



SAFETY DATA SHEET

INGERSOLL RAND

Safety Data Sheet according to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

Product name: Ingersoll Rand Ultra Coolant

Revision Date: 10.07.2024

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INGERSOLL RAND encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: Ingersoll Rand Ultra Coolant

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

Identified uses: Selection of the appropriate polyglycol product for a specific application requires knowledge of the fluid requirements of the application, awareness of the most important of these requirements, and a match-up with the properties of the various polyglycol materials. Polyglycol products can be formulated for use in numerous industry applications such as hydraulic fluids, quenchants, compressor and refrigeration lubricants, heat transfer fluids, machinery lubricants, solder assist fluids, metalworking lubricants, textile finishing, etc.

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION

Ingersoll-Rand Industrial Ireland Limited
165 Lakeview Drive Airside Business Park
Swords
Co. Dublin, K67 EW96
Ireland

Customer Information Number:

+44 1204 208116

1.4 EMERGENCY TELEPHONE NUMBER

U.S. 24-Hour Emergency #: 800-424-9300

Outside U.S. Emergency #: +01 703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008, as retained and amended in UK law

Reproductive toxicity - Category 2 - H361f

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

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008, as retained and amended in UK law

Hazard pictograms



Signal word: **WARNING**

Hazard statements

H361f Suspected of damaging fertility.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents and/or container to an approved waste disposal plant.

Supplemental information

EUH208 Contains: Barium bis(dinonylnaphthalenesulphonate). May produce an allergic reaction.

Contains Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

2.3 Other hazards

This product contains no substances assessed to be PBT or vPvB at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

This product is a mixture.

CASRN / EC-No. / Index-No.	UK REACH Registration Number	Concentration	Component	Classification: REGULATION (EC) No 1272/2008, as retained and amended in UK law
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CASRN 9003-13-8 EC-No.	-	>65.0 - <70.0 %	Polypropylene glycol monobutyl ether	Not classified
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Polymer Index-No. —				Acute toxicity estimate Acute oral toxicity: 9,610 mg/kg Acute dermal toxicity: 19,780 mg/kg
CASRN Not available EC-No. Polymer Index-No. —	—	>25.0 - <30.0 %	Synthetic polyol ester	Not classified Acute toxicity estimate Acute oral toxicity: >2,000 mg/kg Acute inhalation toxicity: 5,100 mg/l, 4 Hour, Mist Acute dermal toxicity: >2,000 mg/kg
CASRN 68411-46-1 EC-No. 270-128-1 Index-No. —	—	>3.0 - <7.0 %	Benzenamine, N- phenyl-, reaction products with 2,4,4- trimethylpentene	Repr. 2; H361f Acute toxicity estimate Acute oral toxicity: >5,000 mg/kg Acute dermal toxicity: >2,000 mg/kg
CASRN 25619-56-1 EC-No. 247-132-7 Index-No. 056-002-00-7	—	<0.5 %	Barium bis(dinonylnaphtale nesulphonate)	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Acute toxicity estimate Acute oral toxicity: 1,750 mg/kg Acute inhalation toxicity: >21 mg/l, 1 Hour, dust/mist Acute dermal toxicity: >10,000 mg/kg

If present in this product, any not classified components disclosed above for which no country specific OEL value(s) is(are) indicated under Section 8, are being disclosed as voluntarily disclosed components.

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

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice:

If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air and keep comfortable for breathing; consult a physician.

Skin contact: Wash off with plenty of water.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: Rinse mouth with water. No emergency medical treatment necessary.

4.2 Most important symptoms and effects, both acute and delayed:

Suspected of damaging fertility.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water fog or fine spray.. Dry chemical fire extinguishers.. Carbon dioxide fire extinguishers.. Foam.. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective..

Unsuitable extinguishing media: Do not use direct water stream.. May spread fire..

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.. Combustion products may include and are not limited to:.. Nitrogen oxides.. Carbon monoxide.. Carbon dioxide..

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation.. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids..

5.3 Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry.. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed.. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles.. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container.. Do not use direct water stream. May spread fire.. Move container from fire area if this is possible without hazard.. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage..

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).. Avoid contact with this material during fire fighting

operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to section 7, Handling, for additional precautionary measures.

6.2 Environmental precautions: Material will float on water. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

6.3 Methods and materials for containment and cleaning up: Contain spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

6.4 Reference to other sections: References to other sections, if applicable, have been provided in the previous sub-sections.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling: No special precautions required. Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

7.2 Conditions for safe storage, including any incompatibilities: Store in the following material(s): 316 stainless steel. Carbon steel. Glass-lined container. Polypropylene. Polyethylene-lined container. Stainless steel. Teflon. This material may soften and lift certain paint and surface coatings. Use product promptly after opening. Store in original unopened container. Unopened containers of material stored beyond the recommended shelf life should be retested against the sales specifications before use. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.

Storage stability

Shelf life: Use within
5 year

7.3 Specific end use(s): See the technical data sheet on this product for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value
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Barium bis(dinonylnaphtalenesulphonate)	ACGIH	TWA	0.5 mg/m ³ , Barium
	Further information: eye ir: Eye irritation; muscular stim: Muscular stimulation; skin ir: Skin irritation; GI ir: Gastrointestinal irritation; A4: Not classifiable as a human carcinogen		
	GB EH40	TWA	0.5 mg/m ³ , Barium
	Further information: 14: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.		

Recommended monitoring procedures

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with the Occupational Exposure Limits and the adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples should be analysed by an accredited laboratory.

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy); European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents); European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods.

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods.

Health and Safety Executive (HSE), United Kingdom: Methods for the Determination of Hazardous Substances.

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany.

L'Institut National de Recherche et de Sécurité (INRS), France.

Derived No Effect Level

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Workers

Acute systemic effects		Acute local effects		Long-term systemic effects		Long-term local effects	
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
n.a.	n.a.	n.a.	n.a.	25 mg/kg bw/day	44.1 mg/m ³	n.a.	n.a.

Consumers

Acute systemic effects			Acute local effects		Long-term systemic effects			Long-term local effects	
Dermal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
n.a.	n.a.	n.a.	n.a.	n.a.	25 mg/kg bw/day	21.7 mg/m ³	25 mg/kg bw/day	n.a.	n.a.

Predicted No Effect Concentration

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Compartment	PNEC
Fresh water	0.051 mg/l

Marine water	0.0051 mg/l
Intermittent use/release	0.51 mg/l
Sewage treatment plant	10 mg/l
Fresh water sediment	0.446 mg/kg
Marine sediment	0.045 mg/kg
Soil	1.76 mg/kg

8.2 Exposure controls

Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

Skin protection

Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl alcohol ("PVA"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65 °C, meeting standard EN 14387).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Color	Brown
Odor	Mild
Odor Threshold	No test data available
pH	8 - 10 <i>ASTM E70</i> (16% in water/methanol, 1:10)
Melting point/range	Not applicable to liquids
Freezing point	See Pour Point
Boiling point (760 mmHg)	>200 °C <i>Calculated</i> .
Flash point	closed cup 210 °C <i>ASTM D 93</i>
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	Not applicable to liquids
Flammability (liquids)	Not expected to be a static-accumulating flammable liquid.
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapor Pressure	<0.01 mmHg at 20 °C <i>ASTM E1719</i>
Relative Vapor Density (air = 1)	No test data available
Relative Density (water = 1)	0.9901 at 25 °C / 25 °C <i>ASTM D891</i>
Water solubility	<1 g/L at 20 °C <i>Measured</i>
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	388 °C <i>ASTM E659</i>
Decomposition temperature	No test data available
Kinematic Viscosity	49.7 - 56.4 cSt at 37.8 °C <i>ASTM D 445</i>
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other information

Liquid Density	0.9872 g/cm ³ at 25 °C <i>ASTM D941</i>
Molecular weight	No test data available
Pour point	-28.9 °C <i>ASTM D97</i>

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No data available

10.2 Chemical stability: Thermally stable at typical use temperatures.

10.3 Possibility of hazardous reactions: Polymerization will not occur.

10.4 Conditions to avoid: Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

10.5 Incompatible materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials.. Decomposition products can include and are not limited to: Aldehydes.. Alcohols.. Ethers.. Hydrocarbons.. Ketones.. Organic acids.. Polymer fragments..

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data are available.

11.1 Information on toxicological effects

Information on likely routes of exposure
Ingestion, Inhalation, Skin contact, Eye contact.

Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

Acute Toxicity Endpoints:

Acute oral toxicity

Information for the Product:

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Based on product testing:
LD50, Rat, male, >5,000 mg/kg

Information for components:

Polypropylene glycol monobutyl ether

LD50, Rat, male, 9,610 mg/kg

Synthetic polyol ester

Very low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause serious injury, even death.

Single dose oral LD50 has not been determined.

For similar material(s): LD50, Rat, >2,000 mg/kg

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

LD50, Rat, male and female, >5,000 mg/kg

Barium bis(dinonylnaphtalenesulphonate)

For similar material(s): LD50, Rat, 1,750 mg/kg

Acute dermal toxicity

Information for the Product:

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Based on product testing:

LD50, Rabbit, >2,000 mg/kg No deaths occurred at this concentration.

Information for components:

Polypropylene glycol monobutyl ether

LD50, Rabbit, 19,780 mg/kg

Synthetic polyol ester

The dermal LD50 has not been determined.

For similar material(s): LD50, Rat, >2,000 mg/kg

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

LD50, Rat, male and female, >2,000 mg/kg No deaths occurred at this concentration.

Barium bis(dinonylnaphtalenesulphonate)

For similar material(s): LD50, Rat, >10,000 mg/kg

Acute Inhalation toxicity

Information for the Product:

At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous. For respiratory irritation and narcotic effects: No relevant data found.

As product: The LC50 has not been determined.

Information for components:

Polypropylene glycol monobutyl ether

For similar material(s): Rat, 8 Hour, No deaths occurred following exposure to a saturated atmosphere.

Synthetic polyol ester

The LC50 has not been determined.

For similar material(s): LC50, Rat, 4 Hour, Mist, 5,100 mg/l

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

The LC50 has not been determined.

Barium bis(dinonylnaphtalenesulphonate)

LC50, Rat, 1 Hour, dust/mist, >21 mg/l No deaths occurred at this concentration.

Skin corrosion/irritation

Information for the Product:

Based on product testing:

Brief contact is essentially nonirritating to skin.

Repeated contact may cause severe skin irritation with local redness and discomfort.

Information for components:

Polypropylene glycol monobutyl ether

Prolonged contact may cause slight skin irritation with local redness.

Synthetic polyol ester

For similar material(s):

Essentially nonirritating to skin.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Brief contact may cause slight skin irritation with local redness.

Barium bis(dinonylnaphtalenesulphonate)

Brief contact may cause slight skin irritation with local redness.

Prolonged contact may cause moderate skin irritation with local redness.

Serious eye damage/eye irritation

Information for the Product:

Based on product testing:

May cause slight temporary eye irritation.

Corneal injury is unlikely.

Information for components:

Polypropylene glycol monobutyl ether

May cause slight temporary eye irritation.

Corneal injury is unlikely.

Synthetic polyol ester

For similar material(s):

May cause slight temporary eye irritation.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Essentially nonirritating to eyes.

Barium bis(dinonylnaphtalenesulphonate)

May cause severe eye irritation.

May cause corneal injury.

Sensitization

Information for the Product:

For skin sensitization:

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No specific, relevant data available for assessment.

Information for components:

Polypropylene glycol monobutyl ether

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

Synthetic polyol ester

For similar material(s):

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

Barium bis(dinonylnaphtalenesulphonate)

Has caused allergic skin reactions when tested in guinea pigs.

Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:

No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Information for the Product:

Product test data not available.

Information for components:

Polypropylene glycol monobutyl ether

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Synthetic polyol ester

Available data are inadequate to determine single exposure specific target organ toxicity.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Available data are inadequate to determine single exposure specific target organ toxicity.

Barium bis(dinonylnaphthalenesulphonate)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Aspiration Hazard**Information for the Product:**

Based on physical properties, not likely to be an aspiration hazard.

Information for components:Polypropylene glycol monobutyl ether

Based on physical properties, not likely to be an aspiration hazard.

Synthetic polyol ester

Based on physical properties, not likely to be an aspiration hazard.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Based on physical properties, not likely to be an aspiration hazard.

Barium bis(dinonylnaphthalenesulphonate)

Based on physical properties, not likely to be an aspiration hazard.

Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

Specific Target Organ Systemic Toxicity (Repeated Exposure)**Information for the Product:**

Product test data not available.

Information for components:Polypropylene glycol monobutyl ether

Based on available data, repeated exposures to small amounts are not anticipated to cause significant adverse effects.

Synthetic polyol ester

For similar material(s):

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Barium bis(dinonylnaphtalenesulphonate)

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity

Information for the Product:

Product test data not available.

Information for components:

Polypropylene glycol monobutyl ether

No relevant data found.

Synthetic polyol ester

No relevant data found.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

No relevant data found.

Barium bis(dinonylnaphtalenesulphonate)

No relevant data found.

Teratogenicity

Suspected of damaging fertility.

Information for the Product:

Product test data not available.

Information for components:

Polypropylene glycol monobutyl ether

No relevant data found.

Synthetic polyol ester

No relevant data found.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

Did not cause birth defects or any other fetal effects in laboratory animals.

Barium bis(dinonylnaphtalenesulphonate)

For similar material(s): Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive toxicity

Suspected of damaging fertility.

Information for the Product:

Product test data not available.

Information for components:

Polypropylene glycol monobutyl ether

No relevant data found.

Synthetic polyol ester

For similar material(s): In animal studies, did not interfere with reproduction.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

In animal studies, has been shown to interfere with fertility.

Barium bis(dinonylnaphtalenesulphonate)

For similar material(s): In animal studies, did not interfere with reproduction.

Mutagenicity

Information for the Product:

Product test data not available.

Information for components:

Polypropylene glycol monobutyl ether

No relevant data found.

Synthetic polyol ester

For similar material(s): In vitro mutagenicity studies were negative.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene

For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Barium bis(dinonylnaphtalenesulphonate)

For similar material(s): In vitro genetic toxicity studies were negative.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data are available.

12.1 Toxicity

Acute toxicity to fish

Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

LL50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, >100 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

EL50, Daphnia magna (Water flea), static test, 48 Hour, >100 mg/l, OECD Test Guideline 202 or Equivalent

12.2 Persistence and degradability

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material has inherent, primary biodegradability according to OECD test (s) guidelines (reaches >20% biodegradation in OECD test(s).

10-day Window: Pass

Biodegradation: 83 %

Exposure time: 29 d

Method: OECD Test Guideline 301A or Equivalent

10-day Window: Not applicable

Biodegradation: 81 %

Exposure time: 28 d

Method: OECD Test Guideline 302B or Equivalent

12.3 Bioaccumulative potential

Bioaccumulation: No specific, relevant data available for assessment.

12.4 Mobility in soil

No specific, relevant data available for assessment.

12.5 Results of PBT and vPvB assessment

This mixture has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Other adverse effects

No specific, relevant data available for assessment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

SECTION 14: TRANSPORT INFORMATION

Classification for ROAD and Rail transport (ADR/RID):

- | | |
|---------------------------------|-----------------------------|
| 14.1 UN number or ID number | Not applicable |
| 14.2 UN proper shipping name | Not regulated for transport |
| 14.3 Transport hazard class(es) | Not applicable |

- | | | |
|------|------------------------------|---|
| 14.4 | Packing group | Not applicable |
| 14.5 | Environmental hazards | Not considered environmentally hazardous based on available data. |
| 14.6 | Special precautions for user | No data available. |

Classification for INLAND waterways (ADNR/ADN):

Consult your Ingersoll Rand contact before transporting by inland waterway

Classification for SEA transport (IMO-IMDG):

- | | | |
|------|---|---|
| 14.1 | UN number or ID number | Not applicable |
| 14.2 | UN proper shipping name | Not regulated for transport |
| 14.3 | Transport hazard class(es) | Not applicable |
| 14.4 | Packing group | Not applicable |
| 14.5 | Environmental hazards | Not considered as marine pollutant based on available data. |
| 14.6 | Special precautions for user | No data available. |
| 14.7 | Maritime transport in bulk according to IMO Instruments | Consult IMO regulations before transporting ocean bulk |

Classification for AIR transport (IATA/ICAO):

- | | | |
|------|------------------------------|-----------------------------|
| 14.1 | UN number or ID number | Not applicable |
| 14.2 | UN proper shipping name | Not regulated for transport |
| 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 | No data available. |

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**UK REACH - UK Statutory Instruments 2019 No.758 as amended**

This product contains only components that have been either registered, notified for downstream user import (DUIN), are exempt from registration, are regarded as registered or are not subject to

registration according to UK Statutory Instruments 2019 No.758 as amended (UK REACH)., Polymers are exempted from registration under REACH. All relevant starting materials and additives have been registered, notified for downstream user import (DUIN) or are exempt from registration according to UK Statutory Instruments 2019 No.758 as amended (UK REACH)., The aforementioned indications of the UK REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied, is given. It is the buyer's/user's responsibility to ensure that his/her understanding of the regulatory status of this product is correct

UK REACH List of restrictions (Annex 17)

Conditions of restriction for the following entries should be considered:
Number on list 3

Control of Major Accident Hazards Regulations 2015 (COMAH)

Listed in Regulation: Not applicable

Further Information

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361f	Suspected of damaging fertility.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008

Repr. - 2 - H361f - Calculation method

Revision

Identification Number: 33798 / A001 / Issue Date: 12.12.2023 / Version: 14.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
GB EH40	UK. EH40 WEL - Workplace Exposure Limits
TWA	8-hour, time-weighted average
Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
Repr.	Reproductive toxicity
Skin Irrit.	Skin irritation

| Skin Sens.

| Skin sensitisation

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

INGERSOLL RAND urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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