

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

Date of issue: 10/30/2014 Revision date: 07/15/2015 Version: 2.0

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

## 1.1. Product identifier

Use of the substance/mixture

Product form : Mixture

Product name : Duralene Dura-Cool Global HD Concentrate

1.2. Relevant identified uses of the substance or mixture and uses advised against

: Antifreeze. Coolant.

## 1.3. Details of the supplier of the safety data sheet

The United Oil Company, Inc. 4405 E. Baltimore St,

Baltimore, MD 21224 Phone 800.296.1203

customerorders@duralene.com www.duralene.com

## 1.4. Emergency telephone number

Emergency number : 1-800-424-9300

CHEMTREC (24 HOURS)

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## **GHS-US** classification

Acute Tox. 4 (Oral) H302 Skin Irrit. 2 H315 Eye Irrit. 2A H319 STOT RE 2 H373

Full text of H-statements: see section 16

# 2.2. Label elements

## **GHS-US labelling**

Hazard pictograms (GHS-US)



GHS07

607 GHS08

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : P260 - Do not breathe mist, spray, vapours

P264 - Wash hands thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear eye protection, protective gloves

P301+P312 - If swallowed: Call a doctor if you feel unwell P302+P352 - If on skin: Wash with plenty of water

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P314 - Get medical advice/attention if you feel unwell

P321 - Specific treatment (see First aid measures on this label)

P330 - Rinse mouth

P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P501 - Dispose of contents/container to an authorised waste collection point

# 2.3. Other hazards

No additional information available

07/15/2015 EN (English) SDS ID: 2-9038 Page 1

# Safety Data Sheet

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

## 2.4. Unknown acute toxicity (GHS US)

2.71 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

3.14 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

# SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Ethylene glycol	(CAS No) 107-21-1	85 – 95	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
sodium benzoate	(CAS No) 532-32-1	1 – 3	Eye Irrit. 2A, H319
Sodium hydroxide	(CAS No) 1310-73-2	0.1 – 1	Skin Corr. 1A, H314
Potassium hydroxide	(CAS No) 1310-58-3	< 0.5	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
sodium nitrite	(CAS No) 7632-00-0	< 0.5	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400
Disodium metasilicate	(CAS No) 6834-92-0	< 0.5	Skin Corr. 1B, H314 STOT SE 3, H335

<sup>\*</sup>Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-statements: see section 16

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

First-aid measures after skin contact : Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of

soap and water. 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. If eye irritation persists: Get medical advice/attention.

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

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

Symptoms/injuries : May cause damage to organs through prolonged or repeated exposure.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

# 4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

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

Unsuitable extinguishing media : None known.

## 5.2. Special hazards arising from the substance or mixture

Fire hazard : No specific fire or explosion hazard.

Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter

drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus.

## **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

07/15/2015 EN (English) SDS ID: 2-9038 2/10

# Safety Data Sheet

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

#### 6.1.1. For non-emergency personnel

: Wear suitable gloves resistant to chemical penetration. Chemical goggles or safety glasses. Protective equipment

**Emergency procedures** : Ventilate area.

6.1.2. For emergency responders

Protective equipment : Wear suitable gloves. Chemical goggles or safety glasses. Where excessive vapour, mist, or

dust may result, use approved respiratory protection equipment.

: Ventilate area. **Emergency procedures** 

#### 6.2. **Environmental precautions**

Avoid release to the environment.

## Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material, then place in suitable container.

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take Methods for cleaning up

up in non-combustible absorbent material and shove into container for disposal.

#### 64 Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

## **SECTION 7: Handling and storage**

#### Precautions for safe handling 7.1.

Precautions for safe handling : Avoid breathing mist, spray, vapours.

Hygiene measures Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with

mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep container closed when not in use. Keep only in the original container in a cool well Storage conditions

ventilated place.

Incompatible products : Strong oxidizing agents. Strong acids. Strong bases.

: Heat sources. Direct sunlight. Incompatible materials

#### Specific end use(s) 7.3.

Antifreeze, Coolant.

8.1.

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

# Control parameters DefendAL Global Heavy Duty Extended Life Coolant Concentrate

Deletidat Global fleavy Duty Extended the Coolant Concentrate		
ACGIH	Not applicable	
OSHA	Not applicable	
Ethylene glycol (107-21-1)		
ACGIH	ACGIH Ceiling (ppm)	39.4 ppm
ACGIH	Remark (ACGIH)	URT & eye irr
OSHA	Not applicable	
	·	
sodium benzoate (532-32-1)		
ACGIH	Not applicable	
OSHA	Not applicable	

Potassium hydroxide (1310-58-3)		
ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³
OSHA	Not applicable	

sodium nitrite (7632-00-0)		
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ as dust
OSHA	Not applicable	

Disodium metasilicate (6834-92-0)	
ACGIH	Not applicable

07/15/2015 EN (English) SDS ID: 2-9038 3/10

# Safety Data Sheet

Disadium mataciliante (6934 03 0)

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

Disodium metasilicate (6834-92-0)			
OSHA	Not applicable	Not applicable	
Sodium hydroxide (1310-73-2)			
ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³	
ACGIH	Remark (ACGIH)	URT, eye, & skin irr	
OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³	

## 8.2. Exposure controls

Appropriate engineering controls : Avoid creating mist or spray. Avoid splashing. Either local exhaust or general room ventilation

is usually required.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear suitable gloves. Nitrile rubber gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing. Impervious clothing.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Use an approved respirator

equipped with oil/mist cartridges.

Other information : Do not eat, drink or smoke when using this product.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Yellow
Odour : odourless

Odour threshold : No data available
pH : 8 - 8.8 50/50 in water
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available

Freezing point : -38  $^{\circ}$ C Boiling point : > 107  $^{\circ}$ C

Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : < 0.1 mm Hg @ 20 °C

Relative vapour density at 20 °C : > 1

Relative density : 1.129 @ 20 °C Solubility Soluble in water. Log Pow : No data available Log Kow : No data available Viscosity, kinematic No data available Viscosity, dynamic : No data available Explosive properties : No data available : No data available Oxidising properties **Explosive limits** : No data available

# 9.2. Other information

No additional information available

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

No dangerous reactions known.

# 10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

07/15/2015 EN (English) SDS ID: 2-9038 4/10

# Safety Data Sheet

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

## 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

## 10.4. Conditions to avoid

Avoid excessive heat or cold. Keep away from sources of ignition.

## 10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

# 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Acute toxicity	. Oral. Hammur ii Swalloweu.	
DefendAL Global Heavy Duty Extended Life Coolant Concentrate		
ATE US (oral)	536.678 mg/kg bodyweight	
Ethylene glycol (107-21-1)		
LD50 dermal rat	> 3500 mg/kg mouse	
LC50 inhalation rat (mg/l)	> 2.5 mg/l/4h	
ATE US (oral)	500.000 mg/kg bodyweight	
sodium benzoate (532-32-1)		
LD50 oral rat	3140 mg/kg bodyweight	
ATE US (oral)	3140.000 mg/kg bodyweight	
Potassium hydroxide (1310-58-3)		
LD50 oral rat	333 mg/kg bodyweight	
ATE US (oral)	333.000 mg/kg bodyweight	
sodium nitrite (7632-00-0)		
LD50 oral rat	180 mg/kg	
ATE US (oral)	180.000 mg/kg bodyweight	
Disodium metasilicate (6834-92-0)		
LD50 oral rat	1250 ml/kg	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Ethylene glycol (107-21-1)		
IARC group	Not listed in carcinogenicity class	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.	
Ethylene glycol (107-21-1)		
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight/day	
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day kidney	
Aspiration hazard	: Not classified	
Symptoms/injuries after skin contact	: Causes skin irritation.	
Symptoms/injuries after eye contact	: Causes serious eye irritation.	
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.	
Likely routes of exposure	: Skin and eye contact;Inhalation	
•		

# SECTION 12: Ecological information

# 12.1. Toxicity

Ethylene glycol (107-21-1)	
LC50 fish 1	72860 mg/l Pimephales promelas

07/15/2015 EN (English) SDS ID: 2-9038 5/10

# Safety Data Sheet

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

Ethylene glycol (107-21-1)	
EC50 Daphnia 1	> 100 mg/l
NOEC chronic fish	15380 mg/l Pimephales promelas
NOEC chronic crustacea	8590 mg/l Ceriodaphnia sp.
sodium benzoate (532-32-1)	
LC50 fish 1	484 mg/l 96 h
EC50 Daphnia 1	> 100 mg/l 96 h
sodium nitrite (7632-00-0)	
LC50 fish 1	0.11 mg/l
Disodium metasilicate (6834-92-0)	
LC50 fish 1	2320 mg/l Gambusia affinis
EC50 Daphnia 1	1700 mg/l
LC50 fish 2	210 mg/l Brachydanio rerio

#### 12.2. Persistence and degradability

Ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable.

#### **Bioaccumulative potential** 12.3.

Ethylene glycol (107-21-1)	
Log Pow	- 1.36
Bioaccumulative potential	Not expected to bioaccumulate.
DI II (000 (000 )	

# Disodium metasilicate (6834-92-0)

Dicearant increasing (CCC) CZ C/		
	Bioaccumulative potential	Not expected to bioaccumulate.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

# **SECTION 14: Transport information**

In accordance with DOT

Non-bulk:

Not a dangerous good

Bulk:

RQ >= 5.476 lbs

Transport document description : RQ, UN3082 Environmentally hazardous substances, liquid, n.o.s. (Ethylene Glycol), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s. (Ethylene Glycol) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140 Transport hazard class(es) (DOT)

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



**DOT Symbols** : G - Identifies PSN requiring a technical name

Packing group (DOT) : III - Minor Danger

Additional information

Other information : No supplementary information available.

07/15/2015 EN (English) SDS ID: 2-9038 6/10

# Safety Data Sheet

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

### ADR

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

# **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

Ethylene glycol (107-21-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
SARA Section 313 - Emission Reporting	>95%
sodium benzoate (532-32-1)	

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

# Potassium hydroxide (1310-58-3)

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

## sodium nitrite (7632-00-0)

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

## Disodium metasilicate (6834-92-0)

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

SARA Section 311/312 Hazard Classes Not subject to reporing requirements of the United States SARA Section 313

## Sodium hydroxide (1310-73-2)

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

RQ (Reportable quantity, section 304 of EPA's List of Lists)

1000 lb

### 15.2. International regulations

### **CANADA**

## Ethylene glycol (107-21-1)

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

## sodium benzoate (532-32-1)

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

# Potassium hydroxide (1310-58-3)

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

# sodium nitrite (7632-00-0)

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

# Disodium metasilicate (6834-92-0)

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

### Sodium hydroxide (1310-73-2)

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

### **EU-Regulations**

## Ethylene glycol (107-21-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

## sodium benzoate (532-32-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

### Potassium hydroxide (1310-58-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

# sodium nitrite (7632-00-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

07/15/2015 EN (English) SDS ID: 2-9038 7/10

# Safety Data Sheet

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

### Disodium metasilicate (6834-92-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

## Sodium hydroxide (1310-73-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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

Acute Tox. 4 (Oral) H302 Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT RE 2 H373

Full text of classification categories and H statements : see section 16

### 15.2.2. National regulations

## Ethylene glycol (107-21-1)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on Taiwan National Chemical Inventory

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

## sodium benzoate (532-32-1)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

# Potassium hydroxide (1310-58-3)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Chinese Catalog of Hazardous Chemicals.

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

## sodium nitrite (7632-00-0)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on Taiwan National Chemical Inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Chinese Catalog of Hazardous Chemicals.

## Disodium metasilicate (6834-92-0)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Water hazard class (WGK)

Listed on Taiwan National Chemical Inventory

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Chinese Catalog of Hazardous Chemicals.

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

# Sodium hydroxide (1310-73-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Chinese Catalog of Hazardous Chemicals.

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

07/15/2015 EN (English) SDS ID: 2-9038 8/10

# Safety Data Sheet

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

## 15.3. US State regulations

## Ethylene glycol (107-21-1)

- U.S. Minnesota Hazardous Substance List
- U.S. Pennsylvania List of Hazardous Substances
- U.S. New Jersey Right to Know Hazardous Substance List

## Potassium hydroxide (1310-58-3)

- U.S. Minnesota Hazardous Substance List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Right to Know List of Hazardous Chemicals
- U.S. Pennsylvania List of Hazardous Substances

## sodium nitrite (7632-00-0)

- U.S. Pennsylvania List of Hazardous Substances
- U.S. New York Right to Know List of Hazardous Chemicals
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Massachusetts Right To Know List

# Sodium hydroxide (1310-73-2)

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

# **SECTION 16: Other information**

### Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

End-use applications **NOT** supported by Kost USA, Inc. for monoethylene glycol, diethylene glycol and triethylene glycol. These limitations include products restricted by law, applications in which may raise unacceptable risks, and other applications which Kost USA, Inc. has decided not to, including minimizing unnecessary risk and liabilities to the company. Kost USA, Inc. does not knowingly market these products into these non-supported applications. This list is not all-inclusive, and Kost USA, Inc. reserves the right to modify the same at any time.

- The use of production of tobacco and in the manufacture of tobacco products (including but not limited to additives, humectants, filters, inks, and paper)
- The use for the generation of artificial smoke / theatrical fogs / mist. This includes applications such as artificial / e-cigarettes.
- The use as ingredient in fuel for warming foods (Sterno<sup>™</sup>-like application) or in fuel for heating an enclosed space where human exposure is
  possible.
- The use in fire extinguishing sprinkler systems.
- The use in the manufacture of munitions.
- The use in the production of de-icers for use on roadways, sidewalks and in aircraft lavatories.
- The use as a component of heat transfer fluids in systems where the heat transfer fluids could infiltrate (i.e., via an exchanger leak, backflow prevention failure, or other means) a potable water.
- The use as a non-reacted component in a formulation for direct internal or external human / animal contact, including, but not limited to
  ingestion, inhalation, and skin contact and in medical / veterinary devices and medial / veterinary. Examples of some such applications are
  uses as a direct component in foods, beverages, pharmaceuticals, cosmetics, personal care products or children's products.
- The use for consumer or hospital usage for deodorizing or air "purifying" purposes by spraying as an aerosol.
- The use as a non-reacted component in adhesives, plasticizers, and softening agents for packaging having direct contact with food or beverage.
- The use as a non-reacted component in the formulation of glues, pastes, ice / heat packs or other items where the potential for significant human contact and/or ingestion exists (including but not limited to children's school glue/paste or arts/craft glue/paste, toys, children products).
- The use as a fluid for pressure testing piping.

For more information contact your Kost USA, Inc. representative.

Indication of changes : Transport information.

Revision date : 07/15/2015

07/15/2015 EN (English) SDS ID: 2-9038 9/10

# Safety Data Sheet

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

Data sources

: ESIS (European chemincal Substances Information System; accessed at:

http://esis.jrc.ec.europa.eu/index.php?PGM=cla.

ACGIH 2000.

European Chemicals Agency (ECHA) Registered Substances list. Accessed at

http://echa.europa.eu/.

Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing",

Fifth Edition.

National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th

edition.

OSHA 29CFR 1910.1200 Hazard Communication Standard.

TSCA Chemical Substance Inventory. Accessed at

http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.

: ACGIH (American Conference of Government Industrial Hygienists).

ATE: Acute Toxicity Estimate.

CAS (Chemical Abstracts Service) number.

CLP: Classification, Labelling, Packaging.

EC50: Environmental Concentration associated with a response by 50% of the test population.

GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).

LD50: Lethal Dose for 50% of the test population. OSHA: Occupational Safety & Health Administration.

STEL: Short Term Exposure Limits. TSCA: Toxic Substances Control Act.

TWA: Time Weight Average.

Other information : None.

# Full text of H-statements:

Abbreviations and acronyms

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Ox. Sol. 3	Oxidising Solids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H272	May intensify fire; oxidiser
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life

NFPA health hazard

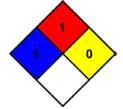
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

0 - Normally stable, even under fire exposure conditions, and not reactive with water.



07/15/2015 EN (English) SDS ID: 2-9038 10/10