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

1.1. Product identifier

**Ingersoll Rand® Ultra EL™ Synthetic Rotary Coolant**

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

Relevant identified uses: Chemical

1.3. Details of the supplier of the safety data sheet

- **Company:**
  - Distributed by
  - Ingersoll Rand
  - 800D Beaty St.
  - Davidson, NC 28036, USA

- Telephone: +01 704-655-4000

1.4. Emergency telephone number

- U.S. 24-hour Emergency #: 800-424-9300
- Outside the U.S. Emergency #: +01 703-527-3887

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.
2.2. Label elements

Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

According to Directive 67/548/EEC or 1999/45/EC


Contains epoxy-containing compounds. Observe manufacturer's instructions.
The product does not require a hazard warning label in accordance with EC Directives.
The product contains: Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl][thio]-2-methyl-
May produce an allergic reaction.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in
classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

lubricant oil additives, polyetherpolyol

Hazardous ingredients (GHS)
according to Regulation (EC) No. 1272/2008

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene
Content (W/W): >= 1 % - < 3 % Aquatic Chronic 3
CAS Number: 68411-46-1 H412
EC-Number: 270-128-1
REACH registration number: 01-2119491299-23

Propanoic acid, 3-[[bis(2-methylpropoxy)phosphinothioyl][thio]-2-methyl-
**SECTION 4: First-Aid Measures**

4.1. **Description of first aid measures**

Remove contaminated clothing.

If inhaled:
If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink plenty of water.

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
Further important symptoms and effects are so far not known.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media
Suitable extinguishing media:
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:
water jet

5.2. Special hazards arising from the substance or mixture
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters
Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective clothing. Breathing protection required.

6.2. Environmental precautions
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up
For large amounts: Pump off product.
For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.
SECTION 7: Handling and Storage

7.1. Precautions for safe handling
No special measures necessary provided product is used correctly.

Protection against fire and explosion:
Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities
Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Protect from temperatures below: -10 °C
Protect from temperatures above: 40 °C

7.3. Specific end use(s)
For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

No occupational exposure limits known.

8.2. Exposure controls

Personal protective equipment
Respiratory protection:
Suitable respiratory protection for higher concentrations or long-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e.g. EN 14387 Type A)

Hand protection:
Chemical resistant protective gloves (EN 374)
Suitable materials short-term contact and/or splashes (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN 374)
butyl rubber (butyl) - 0.7 mm coating thickness
nitrile rubber (NBR) - 0.4 mm coating thickness
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

General safety and hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>yellow to brownish</td>
</tr>
<tr>
<td>Odour</td>
<td>mild</td>
</tr>
<tr>
<td>pH value</td>
<td>7</td>
</tr>
<tr>
<td>(measured with the undiluted substance)</td>
<td></td>
</tr>
<tr>
<td>boiling temperature</td>
<td>&gt; 250 °C</td>
</tr>
<tr>
<td>(1,013 hPa)</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>270 °C</td>
</tr>
<tr>
<td>(ASTM D92)</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>not flammable</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>(DIN 51794)</td>
</tr>
<tr>
<td>Density</td>
<td>0.9828 g/cm³</td>
</tr>
<tr>
<td>(15 °C)</td>
<td>(ISO 2811-3)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>sparingly soluble</td>
</tr>
<tr>
<td>Solubility (qualitative) solvent(s):</td>
<td>organic solvents solvent soluble</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Kow):</td>
<td>Study scientifically not justified.</td>
</tr>
<tr>
<td>Self ignition</td>
<td>Temperature: &gt; 300 °C</td>
</tr>
<tr>
<td>(Method: DIN 51794)</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>48 mm²/s</td>
</tr>
<tr>
<td>(40 °C)</td>
<td>(ASTM D445)</td>
</tr>
<tr>
<td>Explosion hazard</td>
<td>not explosive</td>
</tr>
<tr>
<td>Fire promoting properties</td>
<td>not fire-propagating</td>
</tr>
</tbody>
</table>

9.2. Other information

Self heating ability: It is not a substance capable of spontaneous heating.

Hygroscopy: hygroscopic
Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.
Corrosion to metals: No corrosive effect on metal.
Reactions with water/air:
  Reaction with: water
  Flammable gases: no
  Toxic gases: no
  Corrosive gases: no
  Smoke or fog: no
  Peroxides: no

Reaction with: air
  Flammable gases: no
  Toxic gases: no
  Corrosive gases: no
  Smoke or fog: no
  Peroxides: no

10.2. Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Peroxides: 0.000 %
The product does not contain peroxides.

10.3. Possibility of hazardous reactions
No hazardous reactions when stored and handled according to instructions.

10.4. Conditions to avoid
Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static discharge.

10.5. Incompatible materials
Substances to avoid:
  strong oxidizing agents, strong bases, strong acids

10.6. Hazardous decomposition products
Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity
Experimental/calculated data:
  LD50 rat (oral): > 5,000 mg/kg

Irritation
Assessment of irritating effects:
Not irritating to eyes and skin.

Respiratory/Skin sensitization

Assessment of sensitization:
Based on the ingredients, there is no suspicion of a skin-sensitizing potential.

Germ cell mutagenicity

Assessment of mutagenicity:
Based on the ingredients, there is no suspicion of a mutagenic effect.

Carcinogenicity

Assessment of carcinogenicity:
The whole of the information assessable provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:
Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

12.2. Persistence and degradability

Elimination information:
Biodegradable.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
Significant accumulation in organisms is not to be expected.
Discharge into the environment must be avoided.

12.4. Mobility in soil (and other compartments if available)

Assessment transport between environmental compartments:
No data available.
12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.7. Additional information

Add. remarks environm. fate & pathway:
At the present state of knowledge, no negative ecological effects are expected.

Other ecotoxicological advice:
The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

Contaminated packaging:
Uncontaminated packaging can be re-used.
Packs that cannot be cleaned should be disposed of in the same manner as the contents.

SECTION 14: Transport Information

Land transport

ADR
Not classified as a dangerous good under transport regulations
UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

RID

UN number: Not classified as a dangerous good under transport regulations
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Inland waterway transport

ADN

UN number: Not classified as a dangerous good under transport regulations
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known
Transport in inland waterway vessel: Not evaluated

Sea transport

IMDG

UN number: Not classified as a dangerous good under transport regulations
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Air transport

IATA/ICAO

UN number: Not classified as a dangerous good under transport regulations
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
BASF Safety data sheet according to Regulation (EC) No. 1907/2006
Date / Revised: 20.03.2013 Version: 2.0
Product: Ingersoll Rand® Ultra EL™ Synthetic Rotary Coolant
(ID no. 30561549/SDS_GEN_GB/EN)
Date of print 22.03.2013

Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Regulation: Not evaluated
Shipment approved: Not evaluated
Pollution name: Not evaluated
Pollution category: Not evaluated
Ship Type: Not evaluated

SECTION 15: Regulatory Information

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

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

15.2. Chemical Safety Assessment

Assessment of safe use has been performed for the mixture and the result is documented in section 7 and 8 of the SDS

SECTION 16: Other Information

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

Xi Irritant.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
41 Risk of serious damage to eyes.
43 May cause sensitization by skin contact.
Aquatic Chronic Hazardous to the aquatic environment - chronic
Eye Dam./Irrit. Serious eye damage/eye irritation
Skin Sens. Skin sensitization
H412 Harmful to aquatic life with long lasting effects.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: product-safety-north@basf.com
The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product’s properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.