid sol	TETRAMETHYLSILANE 99.9% (75-76-3)	
CHUCkGYORM-D (D. 99.8%) (865-9-6) Ecology - soil CHUCkGYORM-D (D. 99.8%) (865-9-6) Ecology - soil 22.5. Results of PBT and vPvB assessment No additional information available 22.6. Other adverse effects No additional information available 22.6. Other adverse effects No additional information available 23.6. Other adverse effects No additional information available 23.7. Control (1) 23.7. Disposal Considerations 24.7. Other adverse effects No additional information available 23.7. Control (1) 23.7. Disposal Considerations 25.7. Control (1) 23.7. Disposal Considerations 25.7. Control (1) 23.7. Disposal Considerations 25.7. Dispose of a unused product. 25.7. Control (1)		Not available.
Ecology - sol Not available. 12.5. Results of PBT and VPVB assessment No additional information available Not available 12.6. Other advarse effects No additional information available Image: Comparison of Company. Contact licensed disposal company. Contact licensed disposal company. Contact licensed disposal accompany. Contact licensed disposal recommendations SECTION 14: Transport information Image: Company. Contact licensed disposal recommendations DID T Not (DDT) : 1888 DDT NA no. UN1888 14.2. UN proper shipping name DoDT Proper Shipping Name : Chloroform Department of Transportation (DOT) : 6.1 - Poison inhalation hazard Via		
25 Results of PBT and VPVB assessment No additional information available Information available 12.6. Other adverse effects No No additional information available SECTION 13: Disposed I considerations 13.1. Waste treatment methods Information available SECTION 13: Disposed I considerations Information available SECTION 13: Disposed I considerations Information available SECTION 14: Transport information In a chemical information available SECTION 14: Transport information In a condrace with ADR / RID / ADR / MID / ADR / MI		Natavailable
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) : Offer surplus and non-racyclable solutions to a licensed disposal company. Contact licensed disposal company to dispose of this material. Dissolve or mix the material with a combustible solution in a chemical incinerator equipped with an after burner and scrubber. Waste disposal recommendations : Dispose of as unused product. SECTION 14: Transport information In accordance with ADR / NDD / ICAO / IATA 14.1. UN number . UN-No.(DOT) : 1888 DOT Proper Shipping Name : Chloroform Depart of Transportation (DOT) UN-No.(DOT) : Chloroform Chloroform Chloroform Chloroform Chloroform Chloroform Chloroform Chloroform Chloroform		
21.6. Other adverse effects No additional information available SECTION 13: Disposal considerations 13.1. Weste treatment methods Regional legislation (waste) : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed disposal non-many to dispose of this material. Discolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after burner and sorubber. Waste disposal recommendations : Dispose of as unused product. SECTION 14: Transport information incordance with ADR / RID / ADNN / IMDS / ICAO / IATA 14.1. UN number		int
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SECTION 13: Disposal considerations 13.1. Waste treatment mothods Regional legislation (waste) : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed ditenses disposal company. C	12.6. Other adverse effects	
13.1. Waste treatment methods : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed disposal company. Con	No additional information available	
13.1. Waste treatment methods : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed disposal compony on the licensed disposal contact dispos	SECTION 13: Disposal consideration	ns
Regional legislation (waste) : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed disposal company to dispose of this material. Dissolve on mix the material with a conductible solvent and durin in a chemical equipped with an after burner a with a conductible solvent and durin in a chemical equipped with an after burner and sorublex. Waste disposal recommendations : Dispose of as unused product. SECTION 14: Transport Information In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA 14.1. UN number UNN6(,OOT) UNN6(,ODT) : 1988 DOT Proper Shipping Name : Chloroform Department of Transportation (DOT) Hazard : 6.1 - Poisonous materials 49 CFR 173.132 Classes : Glasses Hazard labels (DOT) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger 'III - Minor Danger : C(1.3 bas f1.31 C) Fas and 31HA2.31HB2.31HA2.31HB2.31HA2.31HB2.21 (1) Na at 122.1, or 30 kPa at 2 (1) (1) KPa at 50 (1) List at 122.1, or 130 kPa at 12 (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2		
Waste disposal recommendations : Dispose of as unused product. SECTION 14: Transport information In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA 14.1. UN number UN-No.(DOT) : 1888 DOT NA no. UN1688 14.2. UN proper shipping name E Dopress Shipping Name : Choroform Department of Transportation (DOT) Hazard : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes : 6.1 - Poison inhalation hazard Water of the More Shipping Name : 6.1 - Poison inhalation hazard Packing group (DOT) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III- Minor Danger You Stard 11F1 and 31H22, Composite than or equal to 110 kPa at 50 C (1 1 bar at 122 F, yor 130 kPa at C (1 3 bar at 131 F) are authorized. HCS: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite V (1 3 bar at 131 F) are authorized. HCS with a vagor pressure less than or equal to 110 kPa at 50 C (1 1 bar at 122 F, yor 130 kPa at C (1 3 bar at 131 F) are authorized. HCS with a vagor pressure less than or equal to 10 kPa at 50 C (1 1 bar at 122 F, yor 130 kPa at C (1 3 bar at 131 F) are authorized. HCS with and the maximum mean bulk temperature during transport (1 mager of Hilling memory). You SZG72 N36 - Aluminum or aluminum. alloy construction materials are permitted only for halogenated hydrocarbons that will not read with a ungree of Hilling runsport (1 mager).		disposal company to dispose of this material. Dissolve or mix the material with a combustible
In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA 14.1 UN number 14.1 UN Number UN-No.(DOT) : 1888 DOT NA no. UN1888 14.2 UN proper shipping name : Chloroform DOT Proper Shipping Name : Chloroform Department of Transportation (DOT) Hazard : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes : 6.1 - Poison inhalation hazard Packing group (DOT) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger DOT Special Provisions (49 CFR 173.202) : III - Minor Danger DOT Special Provision (49 CFR 173.202) : III - Minor Danger DOT Special Provision (49 CFR 172.102) : III - Minor Danger DOT Special Provision (49 CFR 173.202) : III - Minor Danger DOT Packaging Exceptions (49 CFR 173.302) : III - Minor Danger DOT Packaging Exceptions (49 CFR 173.302) : III - Minor Danger DOT P	Waste disposal recommendations	
14.1. UN number UN-No.(DOT) : 1888 DOT NA no. UN1888 14.2. UN proper shipping name : DOT Proper Shipping Name : Department of Transportation (DOT) Hazard : Classes : Hazard labels (DOT) : Packing group (DOT) : DT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31H2 and 31H42, 31HB2, 31HD2, 31HD2 and 31H42). Additional Requirement: Only liquid with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 5 C (1.1 bar at 122 F), or 130	SECTION 14: Transport information	
UN-No.(DOT) : 1888 DOT NA no. UN1888 14.2. UN proper shipping name : Chloroform Department of Transportation (DOT) Hazard : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes : 6.1 - Poison inhalation hazard Hazard labels (DOT) : 6.1 - Poison inhalation hazard Packing group (DOT) : 6.1 - Poison inhalation hazard DDT Special Provisions (49 CFR 172.102) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger C(1.3 bar at 131 F) are authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31H21 and 31H42, 31HB2, 31HD2 and 31H142). Additional Requirement: ONly liquit with a vapor pressure less than or equal to 110 KA 50 C (1.1 bar at 122 F), or 130 KPa at 2 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Tab 2 for UN2672). N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum. T7 - 4 TR3.274(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by th following: (image) Where: this the mean temperature during transport, if is the temperature in degrees celsus of the liquid during filling (1) and the maximum mean bulk temperature during transportation (th) both in degrees celsus. b. For liquids transported under ambient conditions may becalutate during filling (1) and the maximum mean bulk temperature during transportation (th) both in degrees celsus. b. For		
DOT NA no. UN1888 14.2. UN proper shipping name E Chloroform Department of Transportation (DOT) Hazard E 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes E 6.1 - Poison inhalation hazard With a construction of the second seco	14.1. UN number	
DOT NA no. UN1888 14.2. UN proper shipping name E Chloroform Department of Transportation (DOT) Hazard E 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes E 6.1 - Poison inhalation hazard With a construction of the second seco	UN-No.(DOT)	: 1888
DDT Proper Shipping Name : Chloroform Department of Transportation (DOT) Hazard : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes : 6.1 - Poison inhalation hazard Water Strand		
DDT Proper Shipping Name : Chloroform Department of Transportation (DOT) Hazard : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes : 6.1 - Poison inhalation hazard Water Strand	14.2 LIN proper chinging name	
Department of Transportation (DOT) Hazard : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132 Classes : 6.1 - Poison inhalation hazard Wazard labels (DOT) : 6.1 - Poison inhalation hazard Packing group (DOT) : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger Classes : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger Classes : III - Minor Danger Soft Classes : III - Minor Danger DOT Special Provisions (49 CFR 172.102) : III - Minor Danger Soft Classes : Soft Classes Soft Classes : Soft Classes <td></td> <td>· Chloroform</td>		· Chloroform
 Packing group (DOT) DOT Special Provisions (49 CFR 172.102) III - Minor Danger III - Minor Danger III - Minor Danger to the state of the state	Department of Transportation (DOT) Hazard	
DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HD2, 31HD2 and 31HH2). Additional Requirement: Only liquid with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 5 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Tab 2 for UN2672). N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum. T7 - 4 178.274(d)(2) Normal		: 6.1 - Poison inhalation hazard
DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HD2, 31HD2 and 31HH2). Additional Requirement: Only liquid with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 5 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Tab 2 for UN2672). N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum. T7 - 4 178.274(d)(2) Normal		6
 (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquid with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 5 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Tab 2 for UN2672). N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum. T7 - 4 178.274(d)(2) Normal	Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 241 Marine pollutant : No 14.3. Additional information		 N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum. T7 - 4 178.274(d)(2) Normal
DOT Packaging Bulk (49 CFR 173.xxx) : 241 Marine pollutant : No 14.3. Additional information		
Marine pollutant : No 14.3. Additional information		
	14.3. Additional information	
	Other information	: No supplementary information available.

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

Overland transport	
Packing group (ADR)	: III
Class (ADR)	: 6.1 - Toxic substances
Hazard identification number (Kemler No.)	: 60
Classification code (ADR)	: T1
Danger labels (ADR)	: 6.1 - Toxic substances
	6
Orange plates	60 1888
Tunnel restriction code	: E
Limited quantities (ADR)	5L
EAC	: 2Z
Excepted quantities (ADR)	: E1
Transport by sea	
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"
MFAG-No	: 151
Air transmert	
Air transport	
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
Civil Aeronautics Law	: Toxic and infectious substances/Toxic substances
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
	x II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
5% ETHYLBENZENE + 2% TMS IN CHLOROF	FORM-D
Listed on SARA Section 302 (Specific toxic che	
Listed on SARA Section 313 (Specific toxic che	mical listings)
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
ETHYLBENZENE UNLABELED (100-41-4)	Delayed (chronic) health hazard
Listed on SARA Section 313 (Specific toxic che	mical listings)
SARA Section 311/312 Hazard Classes	Fire hazard
	Immediate (acute) health hazard
	Delayed (chronic) health hazard
CHLOROFORM-D (D, 99.8%) (865-49-6)	
Listed on SARA Section 302 (Specific toxic che	
Listed on SARA Section 313 (Specific toxic che SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Delayed (chronic) health hazard
L	

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

5.2. International regulations
CANADA
5% ETHYLBENZENE + 2% TMS IN CHLOROFORM-D
Listed on the Canadian DSL (Domestic Substances List) inventory.
ETHYLBENZENE UNLABELED (100-41-4)
Listed on the Canadian DSL (Domestic Substances List) inventory.
CHLOROFORM-D (D, 99.8%) (865-49-6)
Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

5% ETHYLBENZENE + 2% TMS IN CHLOROFORM-D()	
U.S California - Proposition 65 - Carcinogens List	Yes
U.S California - Proposition 65 - Reproductive Toxicity - Female	Yes
U.S California - Proposition 65 - Reproductive Toxicity - Male	Yes
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 cancer, birth defects or other reproductive harm.

CHLOROFORM-D (D, 99.8%	6) (865-49-6)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes		Yes	Yes	

ETHYLBENZENE UNLABELED (100-41-4)

U.S. - Massachusetts - 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.

CHLOROFORM-D (D, 99.8%) (865-49-6)

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, 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

corresponding unlabeled compound.

compounds are generally not available, but are assumed to be similar or identical to the

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

Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2

Safety Data Sheet

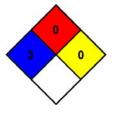
according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Repr. 2	Reproductive toxicity Category 2
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
R11	Highly flammable
R12	Extremely flammable
R20	Harmful by inhalation
R22	Harmful if swallowed
R23	Toxic by inhalation
R36/38	Irritating to eyes and skin
R40	Limited evidence of a carcinogenic effect
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R52	Harmful to aquatic organisms
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
F+	Extremely flammable
Т	Toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard

NFPA fire hazard NFPA reactivity : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

- : 0 Materials that will not burn.
- : 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	: 0 Minimal 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