HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

Foamer 1026 NS

Revision Date: 24-Sep-2015 **Revision Number:** 3

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

1.1. Product Identifier

Product Name Foamer 1026 NS
Internal ID Code HM008131

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

Recommended Use Foam Stabilizer
Sector of use SU2 - Mining, (including offshore industries)
Product category PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific
Process categories PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises

1.3. Details of the supplier of the safety data sheet

Halliburton Energy Services
Halliburton House, Howemoss Place
Kirkhill Industrial Estate
Dyce
Aberdeen, AB21 0GN
United Kingdom

www.halliburton.com

For further information, please contact
E-Mail address: fdunexchem@halliburton.com

1.4. Emergency telephone number

+44 8 08 189 0979 / 1-760-476-3961

Emergency telephone - §45 - (EC)1272/2008	
Europe	**112**
Croatia	Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health)
Cyprus	+210 7793777
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO):+ 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Romania	+40 21 318 36 06
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion / irritation	Category 2 - H315
Serious Eye Damage / Eye Irritation	Category 1 - H318

Chronic Aquatic Toxicity	Chronic 3 - H412

2.2. Label Elements

Hazard Pictograms

Signal Word **Danger**

Hazard Statements
H315 - Causes skin irritation
H318 - Causes serious eye damage
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician

Contains

Substances	**CAS Number**
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8
Hexylene glycol	107-41-5
Cocobetaine	61789-40-0
Alcohols, C6-10, ethoxylated	70879-83-3

2.3. Other Hazards
This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on Ingredients

3.2. Mixtures Mixture

Substances	**EINECS**	**CAS Number**	**PERCENT (w/w)**	**EU - CLP Substance Classification**	**REACH No.**
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	614-215-8	68037-05-8	10 - 30%	Skin Irrit. 2 (H315) Eye Corr. 1 (H318) Aquatic Chronic 3 (H412) Flam. Liq. 3 (H226)	No data available
Hexylene glycol	203-489-0	107-41-5	5 - 10%	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)	No data available
Cocobetaine	263-058-8	61789-40-0	1 - 5%	Eye Corr. 1 (H318) Aquatic Chronic 2 (H411)	No data available
Alcohols, C6-10, ethoxylated	615-189-0	70879-83-3	0.1 - 1%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Corr. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)	No data available

For the full text of the H-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation If inhaled, move victim to fresh air and seek medical attention.

Eyes Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention.

Skin Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes Get medical attention if irritation persists.

Ingestion If swallowed, do NOT induce vomiting. Give victim two glasses of water, Call a physician immediately. Never give anything by mouth to an unconscious person.

4.2. Most Important symptoms and effects, both acute and delayed

Causes severe eye irritation which may damage tissue. Causes skin irritation.

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

Notes to Physician Treat symptomatically

SECTION 5: Firefighting Measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

5.2. Special hazards arising from the substance or mixture

Special Exposure Hazards

Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce harmful gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

5.3. Advice for firefighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.
See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

6.4. Reference to other sections

See Section 8 and 13 for additional information.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed when not in use. Store away from oxidizers. Store at temperatures below 140 F (60 C). Product has a

shelf life of 24 months.

7.3. Specific End Use(s)

Exposure Scenario No information available
Other Guidelines No information available

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Exposure Limits

Substances	CAS Number	EU	UK	Netherlands	France
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Not applicable	Not applicable	Not applicable	Not applicable
Hexylene glycol	107-41-5	Not applicable	TWA: 25 ppm TWA: 123 mg/m³ STEL: 25 ppm STEL: 123 mg/m³	Not applicable	STEL: 25 ppm STEL: 125 mg/m³
Cocobetaine	61789-40-0	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C6-10, ethoxylated	70879-83-3	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Germany	Spain	Portugal	Finland
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Not applicable	Not applicable	Not applicable	Not applicable
Hexylene glycol	107-41-5	TWA: 10 ppm TWA: 49 mg/m³	25 ppm STEL [VLA-EC]; 123 mg/m³ STEL [VLA-EC]	Not applicable	TWA: 25 ppm TWA: 120 mg/m³ STEL: 40 ppm STEL: 200 mg/m³
Cocobetaine	61789-40-0	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C6-10, ethoxylated	70879-83-3	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Not applicable	Not applicable	Not applicable	Not applicable
Hexylene glycol	107-41-5	TWA: 10 ppm TWA: 49 mg/m³ STEL" 10 ppm STEL" 49 mg/m³	25 ppm STEL; 125 mg/m³ STEL	TWA: 10 ppm TWA: 49 mg/m³ STEL: 20 ppm STEL: 98 mg/m³	Not applicable
Cocobetaine	61789-40-0	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C6-10, ethoxylated	70879-83-3	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Not applicable	Not applicable	Not applicable	Not applicable
Hexylene glycol	107-41-5	Not applicable	Not applicable	Not applicable	Not applicable
Cocobetaine	61789-40-0	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C6-10, ethoxylated	70879-83-3	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Not applicable	Not applicable	Not applicable	Not applicable
Hexylene glycol	107-41-5	Not applicable	Not applicable	TWA: 25 ppm TWA: 123 mg/m³ STEL: 25 ppm STEL: 123 mg/m³	Not applicable
Cocobetaine	61789-40-0	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C6-10, ethoxylated	70879-83-3	Not applicable	Not applicable	Not applicable	Not applicable

Derived No Effect Level (DNEL) No information available.

Worker

General Population

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

Personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional. Organic vapor respirator.

Hand Protection Chemical-resistant protective gloves (EN 374) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Nitrile gloves. (>= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced. Manufacturer's directions for use should be observed because of great diversity of types.

Skin Protection Rubber apron.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls Do not allow material to contaminate ground water system

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid **Color:** Clear to Light yellow Amber

Odor: Sweet **Odor Threshold:** No information available

Property Remarks/ - Method	Values
pH:	6-8 (5%)
Freezing Point/Range	No data available
Melting Point/Range	No data available
Boiling Point/Range	No data available
Flash Point	> 99 °C / > 210.2 °F Tag Closed Cup (TCC)
Flammability (solid, gas)	No data available
upper flammability limit	No data available
lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	No data available
Water Solubility	Soluble in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

9.2. Other information

VOC Content (%) No data available

SECTION 10: Stability and Reactivity

10.1. Reactivity
Not expected to be reactive.
10.2. Chemical Stability
Stable
10.3. Possibility of Hazardous Reactions
Will Not Occur
10.4. Conditions to Avoid
None anticipated
10.5. Incompatible Materials
Strong oxidizers.
10.6. Hazardous Decomposition Products
Oxides of sulfur. Carbon monoxide and carbon dioxide. Oxides of nitrogen.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

Inhalation May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact Causes severe eye irritation which may damage tissue.

Skin Contact Causes skin irritation.

Ingestion May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	> 2,000 mg/kg (Rat) (similar substance)	> 2,000 mg/kg (Rat) (similar substance) 4000-12000 mg/kg (Rats) (similar substance)	No data available
Hexylene glycol	107-41-5	3692 mg/kg (Rat) > 1,400 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rat) 8560 µL/kg (Rabbit)	> the saturated vapour concentration at room temperature (Rat)
Cocobetaine	61789-40-0	4900 mg/kg (Rat) 5000 mg/kg (Rat) 7900 mg/kg (Rat) >10000 mg/kg (Rat)	> 2000 mg/kg (Rat)	No data available
Alcohols, C6-10, ethoxylated	70879-83-3	600 mg/kg (Rat) (similar substances) 1600 mg/kg (Rat) (similar substance) > 5000 mg/kg (Rat) (similar substance)	> 5200 mg/kg (rabbit) (similar substances) > 2000 mg/kg (rat) (similar substance) 2500 mg/kg (rabbit) (similar substance)	> saturated concentration (similar substance)

Substances	CAS Number	Skin corrosion/irritation
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Causes moderate skin irritation. (Rabbit) (similar substances)
Hexylene glycol	107-41-5	Causes mild skin irritation (Rabbit)
Cocobetaine	61789-40-0	Non-irritating to the skin (Rabbit)
Alcohols, C6-10, ethoxylated	70879-83-3	May cause moderate skin irritation. (Rabbit) (similar substances)

Substances	CAS Number	Eye damage/irritation
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Causes severe eye irritation. (Rabbit) (similar substances)
Hexylene glycol	107-41-5	Causes eye irritation (Rabbit)
Cocobetaine	61789-40-0	Causes severe eye irritation. (Rabbit)

Alcohols, C6-10, ethoxylated	70879-83-3	Causes severe eye irritation. (Rabbit) (similar substances)

Substances	CAS Number	Skin Sensitization
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Hexylene glycol	107-41-5	Did not cause sensitization on laboratory animals (guinea pig)
Cocobetaine	61789-40-0	Did not cause sensitization on laboratory animals (guinea pig)
Alcohols, C6-10, ethoxylated	70879-83-3	Did not cause sensitization on laboratory animals (similar substances)

Substances	CAS Number	Respiratory Sensitization
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	No information available
Hexylene glycol	107-41-5	No information available
Cocobetaine	61789-40-0	No information available
Alcohols, C6-10, ethoxylated	70879-83-3	No information available

Substances	CAS Number	Mutagenic Effects
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Hexylene glycol	107-41-5	In vitro tests did not show mutagenic effects
Cocobetaine	61789-40-0	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Alcohols, C6-10, ethoxylated	70879-83-3	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)

Substances	CAS Number	Carcinogenic Effects
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Did not show carcinogenic effects in animal experiments (similar substances)
Hexylene glycol	107-41-5	No information available.
Cocobetaine	61789-40-0	Did not show carcinogenic effects in animal experiments
Alcohols, C6-10, ethoxylated	70879-83-3	Did not show carcinogenic effects in animal experiments (similar substances)

Substances	CAS Number	Reproductive toxicity
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Did not show teratogenic effects in animal experiments. (similar substances)
Hexylene glycol	107-41-5	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Cocobetaine	61789-40-0	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Alcohols, C6-10, ethoxylated	70879-83-3	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)

Substances	CAS Number	STOT - single exposure
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Hexylene glycol	107-41-5	No significant toxicity observed in animal studies at concentration requiring classification.
Cocobetaine	61789-40-0	No significant toxicity observed in animal studies at concentration requiring classification.
Alcohols, C6-10, ethoxylated	70879-83-3	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

Substances	CAS Number	STOT - repeated exposure
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Hexylene glycol	107-41-5	No significant toxicity observed in animal studies at concentration requiring classification.
Cocobetaine	61789-40-0	No significant toxicity observed in animal studies at concentration requiring classification.
Alcohols, C6-10,	70879-83-3	No significant toxicity observed in animal studies at concentration requiring classification. (similar

ethoxylated		substances)

Substances	CAS Number	Aspiration hazard
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Not applicable
Hexylene glycol	107-41-5	No information available
Cocobetaine	61789-40-0	Not applicable
Alcohols, C6-10, ethoxylated	70879-83-3	Not applicable

SECTION 12: Ecological Information

12.1. Toxicity

Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	EC50 (72h) 73.52 mg/L (Skeletonema costatum) ErC50 (72h) 32 mg/L (Selenstrum capriconutum) (similar substance) NOErC (72h) 9 mg/L (Selenastrum capricornutum) NOEC (72h) 32 mg/L (Skeletonema costatum)	LC50 (96h) 1 - 2.5 mg/L (Salmo trutta) (similar substance) LC50 (96h) 7.8 mg/L (Scophthalmus maximus) NOEC (30d) 0.88 mg/L (Pimephales promelas) (similar substance)	No information available	EC50 (48h) 1.17 mg/L (Daphnia magna) (similar substance) LC50 (96h) 232.5 mg/L (Acartia tonsa) NOEC (21d) 0.37 mg/L (Daphnia magna) (similar substance)
Hexylene glycol	107-41-5	EC50 (72h) > 429 mg/L (Selenastrum capriconatum)	LC50 (96h) 10500 - 11000 mg/L (Pimephales promelas) LC50 (96h) 10000 mg/L (Lepomis macrochirus) LC50 (96h) 8690 mg/L (Pimephales promelas) LC50 (96h) 9450 mg/L (Oncorhynchus mykiss)	Inhibitory Concentration (10d) > 1000 mg/L (Pseudomonas aeruginosa)	EC50 2700 - 3700 mg/L EC50 (48h) 2800 mg/L (Ceriodaphnia reticulate)
Cocobetaine	61789-40-0	EC50 (72h) 9.86 mg/L (Scenedesmus subspicatus) NOEC (72h) 3.55 mg/L (Scenedesmus subspicatus)	LC50 (96h) .0 - 10.0 mg/L (Brachydanio rerio) NOEC (28d) 16 mg/L (Oncorhynchus mykiss)	No information available	EC50 (48h) 6.5 mg/L (Daphnia magna) NOEC (21d) 0.03 mg/L (Daphania magna)
Alcohols, C6-10, ethoxylated	70879-83-3	EC50 (72h) 0.7 mg/L (Selenestrum capriconutum) (similar substance) EC50 (72h) 1.1 mg/L (Scenedesmus subspicatus) (similar substance)	EC50 (96h) 1.4 mg/L (Pimephales promelas) (similar substance) EC50 (96h) 3 mg/L (Brachydanio rerio) (similar substance) NOEC (30d) 0.28 mg/L (Pimephales promelas) (similar substance) NOEC (16d) 0.16 mg/L (Lepomis macrochirus) (similar substance)	No information available	EC50 (48h) 0.2 mg/L (Daphnia magna) (similar substance) EC50 (48h) 0.39 mg/L (Ceriodaphnia dubia) (similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	Readily biodegradable (87% @ 28d) (similar substances)
Hexylene glycol	107-41-5	Readily biodegradable (60 @ 14d)
Cocobetaine	61789-40-0	Readily biodegradable (90% @ 28d)
Alcohols, C6-10, ethoxylated	70879-83-3	Readily biodegradable

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow

Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	No information available
Hexylene glycol	107-41-5	<0.14
Cocobetaine	61789-40-0	No information available
Alcohols, C6-10, ethoxylated	70879-83-3	12.7 - 237 L/kg (similar substance)

12.4. Mobility in soil

Substances	CAS Number	Mobility
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	68037-05-8	No information available
Hexylene glycol	107-41-5	No information available
Cocobetaine	61789-40-0	No information available
Alcohols, C6-10, ethoxylated	70879-83-3	No information available

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Substances	PBT and vPvB assessment
Polyethylene glycol (C6-C10) alkyl ether, sulfate ammonium salt	Not PBT/vPvB
Hexylene glycol	Not PBT/vPvB
Cocobetaine	Not PBT/vPvB
Alcohols, C6-10, ethoxylated	Not PBT/vPvB

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Disposal Method Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

SECTION 14: Transport Information

IMDG/IMO

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

RID

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

ADR

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IATA/ICAO

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

14.1. UN Number: Not restricted

14.2. UN Proper Shipping Name: Not restricted

14.3. Transport Hazard Class(es): Not applicable

14.4. Packing Group: Not applicable

14.5. Environmental Hazards: Not applicable

14.6. Special Precautions for User: None

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

EINECS Inventory	This product, and all its components, complies with EINECS
US TSCA Inventory	All components listed on inventory or are exempt.
Canadian DSL Inventory	All components listed on inventory or are exempt.

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Classes (WGK) WGK 1: Low hazard to waters.

15.2. Chemical Safety Assessment
No information available

SECTION 16: Other Information

Full text of H-Statements referred to under sections 2 and 3
H226 - Flammable liquid and vapor
H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Key or legend to abbreviations and acronyms
bw – body weight
CAS – Chemical Abstracts Service
CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures
EC – European Commission
EC10 – Effective Concentration 10%
EC50 – Effective Concentration 50%
EEC – European Economic Community
ErC50 – Effective Concentration growth rate 50%
IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL0 – Lethal Loading 0%
LL50 – Lethal Loading 50%
MARPOL – International Convention for the Prevention of Pollution from Ships
mg/kg – milligram/kilogram
mg/L – milligram/liter
NIOSH – National Institute for Occupational Safety and Health
NOEC – No Observed Effect Concentration
NTP – National Toxicology Program

OEL – Occupational Exposure Limit
PBT – Persistent Bioaccumulative and Toxic
PC – Chemical Product category
PEL – Permissible Exposure Limit
ppm – parts per million
PROC – Process category
REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL – Short Term Exposure Limit
SU – Sector of Use category

Key literature references and sources for data
www.ChemADVISOR.com/

Revision Date: 24-Sep-2015
Revision Note
SDS sections updated: 1

This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010

Disclaimer Statement
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End of Safety Data Sheet