

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/12/2019 Revision date: 02/12/2019 Supersedes: 02/12/2019

# **SECTION 1: Identification**

Identification

: Substance Product form

Substance name Slow Universal Epoxy Reducer

Product code MMR-0048S

## Recommended use and restrictions on use

No additional information available

### **Supplier**

Color By Design, Inc. 407 W. Main Haven, KS 67543 T 620-465-2600

info@colorbydesigninc.com

### **Emergency telephone number**

**Emergency number** : 620-728-4044

# SECTION 2: Hazard(s) identification

## Classification of the substance or mixture

### **GHS US classification**

Flammable liquids Category 2 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 1 Germ cell mutagenicity Category 1B

Carcinogenicity Category 1B

Specific target organ toxicity (single exposure) Category 3

Highly flammable liquid and vapour

Causes skin irritation Causes serious eye damage May cause genetic defects

May cause cancer

May cause drowsiness or dizziness

## GHS Label elements, including precautionary statements

## **GHS US labeling**

Hazard pictograms (GHS US)



GHS02







Version: 1.0

Signal word (GHS US) : Danger

Hazard statements (GHS US) : Highly flammable liquid and vapour

Causes skin irritation Causes serious eye damage May cause drowsiness or dizziness May cause genetic defects

May cause cancer

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. 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.

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

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

02/14/2019 EN (English US) Page 1

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

and easy to do. Continue rinsing

If exposed or concerned: Get medical advice/attention.

Immediately call a poison center or doctor

Call a poison center or doctor if you feel unwell

Specific treatment (see supplemental first aid instruction on this label)

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it 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 additional information available

## 2.4. Unknown acute toxicity (GHS US)

Not applicable

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

# 3.1. Substances

Name

## : Slow Universal Epoxy Reducer

Name	Product identifier	%	GHS US classification
2-Propane	(CAS-No.) 67-64-1	40 - 42	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
solvent naphtha (petroleum), light aromatic	(CAS-No.) 64742-95-6	> 17.82	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
Aromatic Hydrocarbon	(CAS-No.) 64742-95-6	14 - 16	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
butan-1-ol	(CAS-No.) 71-36-3	6 - 8	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
Heptan-2-one	(CAS-No.) 110-43-0	6 - 8	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332
1,2,4-Trimethylbenzene	(CAS-No.) 95-63-6	< 6.4	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
2-Butoxyethanol	(CAS-No.) 111-76-2	3 - 5	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
cumene	(CAS-No.) 98-82-8	< 0.22	Flam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Aliphatic Hydrocarbon	(CAS-No.) 64742-49-0		Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304

02/14/2019 EN (English US) 2/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

# **SECTION 5: Fire-fighting measures**

## 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

## 5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapour.
Reactivity : Highly flammable liquid and vapour.

## 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. Avoid breathing dust/fume/gas/mist/vapors/spray.

# 6.1.2. 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.

02/14/2019 EN (English US) 3/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

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. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures

Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. 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.

: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

# SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

2-Propane (67-64-1)		
ACGIH ACGIH TWA (ppm) 250 ppm		
ACGIH STEL (ppm) 500 ppm		500 ppm

## Aliphatic Hydrocarbon (64742-49-0)

Not applicable

solvent naphtha (petroleum), light aromatic (64742-95-6)		
ACGIH	ACGIH TWA (mg/m³)	200 mg/m³
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/m³)	245 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm

# 1,2,4-Trimethylbenzene (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 Hydrocarbon (64742-95-6)

Not applicable

02/14/2019 EN (English US) 4/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

butan-1-ol (71-36-3)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
OSHA	OSHA PEL (TWA) (mg/m³)	300 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Heptan-2-one (110	-43-0)	
ACGIH	ACGIH TWA (ppm)	50 ppm (Methyl n-amyl ketone; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Eye & skin irr
OSHA	OSHA PEL (TWA) (mg/m³)	465 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
2-Butoxyethanol (	111-76-2)	
ACGIH	ACGIH TWA (ppm)	20 ppm (2-Butoxyethanol (EGBE); USA; Time- weighted average exposure limit 8 h; TLV - Adopted Value)

## 8.2. Appropriate engineering controls

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

Environmental exposure controls : 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 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):

Aromatic odour Sweet odour Fruity odour No data available on odour Irritating/pungent odour

Alcohol odour Pleasant odour

Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Boiling point : 132 - 343 °F Flash point : 0 °F TCC Relative evaporation rate (butyl acetate=1) : 6.3

Flammability (solid, gas) : Not applicable.

Vapor pressure : 186 mm Hg @ 20 C

Relative vapor density at 20 °C : No data available

Relative density : 0.82

02/14/2019 EN (English US) 5/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 : No data available Oxidizing properties

## 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Highly flammable liquid and vapour.

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

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. Incompatible materials

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

2-Propane (67-64-1)	
LD50 oral rat	5800 mg/kg (Equivalent or similar to OECD 401, Rat, Female, Experimental value)
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value)
LC50 inhalation rat (mg/l)	76 mg/l (Other, 4 h, Rat, Female, Experimental value)
ATE US (oral)	5800.000 mg/kg body weight
ATE US (dermal)	20000.000 mg/kg body weight
ATE US (vapors)	76.000 mg/l/4h
ATE US (dust, mist)	76.000 mg/l/4h

solvent naphtha (petroleum), light aror	solvent naphtha (petroleum), light aromatic (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)	cumene (98-82-8)	
LD50 oral rat > 2000 mg/kg (Rat; Other; Literature study; 4000 mg/kg bodyweight; Rat; Other; Inconclus 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	

02/14/2019 EN (English US) 6/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

cumene (98-82-8)	
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
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
Heptan-2-one (110-43-0)	
LD50 oral rat	1670 mg/kg (Rat; Experimental value; 1600 mg/kg bodyweight; Rat)
LD50 dermal rat	10300 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight; Rat)
LC50 inhalation rat (mg/l)	14 mg/l/4h (Rat; Experimental value; >16.7 mg/l/4h; Rat)
ATE US (oral)	1670.000 mg/kg body weight
ATE US (dermal)	10300.000 mg/kg body weight
ATE US (gases)	4500.000 ppmV/4h
ATE US (vapors)	14.000 mg/l/4h
ATE US (dust, mist)	1.500 mg/l/4h
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
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
cumene (98-82-8)	
IARC group	2B - Possibly carcinogenic to humans

2-Butoxyethanol (111-76-2)	
IARC group	3 - Not classifiable
Down double to do the Not the	

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

02/14/2019 EN (English US) 7/14

Persistence and degradability

12.2.

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

solvent naphtha (petroleum), light aroma	tic (64742-95-6)
Target organ(s)	liver kidneys central nervous system
cumene (98-82-8)	CONTROL HOLYOUS SYSTEM
Target organ(s)	liver kidneys
	central nervous system
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.
SECTION 12: Ecological information	on and the second secon
<b>I2.1. Toxicity</b> Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
2-Propane (67-64-1)	
LC50 fish 1	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value)
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)
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)
Heptan-2-one (110-43-0)	
LC50 fish 1	131 mg/l (LC50; EPA OPP 72-1; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 2	> 90.1 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Semi-static system; Fresh water; Experimental value)
Threshold limit algae 2	98.2 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
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)

02/14/2019 EN (English US) 8/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Propane (67-64-1)		
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	1.43 g O <sub>2</sub> /g substance	
Chemical oxygen demand (COD)	1.92 g O <sub>2</sub> /g substance	
ThOD	2.2 g O <sub>2</sub> /g substance	
BOD (% of ThOD)	0.872 (20 day(s), Literature study)	
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 <sub>2</sub> /g substance	
Chemical oxygen demand (COD)	2.42 g O <sub>2</sub> /g substance	
ThOD	3.2 g O <sub>2</sub> /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 O₂/g substance	
butan-1-ol (71-36-3)		
Persistence and degradability	Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	1.1 - 1.92 g O₂/g substance	
Chemical oxygen demand (COD)	2.46 g O <sub>2</sub> /g substance	
ThOD	2.59 g O <sub>2</sub> /g substance	
BOD (% of ThOD)	0.33 - 0.79	
Heptan-2-one (110-43-0)		
Persistence and degradability	Readily biodegradable in water. Highly mobile in soil.	
BOD (% of ThOD)	0.44	
2-Butoxyethanol (111-76-2)		
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air.	
12.3. Bioaccumulative potential		
2-Propane (67-64-1)		
BCF fish 1	0.69 (Pisces)	
BCF other aquatic organisms 1	3 (BCFWIN, Calculated value)	
Log Pow	-0.24 (Test data)	
Bioaccumulative potential	Not bioaccumulative.	
solvent naphtha (petroleum), light aromatic	(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 (noctanol/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		
Aromatic Hydrocarbon (64742-95-6)		
Log Pow	w 2.1 - 6	
butan-1-ol (71-36-3)		
BCF other aquatic organisms 1		

02/14/2019 EN (English US) 9/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

outan-1-ol (71-36-3)		
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).	
Heptan-2-one (110-43-0)		
Log Pow	2.26 (Experimental value; EU Method A.8: Partition Coefficient; 30 °C; 2.26; Experimental value; EU Method A.8: Partition Coefficient; 30 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
2-Butoxyethanol (111-76-2)		
Log Pow	0.81 (Test data; 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

# 12.4. Mobility in soil

2-Propane (67-64-1)		
	Surface tension	0.0237 N/m
	Ecology - soil	No (test)data on mobility of the substance available.

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.	

outan-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
Heptan-2-one (110-43-0)		
Surface tension	0.0591 N/m (21.6 °C)	
Log Koc	og Koc log Koc,EU Method C.19; 1.45; Experimental value	

2-Butoxyethanol (111-76-2)		
	Surface tension	0.065 N/m (20 °C; Calculated value)

# 12.5. 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 considerations**

# 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapors may accumulate in the container.

# **SECTION 14: Transport information**

# **Department of Transportation (DOT)**

In accordance with DOT

Transport document description : UN1263 Paint related material, 3, III

UN-No.(DOT) : UN1263

Proper Shipping Name (DOT) : Paint related material

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

Packing group (DOT) : III - Minor Danger

02/14/2019 EN (English US) 10/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (DOT) : 3 - Flammable liquid



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-

: 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..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

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 RELATED MATERIAL, 3, III

UN-No. (IMDG) : 1263

Proper Shipping Name (IMDG) : PAINT RELATED MATERIAL

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

## 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

# **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

02/14/2019 EN (English US) 11/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 2-Propane (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ 5000 lb

## Aliphatic Hydrocarbon (64742-49-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## solvent naphtha (petroleum), light aromatic (64742-95-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### cumene (98-82-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 5000 I

## 1,2,4-Trimethylbenzene (95-63-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

## Aromatic Hydrocarbon (64742-95-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### butan-1-ol (71-36-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 5000 lb

## Heptan-2-one (110-43-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## 2-Butoxyethanol (111-76-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# 15.2. International regulations

## CANADA

# 2-Propane (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)

## Aliphatic Hydrocarbon (64742-49-0)

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 (64742-95-6)

Listed on the Canadian DSL (Domestic Substances List)

# butan-1-ol (71-36-3)

Listed on the Canadian DSL (Domestic Substances List)

## Heptan-2-one (110-43-0)

Listed on the Canadian DSL (Domestic Substances List)

# 2-Butoxyethanol (111-76-2)

Listed on the Canadian DSL (Domestic Substances List)

### **EU-Regulations**

No additional information available

02/14/2019 EN (English US) 12/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## **National regulations**

# 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

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	

## 2-Propane (67-64-1)

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

# butan-1-ol (71-36-3)

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

# Heptan-2-one (110-43-0)

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

# **SECTION 16: Other information**

: 02/12/2019 Revision date

02/14/2019 EN (English US) 13/14

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## Full text of H-phrases:

i text 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
H312	Harmful in contact with skin
H315	Causes skin irritation
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
H411	Toxic to aquatic life with long lasting effects
	I

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

02/14/2019 EN (English US) 14/14