

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 02/07/2019 Revision date: 02/07/2019 Supersedes: 02/07/2019 Version: 1.0

SECTION 1: Identification Identification 1.1. Product form : Substance Substance name : Fast Epoxy Catalyst Product code FOR1 0200 Recommended use and restrictions on use 1.2. No additional information available Supplier 1.3. Color By Design, Inc. 407 W. Main Haven, KS 67543 T 620-465-2600 info@colorbydesigninc.com 1.4. **Emergency telephone number** Emergency number : 620-728-4044 SECTION 2: Hazard(s) identification **Classification of the substance or mixture** 2.1. **GHS US classification**

Flammable liquids Category 2 Highly flammable liquid and vapour Skin corrosion/irritation Category 2 Causes skin irritation Serious eye damage/eye irritation Category 2 Causes serious eye irritation Skin sensitization, Category 1 May cause an allergic skin reaction Germ cell mutagenicity Category 1B May cause genetic defects Carcinogenicity Category 1B May cause cancer Specific target organ toxicity (single exposure) Category 3 May cause drowsiness or dizziness Specific target organ toxicity (repeated exposure) May cause damage to organs through prolonged or repeated exposure Category 2

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS US)		
	GHS02 GHS07 GHS08	
Signal word (GHS US)	: Danger	
Hazard statements (GHS US)	 Highly flammable liquid and vapour Causes skin irritation May cause an allergic skin reaction Causes serious eye irritation May cause drowsiness or dizziness May cause genetic defects May cause cancer May cause damage to organs through prolonged or repeated exposure 	
Precautionary statements (GHS US)	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment Use explosion-proof electrical/ventilating/lighting equipment Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fume, gas, mist, vapors, spray Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands, forearms and face thoroughly after handling. Use only outdoors or in a well-ventilated area. 	
02/14/2019	EN (English US)	

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Contaminated work clothing must not be allowed out of the workplace Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of water If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower If inhaled: Remove person to fresh air and keep comfortable for breathing If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If exposed or concerned: Get medical advice/attention. Call a poison center or doctor if you feel unwell Get medical advice/attention if you feel unwell. Specific treatment (see supplemental first aid instruction on this label) If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. In case of fire: Use media other than water to extinguish. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3.	Other hazards which do not result in classification			
No addit	ional information available			
2.4.	Unknown acute toxicity (GHS US)			
Not appl	Not applicable			
	ON 3: Composition/Information on ingredients			

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Name	Product identifier	%	GHS US classification
solvent naphtha (petroleum), light aromatic	(CAS-No.) 64742-95-6	> 29.7044 55	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
Aromatic Hydrocarbon	(CAS-No.) 108-88-3	21.0005 - 23.02	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
Aromatic Hydrocarbon	(CAS-No.) 64742-95-6	10 - 12	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
1,2,4-Trimethylbenzene	(CAS-No.) 95-63-6	< 10.3872	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
N-BUTYL ACETATE	(CAS-No.) 123-86-4	8 - 10	Flam. Liq. 3, H226 STOT SE 3, H336
2-Butoxyethanol	(CAS-No.) 111-76-2	7 - 9	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319
butan-1-ol	(CAS-No.) 71-36-3	2 - 4	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336
Aromatic Hydrocarbon	(CAS-No.) 1330-20-7	2 - 3	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
Proprietary Acrylic Polymer	(CAS-No.) Proprietary*	0.295 - 1.2	Flam. Liq. 3, H226
ethylbenzene	(CAS-No.) 100-41-4	0.535 - 1	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304
2-Propanol	(CAS-No.) 67-63-0	0.01 - 1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
cumene	(CAS-No.) 98-82-8	0.0001 - 0.37706	Flam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
triethylenetetramine	(CAS-No.) 112-24-3	0.2 - 0.36	Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
1-octene	(CAS-No.) 111-66-0	0.0001 - 0.02	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

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

 3.2. Mixtures

 Not applicable

 SECTION 4: First-aid measures

 4.1. Description of first aid measures

 First-aid measures general
 : IF exposed or concerned: Get medical advice/attention.

 First-aid measures after inhalation
 : Remove person to fresh air and keep comfortable for breathing.

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. First-aid measures after eye contact : Rinse eyes with water as a precaution. First-aid measures after ingestion Call a poison center/doctor/physician if you feel unwell. Most important symptoms and effects (acute and delayed) 4.2. Symptoms/effects : May cause drowsiness or dizziness. Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction. Immediate medical attention and special treatment, if necessary 43 Treat symptomatically. **SECTION 5: Fire-fighting measures** Suitable (and unsuitable) extinguishing media 5.1. : Water spray. Dry powder. Foam. Carbon dioxide. Suitable extinguishing media 5.2. Specific hazards arising from the chemical Fire hazard : Highly flammable liquid and vapour. : Highly flammable liquid and vapour. Reactivity 5.3. Special protective equipment and precautions for fire-fighters Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. **SECTION 6: Accidental release measures** 6.1. Personal precautions, protective equipment and emergency procedures 6.1.1. For non-emergency personnel Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust, fume, gas, mist, vapors, spray. 612 For emergency responders Protective equipment Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". 6.2. **Environmental precautions** Avoid release to the environment. Notify authorities if product enters sewers or public waters. 6.3. Methods and material for containment and cleaning up Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters Other information : Dispose of materials or solid residues at an authorized site. 6.4. **Reference to other sections** For further information refer to section 13. SECTION 7: Handling and storage **Precautions for safe handling** 7.1. Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust, fume, gas, mist, vapors, spray. Avoid contact with skin and eyes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing Hygiene measures before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. 7.2. Conditions for safe storage, including any incompatibilities **Technical measures** : Ground/bond container and receiving equipment. Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

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SECTION 8: Exp	osure controls/personal protection	
.1. Control pa	rameters	
Aromatic Hydrocar	bon (1330-20-7)	
Not applicable		
ethylbenzene (100-	41-4)	
ACGIH	ACGIH TWA (ppm)	20 ppm (Ethyl benzene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	URT irr; kidney dam (nephropathy)
OSHA	OSHA PEL (TWA) (mg/m ³)	435 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
triethylenetetramin	e (112-24-3)	
Not applicable		
2-Butoxyethanol (1	11-76-2)	
ACGIH	ACGIH TWA (ppm)	20 ppm (2-Butoxyethanol (EGBE); USA; Time- weighted average exposure limit 8 h; TLV - Adopted Value)
butan-1-ol (71-36-3)	
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
OSHA	OSHA PEL (TWA) (mg/m ³)	300 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Aromatic Hydrocar	bon (64742-95-6)	
Not applicable	· · ·	
solvent naphtha (p	etroleum), light aromatic (64742-95-6)	
ACGIH	ACGIH TWA (mg/m ³)	200 mg/m ³
ACGIH	ACGIH TWA (ppm)	200 ppm
OSHA	OSHA PEL (TWA) (ppm)	200
OSHA	OSHA PEL (STEL) (ppm)	500
cumene (98-82-8)		
ACGIH	ACGIH TWA (ppm)	50 ppm (Cumene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Lung cancer; liver and lung dam; A2 (Suspected Human Carcinogen: Human data are accepted as adequate in quality but are conflicting or insufficient to classify the agent as a confirmed human carcinogen; OR, the agent is carcinogenic in experimental animals at dose(s), by route(s) of exposure, at site(s), of histologic type(s), or by mechanism(s) considered relevant to worker exposure. The A2 is used primarily when there is limited evidence or carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals with relevance to humans)
OSHA	OSHA PEL (TWA) (mg/m ³)	245 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
1,2,4-Trimethylben	zene (95-63-6)	
ACGIH	ACGIH TWA (ppm)	25 ppm (Trimethyl benzene (mixed isomers); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Aromatic Hydrocar	bon (108-88-3)	
ACGIH	ACGIH TWA (ppm)	20 ppm (Toluene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

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Aromatic Hydrocarbon (108-88-3)			
ACGIH	Remark (ACGIH)	Visual impair; female repro; pregnancy loss; A4; BEI	
OSHA	Remark (OSHA)	(2) See Table Z-2.	
2-Propanol (67-63-0)			
ACGIH	ACGIH TWA (ppm)	200 ppm (2-propanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)	
ACGIH	ACGIH STEL (ppm)	400 ppm (2-propanol; USA; Short time value; TLV - Adopted Value)	
N-BUTYL ACETATE	(123-86-4)		
ACGIH	ACGIH TWA (ppm)	50 ppm	
ACGIH	ACGIH STEL (ppm)	150 ppm	
ACGIH	Remark (ACGIH)	Eye & URT irr	
OSHA	OSHA PEL (TWA) (mg/m ³)	710 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	150 ppm	
Proprietary Acrylic Polymer (Proprietary*)			
Not applicable			
1-octene (111-66-0)			
Not applicable			

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.

: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection.

SECTION 9: Physical and	chemical properties
9.1. Information on basic p	physical and chemical properties
Physical state	: Liquid
Color	: clear
Odor	 There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): Pleasant odour Aromatic odour Petroleum-like odour Sweet odour Ammonia odour Amine-like odour Irritating/pungent odour Alcohol odour No data available on odour Stuffy odour Mild odour Fruity odour
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 165 - 343 °F
Flash point	: 41 °F TCC
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Relative evaporation rate (butyl acetate=1)	: 3
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 96 mm Hg @20 C
Relative vapor density at 20 °C	: No data available
Relative density	: 0.88
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECT	SECTION 10: Stability and reactivity			
10.1.	Reactivity			
Highly f	lammable liquid and vapour.			
10.2.	Chemical stability			
Stable ι	Stable under normal conditions.			
10.3.	Possibility of hazardous reactions			
No dang	No dangerous reactions known under normal conditions of use.			
10.4.	Conditions to avoid			
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.				
10.5.	10.5. Incompatible materials			
No addi	No additional information available			
10.6.	Hazardous decomposition products			

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Not classified

Aromatic Hydrocarbon (1330-20-7)		
LD50 oral rat	> 3608 mg/kg (Rat)	
ATE US (dermal)	1100.000 mg/kg body weight	
ATE US (gases)	4500.000 ppmV/4h	
ATE US (vapors)	11.000 mg/l/4h	
ATE US (dust, mist)	1.500 mg/l/4h	
ethylbenzene (100-41-4)		
LD50 oral rat	3500 mg/kg (Rat; Other; Experimental value)	
LD50 dermal rabbit	15415 mg/kg (Rabbit; Literature study; Other; 15432 mg/kg; Rabbit; Experimental value)	
LC50 inhalation rat (mg/l)	17.8 mg/l/4h (Rat; Literature study)	
LC50 inhalation rat (ppm)	4000 ppm/4h (Rat; Literature study)	
ATE US (oral)	3500.000 mg/kg body weight	
ATE US (dermal)	15415.000 mg/kg body weight	
ATE US (gases)	4000.000 ppmV/4h	
ATE US (vapors)	17.800 mg/l/4h	
ATE US (dust, mist)	1.500 mg/l/4h	

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triethylenetetramine (112-24-3)	
LD50 oral rat	2500 mg/kg (Rat, Literature, Oral)
LD50 dermal rabbit	805 mg/kg (Rabbit, Literature, Dermal)
ATE US (oral)	2500.000 mg/kg body weight
ATE US (dermal)	805.000 mg/kg body weight
2-Butoxyethanol (111-76-2)	
LD50 oral rat	1746 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	2.2 mg/l/4h (Rat; Experimental value)
LC50 inhalation rat (ppm)	450 ppm/4h (Rat; Experimental value)
ATE US (oral)	1746.000 mg/kg body weight
ATE US (dermal)	1100.000 mg/kg body weight
ATE US (gases)	450.000 ppmV/4h
ATE US (vapors)	2.200 mg/l/4h
ATE US (dust, mist)	2.200 mg/l/4h
butan-1-ol (71-36-3)	
LD50 oral rat	2292 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)
LD50 dermal rabbit	3430 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimenta value, Dermal)
ATE US (oral)	500.000 mg/kg body weight
ATE US (dermal)	3430.000 mg/kg body weight
solvent naphtha (petroleum), light aron	natic (64742-95-6)
LD50 oral rat	3492 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat (ppm)	> 6193 ppm/4h
ATE US (oral)	3492.000 mg/kg body weight
cumene (98-82-8)	
LD50 oral rat	> 2000 mg/kg (Rat; Other; Literature study; 4000 mg/kg bodyweight; Rat; Other; Inconclusive, insufficient data)
LD50 dermal rabbit	10578 mg/kg (Rabbit; Literature study; Other)
LC50 inhalation rat (mg/l)	40 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	8000 ppm/4h (Rat; Literature study)
ATE US (dermal)	10578.000 mg/kg body weight
ATE US (gases)	8000.000 ppmV/4h
ATE US (vapors)	40.000 mg/l/4h
ATE US (dust, mist)	40.000 mg/l/4h
1,2,4-Trimethylbenzene (95-63-6)	
LD50 oral rat	> 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature; 6000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 3440 mg/kg (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	18 mg/l/4h (Rat)
ATE US (gases)	4500.000 ppmV/4h
ATE US (vapors)	18.000 mg/l/4h
ATE US (dust, mist)	1.500 mg/l/4h
Aromatic Hydrocarbon (108-88-3)	
LD50 oral rat	> 2000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 5580 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	12223 mg/kg (Rabbit; Literature study; Other; >5000 mg/kg bodyweight; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 20 mg/l/4h (Rat; Literature study)
ATE US (dermal)	12223.000 mg/kg body weight
2-Propanol (67-63-0)	
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit)
LC50 inhalation rat (mg/l)	73 mg/l/4h (Rat)
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2-Propanol (67-63-0)		
ATE US (dermal)	12870.000 mg/kg body weight	
ATE US (vapors)	73.000 mg/l/4h	
ATE US (dust, mist)	73.000 mg/l/4h	
N-BUTYL ACETATE (123-86-4)		
LD50 oral rat	10760 - 12789 mg/kg body weight (Equivalent or similar to OECD 423, Rat, Male/female, Experimental value)	
LD50 dermal rabbit	14112 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male/female, Experimental value)	
ATE US (oral)	10760.000 mg/kg body weight	
ATE US (dermal)	14112.000 mg/kg body weight	
Proprietary Acrylic Polymer (Proprietary*)	·	
LD50 oral rat	> 5000 mg/kg	
1-octene (111-66-0)		
LD50 oral rat	> 5000 mg/kg (Rat)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)	
LC50 inhalation rat (mg/l)	37 mg/l (4 h, Rat)	
LC50 inhalation rat (ppm)	8050 ppm (4 h, Rat)	
ATE US (vapors)	37.000 mg/l/4h	
ATE US (dust, mist)	37.000 mg/l/4h	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitization	: May cause an allergic skin reaction.	
Germ cell mutagenicity	: May cause genetic defects.	
Carcinogenicity	: May cause cancer.	
Aromatic Hydrocarbon (1330-20-7)		
IARC group	3 - Not classifiable	
ethylbenzene (100-41-4)		
IARC group	2B - Possibly carcinogenic to humans	
2-Butoxyethanol (111-76-2)		
IARC group	3 - Not classifiable	
cumene (98-82-8)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicity Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen	
Aromatic Hydrocarbon (108-88-3)		
IARC group	3 - Not classifiable	
2-Propanol (67-63-0)		
IARC group	3 - Not classifiable	
Reproductive toxicity	: Not classified	
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.	

solvent naphtha (petroleum), light aromatic (6	4742-95-6)
Target organ(s)	liver kidneys central nervous system
cumene (98-82-8)	
Target organ(s)	liver kidneys central nervous system

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Specific target organ toxicity - repeated : May cause damage to organs through prolonged or repeated exposure. exposure

Aspiration hazard

: Not classified

Symptoms/effects after skin contact

: Irritation. May cause an allergic skin reaction.

ECTION 12: Ecological inform	ation
2.1. Toxicity cology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse
cology - general	effects in the environment.
Aromatic Hydrocarbon (1330-20-7)	
LC50 fish 1	2.6 - 8.4 mg/l (Salmo gairdneri)
EC50 Daphnia 1	1.4 - 4.7 mg/l (48 h, Daphnia magna)
ethylbenzene (100-41-4)	
LC50 fish 2	4.2 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Salmo gairdneri; Semi-static system; Fresh water; Experimental value)
triethylenetetramine (112-24-3)	
LC50 fish 1	495 mg/l (96 h, Pimephales promelas, Fresh water, Literature study)
EC50 Daphnia 1	31.1 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Literature study)
ErC50 (algae)	>= 100 mg/I (DIN 38412-9, 72 h, Scenedesmus subspicatus, Literature study, Growth)
2-Butoxyethanol (111-76-2)	
LC50 fish 1	1474 ppm (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss; Static system; Fresh water; Experimental value)
EC50 Daphnia 1	1550 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna Static system; Fresh water; Experimental value)
Threshold limit algae 1	911 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
Threshold limit algae 2	88 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
butan-1-ol (71-36-3)	
LC50 fish 1	1376 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	1328 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
cumene (98-82-8)	
EC50 Daphnia 1	2.14 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
1,2,4-Trimethylbenzene (95-63-6)	
LC50 fish 1	7.72 mg/l (LC50; 96 h; Pimephales promelas; Flow-through system; Fresh water)
EC50 Daphnia 1	3.6 mg/l (LC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 2	2.356 mg/l (EC50; ECOSAR; 96 h; Algae; Fresh water)
2-Propanol (67-63-0)	
LC50 fish 2	9640 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow- through system; Fresh water; Experimental value)
EC50 Daphnia 2	13299 mg/l (EC50; Other; 48 h; Daphnia magna)
Threshold limit algae 1	> 1000 mg/l (EC50; UBA; 72 h; Scenedesmus subspicatus)
N-BUTYL ACETATE (123-86-4)	
LC50 fish 1	18 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	44 mg/l (48 h, Daphnia sp., Static system, Fresh water, Experimental value)
1-octene (111-66-0)	

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1-octene (111-66-0)	
EC50 Daphnia 1	3.2 - 10 mg/l (48 h, Daphnia magna)
2.2. Persistence and degradability	
Aromatic Hydrocarbon (1330-20-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	$1.40 - 2.53 \text{ g O}_2/\text{g substance}$
Chemical oxygen demand (COD)	$2.56 - 2.91 \text{ g O}_2/\text{g substance}$
ThOD	3.1 g O ₂ /g substance
BOD (% of ThOD)	0.44 - 0.816
ethylbenzene (100-41-4)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	1.44 g O_2/g substance (20d.)
Chemical oxygen demand (COD)	2.1 g O ₂ /g substance
ThOD	$3.17 \text{ g } \text{O}_2/\text{g substance}$
BOD (% of ThOD)	45.4 (20 days)
triethylenetetramine (112-24-3)	
Persistence and degradability	Not readily biodegradable in water.
2-Butoxyethanol (111-76-2)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air.
<u> </u>	
butan-1-ol (71-36-3)	Deedly biede wedeble is weter
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.1 - 1.92 g O_2/g substance
Chemical oxygen demand (COD)	2.46 g O_2 /g substance
ThOD	$2.59 \text{ g O}_2/\text{g substance}$
BOD (% of ThOD)	0.33 - 0.79
cumene (98-82-8)	
Persistence and degradability	Inherently biodegradable. Not readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	1.28 g O ₂ /g substance
Chemical oxygen demand (COD)	2.42 g O ₂ /g substance
ThOD	3.2 g O ₂ /g substance
BOD (% of ThOD)	0.4
1,2,4-Trimethylbenzene (95-63-6)	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Adsorbs into the soil. Low potential for mobility in soil. Photodegradation in the air.
Chemical oxygen demand (COD)	0.44 g O ₂ /g substance
Aromatic Hydrocarbon (108-88-3)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	2.15 g O ₂ /g substance
Chemical oxygen demand (COD)	$2.52 \text{ g } \text{O}_2/\text{g}$ substance
ThOD	$3.13 \text{ g } \text{O}_2/\text{g substance}$
BOD (% of ThOD)	0.69
2-Propanol (67-63-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.19 g O_2/g substance
Chemical oxygen demand (COD)	2.23 g O_2/g substance
ThOD	2.4 g O ₂ /g substance
N-BUTYL ACETATE (123-86-4)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.21 g O_2/g substance
	0 - 0

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1-octene (111-66-0)	
Persistence and degradability	Readily biodegradable in water.
12.3. Bioaccumulative potential	
Aromatic Hydrocarbon (1330-20-7)	
BCF fish 1	14.1 - 24 (Pisces)
BCF fish 2	14.1 - 15 (Carassius auratus)
Log Pow	3.15 - 3.3 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
ethylbenzene (100-41-4)	
BCF fish 1	1 (BCF; Other; 6 weeks; Oncorhynchus kisutch; Flow-through system; Salt water; Literature
	study)
BCF fish 2	15 - 79 (BCF)
BCF other aquatic organisms 1	4.68 (BCF)
Log Pow	3.15 (Experimental value; 3.6; Experimental value; EU Method A.8: Partition Coefficient; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
triethylenetetramine (112-24-3)	
BCF other aquatic organisms 1	3.162 (BCFBAF v3.01, Calculated value)
Log Pow	-2.65 (Estimated value, KOWWIN)
Bioaccumulative potential	Not bioaccumulative.
2-Butoxyethanol (111-76-2)	
Log Pow	0.81 (Test data; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
butan-1-ol (71-36-3)	
BCF other aquatic organisms 1	3.16 (BCFWIN, Calculated value)
Log Pow	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Aromatic Hydrocarbon (64742-95-6)	
Log Pow	2.1 - 6
solvent naphtha (petroleum), light aroma	tic (64742-95-6)
Log Pow	2.1 - 6
cumene (98-82-8)	
BCF fish 1	35.5 (BCF)
BCF other aquatic organisms 1	94.69 (BCF; BCFBAF v3.00)
Log Pow	3.66 (Experimental value; 3.55; Experimental value; OECD 107: Partition Coefficient (n- octanol/water): Shake Flask Method; 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1,2,4-Trimethylbenzene (95-63-6)	
BCF fish 1	31 - 275 (BCF; Other; 8 weeks; Cyprinus carpio)
Log Pow	3.63 - 4.09 (Experimental value)
Bioaccumulative potential	Potential for bioaccumulation ($4 \ge Log$ Kow ≤ 5).
Aromatic Hydrocarbon (108-88-3)	
BCF fish 2	90 (BCF; 72 h; Leuciscus idus; Static system; Fresh water)
Log Pow	2.73 (Experimental value; Other; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2-Propanol (67-63-0)	
Log Pow	0.05 (Weight of evidence approach; Other; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
N-BUTYL ACETATE (123-86-4)	
BCF fish 1	15.3 (Calculated value)
Log Pow	2.3 (Test data, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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cording to Federal Register / Vol. //, No. 58 / Monday,	
1-octene (111-66-0)	
Log Pow	4.57
Bioaccumulative potential	Bioaccumable.
2.4. Mobility in soil	
Aromatic Hydrocarbon (1330-20-7)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
ethylbenzene (100-41-4)	
Surface tension	0.029 N/m
Log Koc	log Koc,PCKOCWIN v1.66; 2.71; Calculated value; Koc; PCKOCWIN v1.66; 517.8; Calculated value
triethylenetetramine (112-24-3)	
Log Koc	1.885 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
2-Butoxyethanol (111-76-2)	
Surface tension	0.065 N/m (20 °C; Calculated value)
butan-1-ol (71-36-3)	
Surface tension	0.07 N/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Log Koc	0.388 (log Koc, PCKOCWIN v1.66, Calculated value)
Ecology - soil	Highly mobile in soil. May be harmful to plant growth, blooming and fruit formation.
cumene (98-82-8)	
Log Koc	Koc,884; Calculated value; log Koc; 2.946; Calculated value
1,2,4-Trimethylbenzene (95-63-6)	
Surface tension	0.029 N/m
Log Koc	log Koc,3.04; Calculated value
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
Aromatic Hydrocarbon (108-88-3)	
Surface tension	0.03 N/m (20 °C)
2-Propanol (67-63-0)	
Surface tension	0.021 N/m (25 °C)
N-BUTYL ACETATE (123-86-4)	
Surface tension	0.0163 N/m (20 °C)
Log Koc	1.268 - 1.844 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for adsorption in soil.
1-octene (111-66-0)	
Surface tension	0.022 N/m (20 °C)
2.5. Other adverse effects	
Effect on the global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.
SECTION 13: Disposal consideration	IS
3.1. Disposal methods	
Vaste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
dditional information	: Flammable vapors may accumulate in the container.
SECTION 14 Transport information	
SECTION 14: Transport information	
Department of Transportation (DOT)	
n accordance with DOT	
ransport document description	: UN1263 Paint, 3, III
	: UN1263
JN-No.(DOT)	. UN1200

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	-
Proper Shipping Name (DOT)	: Paint
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: III - Minor Danger
Hazard labels (DOT)	: 3 - Flammable liquid
	FLAMMABLE LOUID
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 173
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Special Provisions (49 CFR 172.102)	 B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Emergency Response Guide (ERG) Number	: 128
Other information	: No supplementary information available.
Transportation of Dangerous Goods Not applicable	
Transport by sea	
Transport document description (IMDG)	: UN 1263 PAINT, 3, III
UN-No. (IMDG)	: 1263
Proper Shipping Name (IMDG)	: PAINT
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: III - substances presenting low danger
Limited quantities (IMDG)	: 5L
Air transport	
Transport document description (IATA)	: UN 1263 Paint, 3, III
UN-No. (IATA)	: 1263
Proper Shipping Name (IATA)	: Paint
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: III - Minor Danger

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SECTION 15: Regulatory information	
15.1. US Federal regulations	
Aromatic Hydrocarbon (1330-20-7)	
Listed on the United States TSCA (Toxic Substar Subject to reporting requirements of United State	
CERCLA RQ	100 lb
ethylbenzene (100-41-4)	
Listed on the United States TSCA (Toxic Substar Subject to reporting requirements of United State	
CERCLA RQ	1000 lb
triethylenetetramine (112-24-3)	
Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
2-Butoxyethanol (111-76-2)	
Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
butan-1-ol (71-36-3)	
Listed on the United States TSCA (Toxic Substar Subject to reporting requirements of United State	
CERCLA RQ	5000 lb
Aromatic Hydrocarbon (64742-95-6)	
Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
solvent naphtha (petroleum), light aromatic (6	4742-95-6)
Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
cumene (98-82-8)	
Listed on the United States TSCA (Toxic Substar Subject to reporting requirements of United State	
CERCLA RQ	5000 lb
1,2,4-Trimethylbenzene (95-63-6)	
Listed on the United States TSCA (Toxic Substar Subject to reporting requirements of United State	
Aromatic Hydrocarbon (108-88-3)	
Listed on the United States TSCA (Toxic Substar Subject to reporting requirements of United State	
CERCLA RQ	1000 lb
2-Propanol (67-63-0)	
Listed on the United States TSCA (Toxic Substar Subject to reporting requirements of United State	nces Control Act) inventory s SARA Section 313
N-BUTYL ACETATE (123-86-4)	
Listed on the United States TSCA (Toxic Substar Not subject to reporting requirements of the United	
CERCLA RQ	5000 lb
Proprietary Acrylic Polymer (Proprietary*)	
Not listed on the United States TSCA (Toxic Subs	stances Control Act) inventory
1-octene (111-66-0)	
Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory

 15.2. International regulations

 CANADA

 Aromatic Hydrocarbon (1330-20-7)

 Listed on the Canadian DSL (Domestic Substances List)

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ethylbenzene (100-41-4)
Listed on the Canadian DSL (Domestic Substances List)
triethylenetetramine (112-24-3)
Listed on the Canadian DSL (Domestic Substances List)
2-Butoxyethanol (111-76-2)
Listed on the Canadian DSL (Domestic Substances List)
butan-1-ol (71-36-3)
Listed on the Canadian DSL (Domestic Substances List)
Aromatic Hydrocarbon (64742-95-6)
Listed on the Canadian DSL (Domestic Substances List)
solvent naphtha (petroleum), light aromatic (64742-95-6)
Listed on the Canadian DSL (Domestic Substances List)
cumene (98-82-8)
Listed on the Canadian DSL (Domestic Substances List)
1,2,4-Trimethylbenzene (95-63-6)
Listed on the Canadian DSL (Domestic Substances List)
Aromatic Hydrocarbon (108-88-3)
Listed on the Canadian DSL (Domestic Substances List)
2-Propanol (67-63-0)
Listed on the Canadian DSL (Domestic Substances List)
N-BUTYL ACETATE (123-86-4)
Listed on the Canadian DSL (Domestic Substances List)
Proprietary Acrylic Polymer (Proprietary*)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
1-octene (111-66-0)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations No additional information available

National regulations

ethylbenzene (100-41-4) Listed on IARC (International Agency for Research on Cancer)

cumene (98-82-8)

Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

ethylbenzene (100-41-4)				
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 significant risk level (NSRL)
Yes	No	No	No	54

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cumene (98-82-8)				
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 significant risk level (NSRL)
Yes	No	No	No	
Aromatic Hydrocarbon (108	3-88-3)			
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 significant risk level (NSRL)
No	Yes	No	No	7000

Aromatic Hydrocarbon (1330-20-7)
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List
ethylbenzene (100-41-4)
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List
triethylenetetramine (112-24-3)
U.S New Jersey - Right to Know Hazardous Substance List
2-Butoxyethanol (111-76-2)
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List
butan-1-ol (71-36-3)
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List
cumene (98-82-8)
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List
1,2,4-Trimethylbenzene (95-63-6)
U.S New Jersey - Right to Know Hazardous Substance List
Aromatic Hydrocarbon (108-88-3)
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List
2-Propanol (67-63-0)
U.S New Jersey - Right to Know Hazardous Substance List
N-BUTYL ACETATE (123-86-4)
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date

: 02/07/2019

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Full text of H-phrases:

ext of H-phrases:	
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

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