

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: ULTRA EL COOLANT

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

Identified uses: Formulated Industrial Lubricant

Uses advised against: None identified.

1.3 Details of the supplier of the safety data sheet

Supplier

Company Name: Ingersoll Rand Industrial Ireland Limited
Address: 165 Lakeview Drive, Airside Business Park,
Swords, Co. Dublin, Ireland

Telephone: +44 1204 208116

E-mail contact:

1.4 Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 703 527 3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

This product does not meet the classification requirements of the current European legislation.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

2.2 Label elements according to Regulation (EC) No 1272/2008 as amended

Signal Words: Not applicable

Hazard Statement(s): Not applicable

Precautionary Statements

Supplemental label information

EUH210: Safety data sheet available on request.

EUH208: Contains:

Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-

May produce an allergic reaction.

2.3 Other hazards:

Endocrine Disruption- Toxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Endocrine Disruption- Ecotoxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Regulation No. 1272/2008.

Chemical name	Concentration	EC No.	REACH Registration No.	M-Factor:	Notes
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	1 - 3%	270-128-1	01-2119491299-23		
1-Naphthalenamine, N-phenyl-ar-(1,1,3,3-tetramethylbutyl)-	1 - 5%	269-527-3			
Barium dinonylnaphthalenesulfonate	0.1 - 1%	247-132-7			
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	0.1 - 1%	608-009-7			

600, 700 and 900 ECHA List Numbers do not have any legal significance; rather they are purely technical identifiers and are displayed for informational purposes only.

Classification Regulation No. 1272/2008.

Chemical name	Classification	Notes
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Repr. 2; H361	
1-Naphthalenamine, N-phenyl-ar-(1,1,3,3-tetramethylbutyl)-	Aquatic Chronic 3; H412	
Barium dinonylnaphthalenesulfonate	Skin Corr. 2; H315 Skin Sens. 1; H317 Acute Tox. 4; H302 Specific concentration limit: Skin sensitizer Category 1, > 7.5 - 100 %;	
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Eye Dam. 1; H318 Skin Sens. 1B; H317 Aquatic Chronic 3; H412	

The full text for all H-phrases is displayed in section 16.



See Section 15 for Regulation (EC) No. 1907/2006 REACH Article 59(1). Candidate List (Substances of Very High Concern (SVHC))

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

Skin Contact: Wash with soap and water. If skin irritation occurs, get medical attention.

Ingestion: Treat symptomatically. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed: See section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

5.1 Extinguishing media

Suitable extinguishing media: CO₂, dry chemical, foam, water spray, water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture:

A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

5.3 Advice for firefighters

Special fire-fighting procedures: No data available.

Special protective equipment for fire-fighters: Recommend wearing self-contained breathing apparatus.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** No data available.
- 6.2 Environmental Precautions:** Avoid release to the environment. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so.
- 6.3 Methods and material for containment and cleaning up:** Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.
- 6.4 Reference to other sections:** See sections 8 and 13 for additional information.

SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment.
- Maximum Handling Temperature:** 70 °C
- 7.2 Conditions for safe storage, including any incompatibilities:** Store away from incompatible materials. See section 10 for incompatible materials.
- Maximum Storage Temperature:** 45 °C
- 7.3 Specific end use(s):** End uses are listed in an attached exposure scenario when one is required.

SECTION 8: Exposure controls/personal protection

- 8.1 Control Parameters**
Occupational Exposure Limits
None of the components have assigned exposure limits.

DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	General population	Oral	Systemic, long-term; 0.04 mg/kg	Repeated dose toxicity
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Workers	Dermal	Systemic, long-term; 0.08 mg/kg	Repeated dose toxicity
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	General population	Dermal	Systemic, long-term; 0.04 mg/kg	Repeated dose toxicity
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Workers	Inhalation	Systemic, long-term; 0.6 mg/m ³	Repeated dose toxicity

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	General population	Inhalation	Systemic, long-term; 0.14 mg/m3	Repeated dose toxicity
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	General population	Eyes	Local effect;	No hazard identified
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Workers	Eyes	Local effect;	No hazard identified
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	General population	Oral	Systemic, long-term; 0.6 mg/kg	Repeated dose toxicity
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	General population	Inhalation	Systemic, long-term; 1.1 mg/m3	Repeated dose toxicity
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	General population	Eyes	Local effect;	Low hazard (no threshold derived)
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	General population	Inhalation	Systemic, short-term; 1.1 mg/m3	Repeated dose toxicity
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Workers	Inhalation	Systemic, short-term; 4.4 mg/m3	Repeated dose toxicity
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	General population	Dermal	Systemic, long-term; 0.6 mg/kg	Repeated dose toxicity
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Workers	Inhalation	Systemic, long-term; 4.4 mg/m3	Repeated dose toxicity
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Workers	Dermal	Systemic, long-term; 1.25 mg/kg	Repeated dose toxicity
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Workers	Eyes	Local effect;	Medium hazard (no threshold derived)

PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Soil	1.76 mg/kg	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Sediment (marine water)	0.045 mg/kg	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Sediment (freshwater)	0.446 mg/kg	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Aquatic (marine water)	0.003 mg/l	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Sewage treatment plant	10 mg/l	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Aquatic (freshwater)	0.034 mg/l	

Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Aquatic (freshwater)	0.072 mg/l	
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Sediment (marine water)	2.3 mg/kg	
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Sewage treatment plant	10 mg/l	
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Aquatic (marine water)	0.007 mg/l	
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Sediment (freshwater)	23 mg/kg	
Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl-	Soil	4.54 mg/kg	

8.2 Exposure controls

Appropriate engineering controls:

No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information:

Please follow the recommended personal protective equipment (PPE) guidelines below and refer to the appropriate EN standard where applicable. Use personal protective equipment as required.

Eye/face protection:

If contact is likely, safety glasses with side shields are recommended. Eye protection should meet the standards set out in EN 166.

Skin protection

Hand Protection:

Suitable gloves can be recommended by the glove supplier.

General:

Because specific work environments and material handling practices vary, safety procedures should be specific for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures). Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions. For typical use and handling of chemical substances, gloves should meet the standards set out in EN 374. For applications involving mechanical risks with potential for abrasion or puncture, the standards set out in EN 388 should be considered. For tasks involving thermal hazards, the standards set out in EN 407 should be considered.

Break-through time: Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type.

For continuous contact, we suggest gloves with a minimum breakthrough time of 240 minutes, or > 480 minutes if suitable gloves can be obtained. If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to. For short-term, transient exposures and splash protection, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove thickness: For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It is important to note that glove thickness is not the only predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material.

Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.

Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example: Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, before being disposed of. Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Other: No data available.

Respiratory Protection: Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Use respirator with an organic vapor and dust/mist cartridge if the recommended exposure limit is exceeded.

Respiratory Protective Equipment (RPE) is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions. Please refer to the relevant EN standards for the RPE selected.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Environmental Controls: No data available.
See section 6 for details.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Yellow to brown
Odor:	Characteristic
Odor Threshold:	No data available.
pH:	Not applicable
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	266 °C (Cleveland Open Cup)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.

Upper/lower limit on flammability or explosive limits

Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Relative vapor density:	No data available.
Relative density:	0.979 (20 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition Temperature:	No data available.



Viscosity:	48 mm ² /s (40 °C); 9 mm ² /s (100 °C)
Explosive properties:	No data available.
Oxidizing properties:	No data available.
VOC Content:	No data available.

Particle characteristics

Particle Size:	Not applicable
Particle Size Distribution:	Not applicable
Specific surface area:	Not applicable
Surface charge/Zeta potential:	Not applicable
Assessment:	Not applicable
Shape:	Not applicable
Crystallinity:	Not applicable
Surface treatment:	Not applicable

Other information

Bulk density:	0.984 g/cm ³
Pour Point Temperature:	-45 °C

SECTION 10: Stability and reactivity

10.1 Reactivity:	No data available.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Will not occur.
10.4 Conditions to avoid:	None known.
10.5 Incompatible Materials:	Avoid strong bases at high temperatures, strong acids, strong oxidizing agents and materials that react with hydroxyl compounds.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

SECTION 11: Toxicological information
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Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.



11.1 Information on toxicological effects

Acute toxicity

Oral

Product: Not classified for acute toxicity based on available data.

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: Not classified for acute toxicity based on available data.

Skin Corrosion/Irritation:

Product: Remarks: Not classified as a primary skin irritant.

Serious Eye Damage/Eye Irritation:

Product: Remarks: Not classified as a primary eye irritant.

Respiratory sensitization:

No data available

Skin sensitization:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene Classification: Not a skin sensitizer. (Literature) Not a skin sensitizer.

1-Naphthalenamine, N-phenyl-ar-(1,1,3,3-tetramethylbutyl)- Classification: Not a skin sensitizer. (Read across) Not a skin sensitizer.

Barium dinonylnaphthalenesulfonate Classification: May cause sensitization by skin contact. (Literature) Remarks: Category 1

Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl- Classification: Skin sensitizer (Supplier information) Category 1B

Specific Target Organ Toxicity - Single Exposure:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Barium dinonylnaphthalenesulfonate If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Aspiration Hazard:

No data available

Other effects:

Chronic Effects

Carcinogenicity:

No data available

Germ Cell Mutagenicity:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene In vitro and in vivo genetic toxicity studies were negative.

Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl- The Ames Salmonella test for mutagenicity was negative for this product.

Reproductive toxicity:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene Oral: Target Organ(s): Liver, Kidney

11.2 Information on health hazards**Other hazards**

Product: No data available.

Endocrine Disruption

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;

SECTION 12: Ecological information**12.1 Ecotoxicity****Fish**

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene LC 50 (Zebra Fish, 4 d): > 100 mg/l

Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl- LC 50 (Zebra Fish, 96 h): 38 mg/l

Aquatic Invertebrates

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene EC 50 (Water flea (Daphnia magna), 2 d): 51 mg/l
NOEC (Water Flea (Daphnia Magna), 21 d): 1.69 mg/l

Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl]thio]-2-methyl- EC 50 (Water flea (Daphnia magna), 48 h): 53 mg/l

**Toxicity to Aquatic Plants**Benzenamine, N-phenyl-,
reaction products with 2,4,4-
trimethylpenteneEC 50 (Green algae (*Scenedesmus quadricauda*), 3 d): > 100 mg/l
NOEC (Green algae (*Scenedesmus quadricauda*), 3 d): 10 - 100
mg/l**Toxicity to soil dwelling organisms**

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganismsBenzenamine, N-phenyl-,
reaction products with 2,4,4-
trimethylpentene

EC 50 (Sludge, 3 h): > 100 mg/l

12.2 Persistence and Degradability**Biodegradation**Benzenamine, N-phenyl-, reaction
products with 2,4,4-
trimethylpenteneOECD TG 301 B, 1 %, 28 d, Not readily degradable. (The product is
not biodegradable.)Propanoic acid, 3-[[bis(2-
methylpropoxy)phosphinothioyl]thi
o]-2-methyl-

OECD TG 301 B, 0 %, 28 d, Not readily degradable.

BOD/COD Ratio

No data available

12.3 Bioaccumulative potential**Bioconcentration Factor (BCF)**Benzenamine, N-phenyl-, reaction
products with 2,4,4-
trimethylpenteneCommon Carp, Bioconcentration Factor (BCF): 1,730 (Read across)
Based on experimental data this material is not bioaccumulative.**Partition Coefficient n-octanol / water (log Kow)**Benzenamine, N-phenyl-, reaction
products with 2,4,4-
trimethylpentene

Log Kow: > 5 25 °C (calculated)

12.4 Mobility:

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine Disruption:



Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied.

Contaminated Packaging: Container packaging may exhibit hazards.

SECTION 14: Transport information

ADR

Not Regulated.

IMDG

Not Regulated.

IATA

Not Regulated.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

SECTION 15: Regulatory information

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

EU Regulations

EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances:

None present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended:

None present or none present in regulated quantities.

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended:

None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List:

None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:

None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical name	EC No.	Concentration
Diphenylamine	204-539-4	<0.1%

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.:

None present or none present in regulated quantities.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:

None present or none present in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:

None present or none present in regulated quantities.

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

None present or none present in regulated quantities.

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	EC No.	Concentration
Barium dinonylnaphthalenesulfonate	247-132-7	0.1 - 1.0%

Inventory Status

Australia (AIC)

May require notification before sale under Australian regulations.

Canada (DSL/NDSL)

All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

**European Union (REACH)**

To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Great Britain (UK REACH)

To obtain information on the UK REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)

May require notification before sale in Korea.

New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All substances contained in this product are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland and approved for sale. However, third party importers must be notified to the manufacturer.

Taiwan (TCSCA)

May require notification before sale in Taiwan.

Turkey (KKDIK)

To obtain information on the KKDIK compliance status of this product, please e-mail REACH@SDSInquiries.com.

United States (TSCA)

All substances contained in this product are listed on the TSCA inventory or are exempt.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Key literature references and sources for data: Internal company data and other publically available resources.

Wording of the H-statements in section 2 and 3:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361	Suspected of damaging fertility or the unborn child.

H412 Harmful to aquatic life with long lasting effects.

Other information: Revision(s) are noted by the double bar in the margin and the light gray box.

Abbreviations and acronyms:

ACGIH – American Conference of Governmental Industrial Hygienist
 ADR - International Carriage of Dangerous Goods by Road
 AICS - Australian Inventory of Chemical Substances
 ATEmix - Acute Toxicity Estimate for the mixture
 BCF - Bio concentration factor
 DMSO - Dimethyl sulfoxide
 DSL - Domestic Substance List
 EC50 - Effective concentration that gives a response in 50% of the population
 ECHA - European Chemical Agency
 ECL - Existing Chemical List
 ENCS - Existing and New Chemical Substances
 EPA – Environmental Protection Agency
 IARC - International Agency for Research on Cancer
 IATA - International Air Transport Association
 IECSC - Inventory of Existing Chemical Substances
 IMDG - International Maritime Dangerous Goods
 IP 346 – A gravimetric assay used to determine the percentage weight of polycyclic aromatics in oil, via a DMSO extraction technique
 LC50 - Lethal concentration required to kill 50% of the population
 MARPOL - International Conventions for the Prevention of Pollution from Ships
 NDSL - Non Domestic Substance List
 NOAEC - No observed adverse effect concentration
 NOAEL - No observed adverse effect level
 NOEC - No observed effective concentration
 NTP - National Toxicology Program
 NZloc - New Zealand Inventory of chemicals
 OECD TG - Organization for Economic Cooperation and Development Test Guidelines
 OSHA – Occupational, Safety, and Health Administration
 PBT – Persistent bioaccumulative toxic chemical
 PEL – Permissible Exposure Level
 PICCS - Philippine Inventory of Chemicals and Chemical Substances
 PPE - Personal Protective Equipment
 PRTR - Pollutant Release and Transfer Register
 REACH - Registration, Evaluation, Authorization & restriction of Chemicals
 SVHC - Substance of Very High Concern
 SWISS - Switzerland chemical ordinance
 TCSCA - Toxic Chemical Substance Control Act
 TLV – Threshold Limit Value
 TSCA - Toxic Substances Control Act
 TWA – Time Weighted Average
 vPvB – very Persistent very Bioaccumulative

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