

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Names: Accufoam Roof Foam

1.2 INTENDED USE OF THE PRODUCT

Use of the Substance/Mixture: Closed-cell insulation, for professional use only.

1.3 NAME, ADDRESS, AND TELEPHONE OF THE RESPONSIBLE PARTY COMPANY

PARTY COMPANY

Creative Polymer Solutions, LLC.
2720 Southeastern Circle, Birmingham, AL 35215
205-440-4996
www.creativepolymer.com

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Number: CHEMTREC: 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE


GHS-US Classification

Skin Irrit. 2	H315
Eye Dam. 1	H318
Carc. 2	H351
Repr. 2	H361
STOT RE 2	H373
Aquatic Chronic 3	H412

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

2.2 LABEL ELEMENTS

GHS-US Labeling

HAZARD PICTOGRAMS (GHS-US)	
SIGNAL WORD (GHS-US)	Danger
HAZARD STATEMENTS (GHS-US)	H302 - Harmful if swallowed. H315 Causes skin irritation. H318 - Causes serious eye damage. H361 Suspected of damaging fertility or the unborn child.

PRECAUTIONARY STATEMENTS (GHS-US)

P301+P317 - IF SWALLOWED: Get medical help.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305 + P354 + P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316 Get emergency medical help immediately.
P318 If exposed or concerned, get medical advice.
P330 – Rinse mouth.
P405 - Store locked up.
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 OTHER HAZARDS

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4 UNKNOWN ACUTE TOXICITY (GHS-US)

No Available Data

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCE

Not Applicable

3.2 MIXTURE

CHEMICAL NAME	CAS NUMBER	%*
Proprietary Polyester Resin (75-95%), 2,2'-oxybisethanol; diethylene glycol	Proprietary Polyester Resin, 111-46-6	40-50
Polyether polyol (65-85%) Polyether Polyol (15-45%)	9049-71-2 25791-96-2	10-20
Oxirane, 2-methyl-, polymer with oxirane ether with 2,6-bis[[bis-(2-hydroxyethyl) amino]methyl]-4-branched nonylphenol	940912-28-7 34354-45-5	10-20
Tris(1-chloro-2-propyl) phosphate	13674-84-5	10-20
Tetrabromophthalic Acid Diester/Diol (85-95%) 2,2'-oxydiethanol	77098-07-8 111-46-6	2-12
1-Vinyl-2-pyrrolidone (15)	88-12-0	0.5-8
2-Dimethylaminoethanol	108-01-0	1-10
Propane, 1, 1, 1, 2, 3, 3, 3-heptafluoro- (5-10%)	431-89-0	1-10
Tertiary amine catalyst (>25%), ethylene glycol (>25%)	Not Available 107-21-1	0-10

Full text of H-phrases: see section 16

*The exact percentage of composition has been withheld as a trade secret [29 CFR 1910.1200].

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: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.

First-aid Measures After Eye Contact: Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED

Symptoms/Injuries: May cause damage to organs through prolonged or repeated exposure. Suspected of damaging fertility or the unborn child. Causes skin irritation. Suspected of causing cancer. Causes serious eye damage.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 ADVICE FOR FIREFIGHTERS

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

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

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Nitrogen oxides. Black smoke. Acrid smoke and irritating fumes.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

6.1.1 FOR NON-EMERGENCY PERSONNEL

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2 FOR EMERGENCY PERSONNEL

Protective Equipment:

Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4 REFERENCE TO OTHER SECTIONS

See Section 8 for exposure controls and personal protection and Section 13 for disposal

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe vapors, fumes, mist, or spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. reactive metals (Al, K, Zn ...). Isocyanates.

7.3 SPECIFIC END USE(S)

Closed cell insulation, for professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Diethylene glycol (111-46-6)

USA AIHA	WEEL TWA (mg/m ³)	10 mg/m ³
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1,4-Dioxane (123-91-1)

USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	3.6 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	1 ppm
USA IDLH	US IDLH (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	360 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
USA OSHA	Limit value category (OSHA)	prevent or reduce skin absorption

Triethyl phosphate (78-40-0)

USA AIHA	WEEL TWA (mg/m ³)	7.45 mg/m ³
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cis-1,1,1,4,4,4-Hexafluoro-2-butene (692-49-9)

USA AIHA	WEEL TWA (mg/m ³)	3350 mg/m ³
USA AIHA	WEEL TWA (ppm)	500 ppm

8.2 EXPOSURE CONTROLS

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen-deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Flash Point (F)	117.5

9.2 OTHER INFORMATION

No Additional Information available

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY:

Hazardous reactions will not occur under normal conditions.

10.2 CHEMICAL STABILITY:

Stable under recommended handling and storage conditions (see section 7).

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Hazardous polymerization will not occur.

10.4 CONDITIONS TO AVOID:

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5 INCOMPATIBLE MATERIALS:

Strong acids, strong bases, strong oxidizers. reactive metals (Al, K, Zn ...). Isocyanates.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon oxides (CO, CO₂). Phosphorus oxides. Nitrogen oxides. Hydrochloric acid fumes may be generated. Hydrogen bromide. Phosphine. aldehydes, ketones. Acrid smoke and irritating fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity: Not Classified

Diethylene glycol (111-46-6)

LD50 Oral Rat	1120 mg/kg
LD50 Dermal Rabbit	11890 mg/kg
LC50 Inhalation Rat	> 4600 mg/m ³ (Exposure time: 4 h)
ATE (Dermal)	11,890.00 mg/kg body weight

1,4-Dioxane (123-91-1)

LD50 Oral Rat	5170 mg/kg
LD50 Dermal Rabbit	7600 mg/kg
LC50 Inhalation Rat	46 mg/l (Exposure time: 2 h)
LC50 Inhalation Rat	32.5 mg/l/4h

Triethyl phosphate (78-40-0)

LD50 Oral Rat	1100 - 1600 mg/kg
LD50 Dermal Rabbit	>20 g/kg
LC50 Inhalation Rat	> 8187 mg/m ³ (Exposure time: 4 h)

1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl- (33329-35-0)

ATE (Oral)	500.00 mg/kg body weight
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cis-1,1,1,4,4,4-Hexafluoro-2-butene (692-49-9)

LC50 Inhalation Rat	> 690 mg/l/4h
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1,2-Propanediol, polymer with ethyloxirane and oxirane, potassium salt (134737-27-2)

ATE (Oral)	500.00 mg/kg body weight
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Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer.

1,4-Dioxane (123-91-1)

IARC group	2B
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity, Reasonably anticipated to be Human Carcinogen.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris,

or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY

Ecology-General: Harmful to aquatic life with long lasting effects

Diethylene glycol (111-46-6)

LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

1,4-Dioxane (123-91-1)

LC50 Fish 1	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	163 mg/l (Exposure time: 48 h - Species: water flea [Static])
LC50 Fish 2	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [semi-static])

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

LC50 Fish 1	56.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	63 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
ErC50 (Algae)	82 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
NOEC Chronic Algae	6 mg/l

2-(Dimethylamino)ethanol (108-01-0)

LC50 Fish 1	81 mg/l (Exposure time: 96 h - Species: Pimephales promelas (static))
EC50 Daphnia 1	98.77 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 (Algae)	35 mg/l

12.2 PERSISTENCE AND DEGRADABILITY

Accufoam Roof Foam

Persistence and Degradability: May cause long-term adverse effects in the environment.

12.3 BIOACCUMULATIVE POTENTIAL

Accufoam Roof Foam

Bioaccumulative Potential	Not established
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Diethylene glycol (111-46-6)

BCF Fish 1	100 - 180
Log Pow	-1.98 (at 25 °C)

1,4-Dioxane (123-91-1)

BCF Fish 1	0.2 - 0.7
Log Pow	-0.42

Triethyl phosphate (78-40-0)

Log Pow	0.8 - 1.11
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2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

BCF Fish 1	1.9 - 4.6
Log Pow	2.59

2-(Dimethylamino)ethanol (108-01-0)

Log Pow	-0.55 (at 23 °C)
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12.4 MOBILITY IN SOIL

No additional information available

12.5 OTHER ADVERSE EFFECTS

Other Adverse Effects: This product may degrade to yield endocrine disruptor(s).

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology- Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1 IN ACCORDANCE WITH DOT

Not regulate except in bulk. Bulk containers (>5,000 lbs) must be transported as:

UN3082, Environmentally Hazardous Substance, Liquid, NOS, Class 9, PGIII

Proper Shipping Name: UN3083, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 1,4-Dioxane), g, PG III

Hazard Class: 9

Identification Number: NA3082

Label Codes: 9

Packing Group: III

ERG Number: 171



14.2 IN ACCORDANCE WITH IMDG

Not regulated for transport

14.3 IN ACCORDANCE WITH IATA

Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US FEDERAL REGULATIONS

Accufoam CC: SARA Section 311/312 Hazard Classes

Health hazard: Reproductive toxicity

Health hazard: Specific target organ toxicity (single or repeated exposure)

Health hazard: Skin corrosion or Irritation

Health hazard: Carcinogenicity

Health hazard: Serious eye damage or eye irritation

Diethylene glycol (111-46-6)

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

Ethylene oxide, polymer with 2,2'-iminodiethanol and propylene oxide (34354-45-5)

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

EPA TSCA Regulatory Flag: XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e., Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710 (C)).

Triethyl phosphate (78-40-0)

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

1,3-Propanediamine, N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl- (33329-35-0)

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

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

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

cis-1,1,1,4,4,4-Hexafluoro-2-butene (692-49-9)

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

EPA TSCA Regulatory Flag:

P - P - indicates a commenced PMN substance.

S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule.

2-(Dimethylamino)ethanol (108-01-0)

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

15.2 US STATE REGULATIONS
1,4-Dioxane (123-91-1)

U.S. - California - Proposition 65 - Carcinogens List: WARNING: This product contains chemicals known to the State of California to cause cancer.

Diethylene glycol (111-46-6)

U.S. - Pennsylvania - RTK (Right to Know) List

1,4-Dioxane (123-91-1)

U.S. - Massachusetts: Right To Know List

U.S. - New Jersey: Right to Know Hazardous Substance List

U.S. - Pennsylvania: RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania: RTK (Right to Know) - Special Hazardous Substances

U.S. - Pennsylvania: RTK (Right to Know) List

2-(Dimethylamino)ethanol (108-01-0)

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, INCLUDING DATE OF PREPARATION OR LAST REVISION

DATE OF PREPARATION OR LATEST REVISION: 05/09/2018

OTHER INFORMATION: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases

Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
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
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin

H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

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.

SDS US (GHS HazCom)