

# SAFETY DATA SHEET

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Super Slow Urethane Reducer
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Product Code FS 5696-1

Recommended Use	SOLVENT
	FOR PROFESSIONAL USE ONLY

Manufacturer/Importer/Supplier/Distributor information

Company name Address	INTERNATIONAL AUTOBODY MARKETING GROUP 1505 NORTH HAYDEN RD, SUITE 111 SCOTTSDALE, AZ 85257 UNITED STATES
Website	www.5starxtreme.com
Telephone	1-87-REFINISH 480.451.4451

Emergency phone number 800-424-9300 ChemTrec EMERGENCY 24 Hrs.

#### **SECTION 2. HAZARDS IDENTIFICATION**

CHC	Classification	
0115	classification	

Flammable liquids	: Category 2
Skin irritation	: Category 2
Eye irritation	: Category 2A
Germ cell mutagenicity	: Category 1B
Carcinogenicity	: Category 2
Reproductive toxicity	: Category 2
Specific target organ tox- icity - single exposure	: Category 3 (Central nervous system)
Specific target organ tox- icity - repeated exposure	: Category 2 (Liver, Kidney, Central nervous system, Au- ditory system)
Specific target organ tox- icity - repeated exposure (Inhalation)	: Category 2 (Auditory system, Eyes)

Aspiration hazard	: Category 1
GHS Label element Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H340 May cause genetic defects. H351 Suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs (Liver, Kidney, Central nervous system, Auditory system) through prolonged or repeated exposure. H373 May cause damage to organs (Auditory system, Eyes) through prolonged or repeated exposure if inhaled.</li> </ul>
Precautionary statements	<ul> <li><b>Prevention:</b></li> <li>P201 Obtain special instructions before use.</li> <li>P202 Do not handle until all safety precautions have been read and understood.</li> <li>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P233 Keep container tightly closed.</li> <li>P240 Ground/bond container and receiving equipment.</li> <li>P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.</li> <li>P242 Use only non-sparking tools.</li> <li>P243 Take precautionary measures against static discharge.</li> <li>P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear protective gloves/ eye protection/ face protection.</li> <li>P281 Use personal protective equipment as required.</li> <li><b>Response:</b></li> <li>P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.</li> </ul>

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

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.

P331 Do NOT induce vomiting.

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 dry sand, dry chemical or alcohol-resistant foam for extinction.

#### Storage:

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.

#### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

#### **Potential Health Effects**

Carcinogenicity:		
IARC	RC Group 2B: Possibly carcinogenic to humans	
	64742-49-0	Naphtha (pet), hydrotreated It
	64742-89-8	Solvent naphtha (pet), lt aliph.
	100-41-4	Ethylbenzene
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.	
OSHA	No component of this prodution that or equal to 0.1% is identified potential carcinogen by OSI	

#### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### **Emergency Overview**

Appearance	liquid
Colour	clear, colourless
Hazard Summary	No information available.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

CAS-No.	Chemical Name	Concentration (%)
763-69-9	Ethyl 3-ethoxypropionate	30 - 50
123-86-4	n-Butyl acetate	20 - 30
108-88-3	Toluene	5 - 10
78-93-3	Methyl ethyl ketone	5 - 10
64742-49-0	Naphtha (pet), hydrotreated It	0 - 10
64742-89-8	Solvent naphtha (pet), lt aliph.	0 - 10
68410-97-9	Distillates, pet, lt dist hydrotreat process, low-boil	0 - 10
1330-20-7	Mixed xylenes	1 - 5
100-41-4	Ethylbenzene	1 - 5

**Special Notes:** : Functionally equivalent petroleum streams may be found in this preparation at varying concentrations. Mixed Xylenes contains the isomers o-, m-, p- Xylene, and Ethylbenzene. Trace amounts of Toluene and Benzene may also be present as impurities.

#### **SECTION 4. FIRST AID MEASURES**

General advice	<ul> <li>Move out of dangerous area.</li> <li>Show this safety data sheet to the doctor in attendance.</li> <li>Symptoms of poisoning may appear several hours later.</li> <li>Do not leave the victim unattended.</li> </ul>
If inhaled	: Consult a physician after significant exposure.

	If unconscious place in recovery position and seek medical advice.
In case of skin contact	: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	<ul> <li>Immediately flush eye(s) with plenty of water. Remove contact lenses.</li> <li>Protect unharmed eye.</li> <li>Keep eye wide open while rinsing.</li> <li>If eye irritation persists, consult a specialist.</li> </ul>
If swallowed	<ul> <li>Keep respiratory tract clear.</li> <li>Do NOT induce vomiting.</li> <li>Do not give milk or alcoholic beverages.</li> <li>Never give anything by mouth to an unconscious person.</li> <li>If symptoms persist, call a physician.</li> <li>Take victim immediately to hospital.</li> </ul>

# **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Use a water spray to cool fully closed containers.
Further information	<ul> <li>Collect contaminated fire extinguishing water separately. This must not be discharged into drains.</li> <li>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.</li> <li>For safety reasons in case of fire, cans should be stored separately in closed containments.</li> </ul>
Special protective equip-	: Wear self-contained breathing apparatus for fire-

ment for firefighters

fighting if necessary.

# **NFPA Flammable and Combustible Liquids Classification**: Flammable Liquid Class IB

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. 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.
Environmental precau- tions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non- combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in con- tainer for disposal according to local / national regula- tions (see section 13).

#### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling	<ul> <li>Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharg- es. Provide sufficient air exchange and/or exhaust in work rooms.</li> <li>Open drum carefully as content may be under pres- sure. Dispose of rinse water in accordance with local and national regulations.</li> </ul>
Conditions for safe stor- age	: No smoking. 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS-No.	Components	Value type	Control parame-	Basis
CAS-NO.	Components	(Form of	ters / Permissi-	Dasis
			ble concentra-	
		exposure)		
122.06.4			tion	100111
123-86-4	n-Butyl acetate	TWA	150 ppm	ACGIH
		STEL	200 ppm	ACGIH
		ST	200 ppm	NIOSH REL
			950 mg/m3	
		TWA	150 ppm	NIOSH REL
			710 mg/m3	
		TWA	150 ppm	OSHA Z-1
			710 mg/m3	
		TWA	150 ppm	OSHA PO
			710 mg/m3	
		STEL	200 ppm	OSHA P0
			950 mg/m3	
108-88-3	Toluene	TWA	20 ppm	ACGIH
		TWA	100 ppm	NIOSH REL
			375 mg/m3	
		ST	150 ppm	NIOSH REL
			560 mg/m3	
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm	OSHA Z-2
		TWA	100 ppm	OSHA PO
			375 mg/m3	
		STEL	150 ppm	OSHA PO
			560 mg/m3	
78-93-3	Methyl ethyl ketone	TWA	200 ppm	ACGIH
		STEL	300 ppm	ACGIH
		TWA	200 ppm	NIOSH REL
			590 mg/m3	
		ST	300 ppm	NIOSH REL
			885 mg/m3	
		TWA	200 ppm	OSHA Z-1
			590 mg/m3	55
		TWA	200 ppm	OSHA P0
			-00 ppm	5517710

#### **Components with workplace control parameters**

1			590 mg/m3	1
		STEL	300 ppm 885 mg/m3	OSHA PO
64742-49-0	Naphtha (pet), hydrotreat- ed It	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA PO
64742-89-8	Solvent naphtha (pet), lt aliph.	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA PO
1330-20-7	Mixed xylenes	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		TWA	100 ppm 435 mg/m3	OSHA Z-1
100-41-4	Ethylbenzene	TWA	20 ppm	ACGIH
		STEL	125 ppm	ACGIH
		TWA	100 ppm 435 mg/m3	NIOSH REL
		ST	125 ppm 545 mg/m3	NIOSH REL
		TWA	100 ppm 435 mg/m3	OSHA Z-1
		TWA	100 ppm 435 mg/m3	OSHA PO
		STEL	125 ppm 545 mg/m3	OSHA PO

# Biological occupational exposure limits

Components	CAS-No.	Control parame- ters	Biological specimen	Sam- pling time	Permissi- ble con- centration	Basis
Toluene	108-88- 3	Toluene	In blood	Prior to last shift of work- week	0.02 mg/l	ACGIH BEI
		Toluene	Urine	End of shift (As soon as possible after expo- sure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As	0.3 mg/g Creatinine	ACGIH BEI

				soon as possible after expo- sure ceases)		
Methyl ethyl ketone	78-93-3	МЕК	In urine	End of shift (As soon as possible after expo- sure ceases)	2 mg/l	ACGIH BEI
Ethylbenzene	100-41- 4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift at end of work- week	0.7 g/g creatinine	ACGIH BEI

# Personal protective equipment

Respiratory protection	:	No personal respiratory protective equipment normally required. In the case of vapour formation use a respirator with an approved filter.
Hand protection Remarks	:	The suitability for a specific workplace should be dis- cussed with the producers of the protective gloves.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal pro- cessing problems.
Skin and body protection	:	impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear, colourless
Odour	: No data available
Odour Threshold	: No data available
рН	: No data available
Freezing Point	: No data available
Boiling Point (Boiling point/boiling range)	: 56 - 140 °C (133 - 284 °F) (1013 hPa)
Flash point	: -4 °C (25 °F)
Evaporation rate	: 1 Ethyl Ether
Flammability (solid, gas)	
Burning rate	: No data available
Upper explosion limit	: 10 %(V) Calculated Explosive Limit
Lower explosion limit	: 1 %(V) Calculated Explosive Limit
Vapour pressure	: 170.02 mmHg @ 20 °C (68 °F) Calculated Vapor Pressure
Relative vapour density	: > 1(Air = 1.0)
Relative density	: 0.89 @ 20 °C (68 °F)
Density	: 0.89 g/cm3 @ 20 °C (68 °F)
	7.4235 lb/gal @ 20 °C (68 °F)
Bulk density	: No data available
Water solubility	: No data available
Solubility in other sol- vents	: No data available
Partition coefficient: n- octanol/water	: No data available
Auto-ignition temperature	: No data available

Thermal decomposition : No data available

# SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Product will not undergo hazardous polymerization. Vapours may form explosive mixture with air.
Conditions to avoid	<ul> <li>Keep away from heat, flame, sparks and other ignition sources.</li> <li>Extremes of temperature and direct sunlight.</li> <li>Exposure to light.</li> </ul>
Incompatible materials	<ul> <li>Acids <ul> <li>alkalis</li> <li>Amines</li> <li>Copper</li> <li>Copper alloys</li> <li>nitrates</li> <li>organic absorbents such as sawdust, peat moss,</li> <li>ground corn cobs, etc.</li> <li>Strong oxidizing agents</li> <li>Strong reducing agents</li> <li>Bases</li> <li>halogens</li> <li>metal salts</li> <li>Peroxides</li> </ul> </li> </ul>

#### SECTION 11. TOXICOLOGICAL INFORMATION

# Acute toxicity

#### Product:

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 30000 ppm Exposure time: 4 h Test atmosphere: gas

		Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Components:		
763-69-9: Acute oral toxicity	:	LD50 (rat, male): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	:	LC50 (rat): > 998 ppm Exposure time: 6 h Method: OECD Test Guideline 403 Symptoms: weight gain GLP: No data available Assessment: The component/mixture is low toxic after short term inhalation.
Acute dermal toxicity	:	LD50 (rabbit, male): 4,080 mg/kg Method: OECD Test Guideline 402 Symptoms: no symptoms GLP: no
123-86-4:		
Acute oral toxicity	:	LD50 (rat): > 5,000 mg/kg Method: OECD Test Guideline 423 GLP: no
Acute inhalation toxicity	:	LC50 (rat, male and female): > 21 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 GLP: yes
Acute dermal toxicity	:	LD50 (rabbit, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
108-88-3:		
Acute oral toxicity	:	LD50 (rat, male): > 5,580 mg/kg
Acute inhalation toxicity	:	LC50 (rat, male and female): 28.1 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (rabbit): > 5,000 mg/kg
78-93-3:		

Acute oral toxicity	: LD50 (rat): 2,737 mg/kg
Acute inhalation toxicity	: LC50 (mouse): 320 mg/l Exposure time: 4 h
Acute dermal toxicity	: LD50 (rabbit): 6,480 mg/kg
64742-49-0: Acute oral toxicity	: LD50 (rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (rabbit, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
64742-89-8: Acute oral toxicity	: LD50 (rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (rabbit, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
68410-97-9:	
Acute oral toxicity	: LD50 (rat): > 5,000 mg/kg
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (rabbit): > 2,000 mg/kg
1330-20-7: Acute oral toxicity	: LD50 (rat, male): 3,523 mg/kg Method: EU Method B.1 (Acute Toxicity, Oral) GLP: no
Acute inhalation toxicity	: LC50 (rat, male): 6700 ppm Exposure time: 4 h Method: Directive 67/548/EEC, Annex V, B.2. Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	: LD50 (rabbit): 1,100 mg/kg Assessment: The component/mixture is moderately toxic after single contact with skin.

#### 100-41-4:

Acute inhalation toxicity	: LC50 (Mouse, Male): 10 mg/l Exposure time: 4 h Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	: LD50 (rabbit): 15,433 mg/kg

#### Skin corrosion/irritation

#### Product:

Remarks: Irritating to skin.

#### Components:

**763-69-9:** Species: rabbit Exposure time: 4 h Method: OECD Test Guideline 404 Result: Mild skin irritation GLP: no

#### 123-86-4:

Species: rabbit Method: OECD Test Guideline 404 Result: No skin irritation GLP: no

#### 108-88-3:

Species: rabbit Exposure time: 4 h Result: Irritating to skin.

#### 78-93-3:

Species: rabbit Exposure time: 24 h Result: No skin irritation

#### 64742-49-0:

Species: rabbit Result: Irritating to skin.

#### 64742-89-8:

Species: rabbit Exposure time: 4 h Result: Irritating to skin.

#### 68410-97-9:

Species: rabbit Result: Irritating to skin.

#### 1330-20-7:

Species: rabbit Exposure time: 24 h Result: Irritating to skin.

#### 100-41-4:

Species: rabbit Result: Mild skin irritation

#### Serious eye damage/eye irritation

#### Product:

Remarks: Irritating to eyes.

#### Components:

**763-69-9:** Species: rabbit Result: Mild eye irritation Method: OECD Test Guideline 405 GLP: no

#### 123-86-4:

Species: rabbit Result: No eye irritation GLP: yes

#### 108-88-3:

Species: rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405

#### 78-93-3:

Species: rabbit Result: Irritating to eyes. Exposure time: 24 h

#### 64742-49-0:

Species: rabbit Result: Irritating to eyes.

#### 64742-89-8:

Species: rabbit Result: Irritating to eyes.

#### 68410-97-9:

Species: rabbit Result: Irritating to eyes.

#### 1330-20-7:

Species: rabbit Result: Irritating to eyes.

#### 100-41-4:

Species: rabbit Result: Mild eye irritation

#### **Respiratory or skin sensitisation**

#### Components:

**763-69-9:** Species: guinea pig Method: OECD Test Guideline 406 Result: Did not cause sensitisation on laboratory animals.

#### 123-86-4:

Species: guinea pig Result: Did not cause sensitisation on laboratory animals.

#### 108-88-3:

Test Type: Maximisation Test (GPMT) Species: guinea pig Result: Did not cause sensitisation on laboratory animals. GLP: yes

#### 78-93-3:

Test Type: Buehler Test Species: guinea pig Method: OECD Test Guideline 406 Result: Did not cause sensitisation on laboratory animals.

#### 64742-49-0:

Test Type: Buehler Test Species: guinea pig Result: Did not cause sensitisation on laboratory animals.

#### 64742-89-8:

Test Type: Buehler Test Species: guinea pig Result: Did not cause sensitisation on laboratory animals.

#### 1330-20-7:

Remarks: No data available

**100-41-4:** Remarks: No data available

#### Germ cell mutagenicity

Components:

763-69-9:	
Genotoxicity in vitro	: Test Type: Mammalian cell gene mutation assay Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 476 Result: negative GLP: yes
	: Test Type: Ames test Test species: Salmonella typhimurium Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 471 Result: negative GLP: yes
	<ul> <li>Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: yes</li> </ul>
Germ cell mutagenicity- Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
<b>123-86-4:</b> Genotoxicity in vitro	: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster lung fibroblasts Metabolic activation: Without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: No data available
Genotoxicity in vivo	<ul> <li>Test Type: In vivo micronucleus test Test species: mouse (male and female) Application Route: Oral Dose: 500, 1000, 2000 mg/kg bw Method: OECD Test Guideline 474 Result: negative GLP: yes Test substance: Information given is based on data obtained from similar substances.</li> </ul>
Germ cell mutagenicity- Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

108-88-3:

Genotoxicity in vitro	: Test Type: Mammalian cell gene mutation assay Test species: Mouse lymphoma cells Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 476 Result: negative	
Genotoxicity in vivo	<ul> <li>Test Type: Dominant lethal assay Test species: mouse (male) Application Route: inhalation (vapour) Exposure time: 6 h/d, 5 d/wk for 8 wks Dose: 0, 100, 400 ppm Method: OECD Test Guideline 478 Result: negative</li> </ul>	
Germ cell mutagenicity- Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.	
<b>78-93-3:</b> Genotoxicity in vitro	: Test Type: Ames test Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 471	
	Result: negative	
	: Test Type: Mammalian cell gene mutation assay Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 476 Result: negative	
	: Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative	
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: mouse (male and female) Dose: 1.96 mL/kg Method: OECD Test Guideline 474 Result: negative	
Germ cell mutagenicity- Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.	
<b>64742-49-0:</b> Germ cell mutagenicity- Assessment	: Mutagenicity classification not possible from current data	
64742-89-8: Germ cell mutagenicity-	: Mutagenicity classification not possible from current	

Assessment	data
68410-97-9: Genotoxicity in vitro	: Test Type: Mammalian cell gene mutation assay Test species: mouse lymphoma cells Result: positive
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: mouse Method: OECD Test Guideline 474 Result: positive
Germ cell mutagenicity- Assessment	: Positive result(s) from in vivo heritable germ cell mu- tagenicity tests in mammals
<b>1330-20-7:</b> Genotoxicity in vitro	: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Method: Mutagenicity (in vitro mammalian cytogenetic test) Result: negative
	: Test Type: Sister chromatid exchange assay in mam- malian cells Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Result: negative
Genotoxicity in vivo	: Test Type: Dominant lethal assay Test species: mouse Application Route: Subcutaneous Exposure time: 8 wk Dose: 1.0 mL/kg Method: OECD Test Guideline 478 Result: negative GLP: no
Germ cell mutagenicity- Assessment	: Animal testing did not show any mutagenic effects.
<b>100-41-4:</b> Genotoxicity in vitro	: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 473 Result: negative

GLP: no

	<ul> <li>Test Type: Mammalian cell gene mutation assay Test species: mouse lymphoma cells Metabolic activation: with and without metabolic activation vation Method: OECD Test Guideline 476 Result: negative GLP: yes</li> </ul>
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: mouse (male) Application Route: Oral Method: OECD Test Guideline 474 Result: negative GLP: yes
	Test Type: DNA damage and/or repair Test species: mouse (male and female) Application Route: Inhalation Method: OECD Test Guideline 486 Result: negative GLP: yes
Germ cell mutagenicity- Assessment	: In vivo tests did not show mutagenic effects

#### Carcinogenicity

#### Components:

763-69-9:

Remarks: This information is not available.

Carcinogenicity - As- : Carcinogenicity classification not possible from current data.

#### 123-86-4:

Remarks: This information is not available.

Carcinogenicity - As- : No evidence of carcinogenicity in animal studies. sessment

#### 108-88-3:

Species: rat, (male and female) Application Route: inhalation (vapour) Exposure time: 103 wks Dose: 0, 600, 1200 ppm Frequency of Treatment: 6.5 h/d, 5 d/wk NOAEL: No observed adverse effect level: 1,200 ppm Method: OECD Test Guideline 453 Result: did not display carcinogenic properties Symptoms: Erosion of nasal epithelium GLP: yes

Carcinogenicity - As- : Not classifiable as a human carcinogen. sessment

#### 78-93-3:

Remarks: This information is not available.

Carcinogenicity - As-	:	Not classifiable as a human carcinogen.
sessment		

#### 64742-49-0:

Carcinogenicity - As- : Not classifiable as a human carcinogen. sessment

#### 64742-89-8:

Carcinogenicity - As- : Not classifiable as a human carcinogen. sessment

#### 68410-97-9:

Species: mouse NOAEL: 50 mg/kg bw/day

Method: OECD Test Guideline 451 Result: evidence of carcinogenic activity

Carcinogenicity - As- : Possible human carcinogen sessment

#### 1330-20-7:

Species: mouse, (male and female) Application Route: Oral Exposure time: 103 wk Dose: 0, 500 or 1000 mg/kg Frequency of Treatment: 5 days/week Method: Directive 67/548/EEC, Annex V, B.32. Result: did not display carcinogenic properties GLP: No data available

Carcinogenicity - As- : Animal testing did not show any carcinogenic effects. sessment

#### 100-41-4:

Species: mouse, (male and female) Application Route: Inhalation Exposure time: 103 wk Activity duration: 6 h Dose: 0, 75, 250, 750 ppm Frequency of Treatment: 5 days/week NOAEL: 250 ppm

Method: OECD Test Guideline 453 Result: evidence of carcinogenic activity Symptoms: increased incidences of alveolar/bronchiolar neoplasms, increase incidence of hepatocellular carcinomas GLP: yes

Carcinogenicity - As-	:	Suspected human carcinogens
sessment		

#### **Reproductive toxicity**

#### **Components:**

<b>763-69-9:</b> Effects on fertility	: Remarks: No data available
Effects on foetal devel- opment	: Species: rat Application Route: Inhalation Dose: 125, 250, 500 and 1000 ppm Duration of Single Treatment: 10 d General Toxicity Maternal: NOAEC: 250 ppm Teratogenicity: NOAEC: 1,000 ppm Embryo-foetal toxicity.: NOAEC: 500 ppm Method: OECD Test Guideline 414 Result: No teratogenic effects. GLP: No data available
Reproductive toxicity - Assessment	: No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.
<b>123-86-4:</b> Effects on fertility	: Species: rat, male and female Application Route: Inhalation Dose: 0, 750, 1500, 2000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 750 ppm General Toxicity F1: NOAEC: 750 ppm Fertility: NOAEC: 2,000 ppm Early Embryonic Development: NOAEC: 750 ppm Symptoms: Effect on reproduction capacity. Method: OECD Test Guideline 416 GLP: yes
Effects on foetal devel- opment	: Species: rat, male and female Application Route: vapour

	Dose: 500, 1500, 3000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 5 days/week GLP: yes
Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
<b>108-88-3:</b> Effects on fertility	<ul> <li>Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 500 ppm General Toxicity F1: NOAEC: 500 ppm Fertility: NOAEC: 2,000 ppm Symptoms: Reduced maternal body weight gain. Re- duced offspring weight gain. Method: OECD Test Guideline 416 Result: Animal testing did not show any effects on fertility. GLP: yes</li> </ul>
	Test Type: Fertility Species: rat, male and female Application Route: inhalation (vapour) Dose: 0, 600, 1200 ppm Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 600 ppm Symptoms: Decreased sperm count Result: Animal testing did not show any effects on fertility.
Effects on foetal devel- opment	: Species: rat Application Route: inhalation (vapour) Dose: 0, 250, 750, 1500, 3000 ppm Duration of Single Treatment: 10 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 750 ppm Developmental Toxicity: NOAEC: 750 ppm Symptoms: Maternal toxicity, Reduced body weight, Skeletal malformations. GLP: yes
Reproductive toxicity - Assessment	: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

78-93-3:

Effects on foetal devel- opment	: Species: rat, female Application Route: Inhalation Dose: 400, 1000, 3000 ppm Duration of Single Treatment: 18 d Frequency of Treatment: 7 days/week General Toxicity Maternal: NOAEC: 1,002 ppm Teratogenicity: NOAEC: 1,002 ppm Method: OECD Test Guideline 414 GLP: no
Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Did not show teratogenic effects in animal experi- ments.
<b>64742-49-0:</b> Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
<b>64742-89-8:</b> Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
<b>68410-97-9:</b> Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
<b>1330-20-7:</b> Effects on fertility	: Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 25, 100 and 500 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: > 500 ppm General Toxicity F1: NOAEC: > 500 ppm Early Embryonic Development: NOAEC: > 500 ppm Result: No reproductive effects.
Effects on foetal devel- opment	: Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000 or 2000 ppm Duration of Single Treatment: 14 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: > 2,000 Developmental Toxicity: NOAEC: 100 ppm Result: No teratogenic effects., Developmental toxicity

	occurred at maternal toxicity dose levels
Reproductive toxicity - Assessment	: Animal testing did not show any effects on fertility. Damage to fetus not classifiable
<b>100-41-4:</b> Effects on fertility	<ul> <li>Test Type: One generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500 and 1000 ppm Duration of Single Treatment: 6 h General Toxicity - Parent: NOAEC: 1,000 ppm General Toxicity F1: NOAEC: 100 ppm Symptoms: Reduced foetal weight. Reduced offspring weight gain. Method: OECD Test Guideline 415 Result: No reproductive effects. GLP: yes</li> </ul>
Effects on foetal devel- opment	: Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000, 2000 ppm Duration of Single Treatment: 15 d General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: 2,000 ppm Developmental Toxicity: NOAEC: 500 ppm Symptoms: Reduced body weight Method: OECD Test Guideline 414 Result: Developmental toxicity occurred at maternal toxicity dose levels GLP: No data available
Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.

# STOT - single exposure

Product:No data available Components: 763-69-9:No data available

# 123-86-4:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsi- ness or dizziness., The substance or mixture is classified as specific target	
		organ toxicant, sin-	

	gle exposure, cate- gory 3 with narcotic effects.	
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#### 108-88-3:

<b>Exposure routes:</b>	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsi- ness or dizziness., The substance or mixture is classified as specific target organ toxicant, sin- gle exposure, cate- gory 3 with narcotic effects.	

#### 78-93-3:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsi- ness or dizziness., The substance or mixture is classified as specific target organ toxicant, sin- gle exposure, cate- gory 3 with narcotic effects.	

#### 64742-49-0:

<b>Exposure routes:</b>	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsi- ness or dizziness., The substance or mixture is classified as specific target organ toxicant, sin- gle exposure, cate- gory 3 with narcotic effects.	

#### 64742-89-8:No data available

#### 68410-97-9:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous	May cause drowsi-	
	system	ness or dizziness.,	

	The substance or mixture is classified as specific target organ toxicant, sin- gle exposure, cate- gory 3 with narcotic effects.	
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#### 1330-20-7:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Respiratory system	May cause respira- tory irritation., The substance or mix- ture is classified as specific target or- gan toxicant, single exposure, category 3 with respiratory tract irritation.	

100-41-4:No data available

#### **STOT - repeated exposure**

**Product:**No data available

#### Components:

763-69-9:No data available

123-86-4:No data available

#### 108-88-3:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Auditory system, Eyes	May cause damage to organs through prolonged or re- peated exposure., The substance or mixture is classified as specific target organ toxicant, re- peated exposure, category 2.	

78-93-3:No data available

64742-49-0:No data available

64742-89-8:No data available

68410-97-9:No data available

#### 1330-20-7:

Exposure routes:	Target Organs:	Assessment:	Remarks:
	Liver, Kidney, Cen- tral nervous system	May cause damage to organs through prolonged or re- peated exposure., The substance or mixture is classified as specific target organ toxicant, re- peated exposure, category 2.	

#### 100-41-4:

Exposure routes:	Target Organs:	Assessment:	Remarks:
	Auditory system	May cause damage to organs through prolonged or re- peated exposure., The substance or mixture is classified as specific target organ toxicant, re- peated exposure, category 2.	

# Repeated dose toxicity

#### Components:

**763-69-9:** Species: rat, male and female NOAEL: 1,000 mg/kg Application Route: Oral Exposure time: 28 d Dose: 100 or 1000 mg/kg/day Method: OECD Test Guideline 407 GLP: yes

Species: rat, male and female NOAEL: 500 Application Route: Inhalation Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk Dose: 250, 500 or 1000 ppm

#### 123-86-4:

Species: rat, male and female NOAEL: 500 Application Route: inhalation (vapour) Exposure time: 13 wk Number of exposures: 6 h/d, 5d/wk Dose: 500, 1500, 3000 ppm GLP: yes Symptoms: oral or nasal discharge

#### 108-88-3:

Species: rat, male and female NOAEL: 300 Application Route: inhalation (vapour) Exposure time: 6, 12, or 18 mths Number of exposures: 6 h/d, 5 d/wk Dose: 0, 30, 100, 300 ppm Method: OECD Test Guideline 453

Repeated dose toxicity - : Causes skin irritation. Assessment

#### 64742-89-8:

Species: rat, male and female NOAEL: 1402 Application Route: inhalation (vapour) Test atmosphere: vapour Exposure time: 13 weeks Number of exposures: 6 hours/day, 5 days/week Dose: 322, 1402, 9869 mg/m3 GLP: yes Target Organs: Kidney Symptoms: Nasal and ocular discharge

#### 1330-20-7:

Species: rat, male and female NOAEL: 250 mg/kg Application Route: Oral Exposure time: 103 wk Number of exposures: 5 d/wk Dose: 0, 250 or 500 mg/kg Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

#### 100-41-4:

Species: rat, male and female NOAEL: 75 mg/kg Application Route: Oral Exposure time: 28 d Dose: 75, 250 and 750 mg/kg bw/day Method: OECD Test Guideline 407 GLP: yes Symptoms: Increased kidney and liver weights

#### **Aspiration toxicity**

<u>Components:</u> 108-88-3: Aspiration Toxicity - Category 1

**64742-49-0:** May be fatal if swallowed and enters airways.

**64742-89-8:** May be fatal if swallowed and enters airways.

68410-97-9:

May be fatal if swallowed and enters airways.

1330-20-7:

May be fatal if swallowed and enters airways.

#### 100-41-4:

May be fatal if swallowed and enters airways.

#### **Further information**

#### Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

# SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	
<u>Components:</u> 763-69-9:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 55.3 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic inverte- brates	<ul> <li>EC50 (Daphnia magna (Water flea)): 479.7 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes</li> </ul>
Toxicity to algae	<ul> <li>EC50 (Pseudokirchneriella subcapitata (green algae)):</li> <li>&gt; 114.86 mg/l</li> <li>End point: Growth rate</li> <li>Exposure time: 72 h</li> <li>Test Type: static test</li> <li>Method: OECD Test Guideline 201</li> <li>GLP: yes</li> </ul>
Toxicity to bacteria	: IC50: > 5,000 mg/l Exposure time: 16 h Test Type: Growth inhibition GLP:
123-86-4:	
Toxicity to fish	<ul> <li>LC50 (Pimephales promelas (fathead minnow)): 18 mg/l</li> <li>Exposure time: 96 h</li> <li>Test Type: flow-through test</li> <li>Method: OECD Test Guideline 203</li> <li>GLP: no</li> </ul>
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Daphnia magna (Water flea)): 44 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l End point: Growth rate Exposure time: 72 h

Toxicity to daphnia and other aquatic inverte- brates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): 23 mg/l Exposure time: 21 d
Toxicity to bacteria	: EC 50 (Tetrahymena pyriformis (Ciliate)): 356 mg/l Exposure time: 40 h Test Type: Static
Ecotoxicology Assessment Acute aquatic toxicity	: Harmful to aquatic life.
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.
108-88-3:	
Toxicity to fish	<ul> <li>LC50 (Oncorhynchus mykiss (rainbow trout)): 5.5 mg/l</li> <li>Exposure time: 96 h</li> <li>Test Type: flow-through test</li> </ul>
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Ceriodaphnia dubia): 3.78 mg/l Exposure time: 48 h Test Type: Renewal
Toxicity to algae	: EC50 (Chlorella vulgaris (Fresh water algae)): 134 mg/l Exposure time: 3 h Test Type: static test
Toxicity to bacteria	: IC50 (Bacteria): 84 mg/l Exposure time: 24 h Test Type: Static
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.
78-93-3:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: Immobilization
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h

64742-49-0:	
Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Daphnia magna (Water flea)): 4.5 mg/l Exposure time: 48 h
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (green algae)): 3.71 mg/l Exposure time: 96 h
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.
64742-89-8:	
Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 8.2 mg/l
	Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Daphnia magna (Water flea)): 4.5 mg/l Exposure time: 48 h Test Type: Immobilization Analytical monitoring: yes
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (green algae)): 3.7 mg/l Exposure time: 96 h Test Type: static test
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.
68410-97-9:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 8.2 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Daphnia magna (Water flea)): 4.5 mg/l Exposure time: 48 h
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (green algae)): 3.1 mg/l Exposure time: 72 h

	Method: OECD Test Guideline 201
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.
1330-20-7:	
Toxicity to fish	<ul> <li>LC50 (Oncorhynchus mykiss (rainbow trout)): 2.6 mg/l</li> <li>Exposure time: 96 h</li> <li>Method: OECD Test Guideline 203</li> </ul>
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Daphnia magna (Water flea)): 1 mg/l Exposure time: 24 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata): 4.36 mg/l End point: Growth rate Exposure time: 73 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.
100-41-4:	
Toxicity to fish	<ul> <li>LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l</li> <li>Exposure time: 96 h</li> <li>Test Type: semi-static test</li> </ul>
Toxicity to daphnia and other aquatic inverte- brates	: EC50 (Daphnia magna (Water flea)): 1.8 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata): 5.4 mg/l Exposure time: 72 h Test Type: static test
Toxicity to bacteria	: Remarks: No data available
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

# Persistence and degradability

Components:	
763-69-9:	
Biodegradability	<ul> <li>Primary biodegradation Inoculum: activated sludge Concentration: 34.8 mg/l Result: Readily biodegradable. Biodegradation: 99.8 % Testing period: 5 d Exposure time: 28 d Method: OECD Test Guideline 301B Remarks: The 10 day time window criterion is not fulfilled.</li> </ul>
Chemical Oxygen De- mand (COD)	: 0.002 mg/g
Theoritical Oxygen De- mand (ThOD)	: 0.00197 mg/g
123-86-4:	
Biodegradability	: Biodegradation: 83 % Exposure time: 28 d Method: OECD Test Guideline 301D
Chemical Oxygen De- mand (COD)	: 0.00169 mg/g
BOD/COD	: BOD/COD: 72 %
Theoritical Oxygen De- mand (ThOD)	: 0.0022 mg/g
108-88-3:	
Biodegradability	: Inoculum: Sewage Biodegradation: 100 % Remarks: Readily biodegradable
78-93-3:	
Biodegradability	: Concentration: 2 mg/l Result: Readily biodegradable. Biodegradation: 98 % Exposure time: 28 d Test substance: Methylethyl Ketone GLP: yes Remarks: Readily biodegradable

# 64742-49-0:

Biodegradability	: aerobic Inoculum: activated sludge Concentration: 20 mg/l Biodegradation: 74.30 %
	Exposure time: 56 d GLP: yes
	Remarks: Inherently biodegradable.
64742-89-8:	

#### Diadagendahility

Biodegradability	: Concentration: 49.2 mg/l
	Result: Readily biodegradable.
	Biodegradation: 77 %
	Testing period: 2 d
	Exposure time: 28 d
	GLP: yes

#### 1330-20-7:

Biodegradability	: Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: 72 % Exposure time: 20 d

#### 100-41-4:

Biodegradability	: Inoculum: activated sludge		
	Concentration: 22 mg/l		
	Result: Readily biodegradable.		
	Biodegradation: 70 %		
	Exposure time: 28 d		
	GLP: yes		

#### **Bioaccumulative potential**

# Components:763-69-9:Partition coefficient: n-<br/>octanol/water123-86-4:Bioaccumulation: Species: Fish<br/>Bioconcentration factor (BCF): 15Partition coefficient: n-<br/>octanol/water108-88-3:<br/>Partition coefficient: n-<br/>octanol/water: log Pow: 2.73<br/>octanol/water

<b>64742-49-0:</b> Partition coefficient: n- octanol/water	Remarks: No data available		
<b>64742-89-8:</b> Partition coefficient: n- octanol/water	: log Pow: 2.13 - 4.85 (25 °C)		
<b>1330-20-7:</b> Partition coefficient: n- octanol/water	: log Pow: 2.77 - 3.15		
<b>100-41-4:</b> Partition coefficient: n- octanol/water	log Pow: 2.92		
<b>Mobility in soil</b> No data available			
Other adverse effects			
Product:			
Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Sub- stances		
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).		
Additional ecological in- formation	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.		
Components:			
<b>100-41-4:</b> Results of PBT and vPvB assessment	: This substance is not considered to be persistent, bio- accumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumu- lating (vPvB).		

#### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	: Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging	<ul> <li>Empty remaining contents.</li> <li>Dispose of as unused product.</li> <li>Do not re-use empty containers.</li> <li>Do not burn, or use a cutting torch on, the empty drum.</li> </ul>

#### **SECTION 14. TRANSPORT INFORMATION**

**IATA (International Air Transport Association)**: UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:-4 °C(25 °F)

**IMDG (International Maritime Dangerous Goods):** UN1263, PAINT RELATED MATERIAL, 3, II

DOT (Department of Transportation): UN1263, PAINT RELATED MATERIAL, 3, II

#### **SECTION 15. REGULATORY INFORMATION**

OSHA Hazards	: Flammable liquid, Carcinogen, Harmful by skin absorption., Moderate skin irritant, Moderate eye irritant, Moderate respiratory irritant, Teratogen, Reproductive hazard, Mutagen, Aspiration hazard		
WHMIS Classification	: B2: Flammable liquid D1A: Very Toxic Material Causing Immediate and Serious Toxic Effects D2A: Very Toxic Material Causing Other Toxic Effects D2B: Toxic Material Causing Other Toxic Effects		

#### **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Mixed xylenes	1330-20-7	100	2054

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

-	•	• /	
Components	CAS-No.	Component	Calculated product
		RQ (lbs)	RQ (lbs)
Formaldehyde	50-00-0	100	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

#### SARA 311/312 Hazards

: Fire Hazard Chronic Health Hazard Acute Health Hazard

#### **Clean Air Act**

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61): 108-88-3 Toluene 8 7920 %

	108-88-3	loluene	8.7920 %
	100-41-4	Ethylbenzene	1.4728 %
	71-43-2	Benzene	0.0146 %
	50-00-0	Formaldehyde	0.0085 %
	110-54-3	Hexane	0.0011 %
	140-88-5	Ethyl acrylate	0.0006 %
	91-20-3	Naphthalene	0.0001 %
	98-82-8	Cumene	0.000 %
The follo	wing chemical(	s) are listed under the U.S. Clean Ai	r Act Section 112(r) for
Accident	al Release Prev	ention (40 CFR 68.130, Subpart F):	
	50-00-0	Formaldehyde	0.0085 %
The follo	wing chemical(	s) are listed under the U.S. Clean Ai	r Act Section 111 SOCMI
Intermed	diate or Final V	DC's (40 CFR 60.489):	
	123-86-4	n-Butyl acetate	29.7322 %
	108-88-3	Toluene	8.7920 %
	78-93-3	Methyl ethyl ketone	8.143 %
	1330-20-7	Mixed xylenes	4.8685 %
	100-41-4	Ethylbenzene	1.4728 %
	110-82-7	Cyclohexane	0.1453 %
	71-43-2	Benzene	0.0146 %
	50-00-0	Formaldehyde	0.0085 %
	140-88-5	Ethyl acrylate	0.0006 %
	98-82-8	Cumene	0.000 %

#### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

123-86-4	n-Butyl acetate	29.7322 %
108-88-3	Toluene	8.7920 %
1330-20-7	Mixed xylenes	4.8685 %
100-41-4	Ethylbenzene	1.4728 %
110-82-7	Cyclohexane	0.1453 %
71-43-2	Benzene	0.0146 %
50-00-0	Formaldehyde	0.0085 %
91-20-3	Naphthalene	0.0001 %
5	Chemicals are listed under the U.S	. CleanWater Act, Section
311, Table 117.3:		
123-86-4	n-Butyl acetate	29.7322 %
108-88-3	Toluene	8.7920 %
1330-20-7	Mixed xylenes	4.8685 %
100-41-4	Ethylbenzene	1.4728 %
110-82-7	Cyclohexane	0.1453 %

71-43-2 Benzene 50-00-0 Formaldehyde 91-20-3 Naphthalene This product contains the following toxi Act Section 307		naldehyde hthalene	0.0146 % 0.0085 % 0.0001 % ic pollutants listed under the U.S. Clean Water	
108-88			8.7920 %	
100-41 US State Regul	•	lbenzene	1.4728 %	
Massachusetts		now		
12 10 73 12 10	23-86-4 08-88-3 3-93-3 330-20-7 00-41-4	n-Butyl acetate Toluene Methyl ethyl ketone Mixed xylenes Ethylbenzene		20 - 30 % 5 - 10 % 5 - 10 % 1 - 5 % 0 - 0 1 %
50	1-43-2 0-00-0 40-88-5	Benzene Formaldehyde Ethyl acrylate		0 - 0.1 % 0 - 0.1 % 0 - 0.1 %
12 10 78 64 64 64 11 10 11	<b>Right To Kno</b> 53-69-9 23-86-4 08-88-3 3-93-3 4742-49-0 4742-89-8 3410-97-9 330-20-7 00-41-4 10-82-7 1-43-2	Ethyl 3-ethoxypropionate n-Butyl acetate Toluene Methyl ethyl ketone Naphtha (pet), hydrotreated It Solvent naphtha (pet), It aliph Distillates, pet, It dist hydrotre process, low-boil Mixed xylenes Ethylbenzene Cyclohexane Benzene	at	30 - 50 % $20 - 30 %$ $5 - 10 %$ $5 - 10 %$ $0 - 10 %$ $0 - 10 %$ $1 - 5 %$ $1 - 5 %$ $0.1 - 1 %$ $0 - 0.1 %$
12 10 78 64 64 64 13	<b>3 ht To Knov</b> 53-69-9 23-86-4 08-88-3 3-93-3 4742-49-0 4742-89-8 3410-97-9 330-20-7 00-41-4	Ethyl 3-ethoxypropionate n-Butyl acetate Toluene Methyl ethyl ketone Naphtha (pet), hydrotreated It Solvent naphtha (pet), It aliph Distillates, pet, It dist hydrotre process, low-boil Mixed xylenes Ethylbenzene		$30 - 50 \% \\ 20 - 30 \% \\ 5 - 10 \% \\ 5 - 10 \% \\ 0 - 10 \% \\ 0 - 10 \% \\ 0 - 10 \% \\ 1 - 5 \% \\ 1 - 5 \% $
California Prop	65	WARNING! This product contai the State of California to cause		al known to

100-41-4 71-43-2 50-00-0	Ethylbenzene Benzene Formaldehyde
140-88-5	Ethyl acrylate
91-20-3	Naphthalene
98-82-8	Cumene
	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
108-88-3 71-43-2	Toluene Benzene

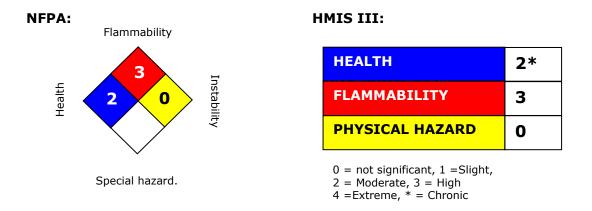
# The components of this product are reported in the following inventories:

Switzerland. New notified substances and declared preparations	:	y (positive listing) (The formulation contains substances listed on the Swiss Inventory)
United States TSCA Inventory	:	y (positive listing) (On TSCA Invento- ry)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	n (Negative listing) (Not in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	n (Negative listing) (Not in compliance with the inventory)
Japan. ISHL - Inventory of Chemical Substances (METI)	:	n (Negative listing) (Not in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
China. Inventory of Existing Chemical Substances in China (IECSC)	:	y (positive listing) (On the inventory, or in compliance with the inventory)

#### **SECTION 16. OTHER INFORMATION**

VERSION	3.0
REVISION DATE	06/20/2019



The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Legecy MSDS:

R0374099

Material number: 117095,

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Cour		Lethal Dose 50%
ACGIH	American Conference of Gov-	LD50	Lethal Dose 50%
	ernment Industrial Hygienists		
AICS	Australia, Inventory of Chem- ical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substanc- es List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Sub- stances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Admin- istration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Exist- ing Chemical Substances	PICCS	Philipines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concen- tration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reau- thorization Act.
IARC	International Agency for Re- search on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemi- cal Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substanc- es	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical In- ventory	UVCB	Unknown or Variable Compositon, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials In- formation System
LC50	50 Lethal Concentration 50%		centration 50%