1. IDENTIFICATION

GHS Product Identifier
ROCOL ULTRAGUARD B

Company Name
ITW POLYMERS AND FLUIDS (ABN 63 004 235 063)

Address
100 Hassall Street Wetherill Park
NSW AUSTRALIA

Telephone/Fax Number
Tel: +61 2 9757 8800
Fax: +61 2 9757 3855

Emergency phone number
1800 385 556 / 0438 465 960

Emergency Contact Name
(02) 9652-1713 A/HRS

Recommended use of the chemical and restrictions on use
Relevant identified uses: Soluble oil bactericide and fungicide for the preservation of cutting oil emulsions and synthetic coolants. Added directly to coolant in sump at a ratio of 1 part Ultraguard B to 400 parts of coolant.

Additional Information
Other means of identification: Not Available

Website: www.itwpf.com.au

Once connected and if the message is not in your preferred language then please dial 01

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture
[1] Acute Toxicity (Oral) Category 4, Skin Sensitizer Category 1

Signal Word (s)
WARNING

Hazard Statement (s)
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.

Pictogram (s)
Exclamation mark

Precautionary statement – Prevention
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P261 Avoid breathing mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement – Response
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

Precautionary statement – Storage
Not Applicable

Precautionary statement – Disposal
P501 Dispose of contents/container in accordance with local regulations.

Other Information
Classification of the substance or mixture:
HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.


3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hexahydro-1,3,5-tris(hydroxyethyl)triazine</td>
<td>4719-04-4</td>
<td>30-40 %weight</td>
</tr>
<tr>
<td></td>
<td>Ingredients determined not to be hazardous</td>
<td>Not Available</td>
<td>10-20 %weight</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td>7732-18-5</td>
<td>30-60 %weight</td>
</tr>
</tbody>
</table>

Other Information
Substances:
See section below for composition of Mixtures

4. FIRST-AID MEASURES

Inhalation
If fumes or combustion products are inhaled remove from contaminated area.
Lay patient down. Keep warm and rested.
Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
Transport to hospital, or doctor.

Ingestion
If swallowed do NOT induce vomiting.
If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
Observe the patient carefully.
Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
Seek medical advice.

Skin
If skin contact occurs:
Immediately remove all contaminated clothing, including footwear.
Flush skin and hair with running water (and soap if available).
Seek medical attention in event of irritation.

**Eye contact**
If this product comes in contact with the eyes:
Wash out immediately with fresh running water.
Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
Seek medical attention without delay; if pain persists or recurs seek medical attention.
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Indication of immediate medical attention and special treatment needed if necessary**
Treat symptomatically.

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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:
Foam.

**Specific Methods**
Alert Fire Brigade and tell them location and nature of hazard.
Wear breathing apparatus plus protective gloves in the event of a fire.
Prevent, by any means available, spillage from entering drains or water courses.
Use fire fighting procedures suitable for surrounding area.

**Specific Hazards Arising From The Chemical**
Fire Incompatibility: Avoid contamination with strong oxidising agents as ignition may result.

Fire/Explosion Hazard:
The material is not readily combustible under normal conditions.
However, it will break down under fire conditions and the organic component may burn.
Not considered to be a significant fire risk.
Heat may cause expansion or decomposition with violent rupture of containers.
Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2), nitrogen oxides (NOx), aldehydes

**Decomposition Temperature**
Not Available

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### 6. ACCIDENTAL RELEASE MEASURES

**Clean-up Methods - Small Spillages**
Clean up all spills immediately.
Avoid breathing vapours and contact with skin and eyes.
Control personal contact with the substance, by using protective equipment.
Contain and absorb spill with sand, earth, inert material or vermiculite.

**Clean-up Methods - Large Spillages**
Minor hazard.
Clear area of personnel.
Alert Fire Brigade and tell them location and nature of hazard.
Control personal contact with the substance, by using protective equipment as required.

**Other Information**
Personal Protective Equipment advice is contained in Section 8 of the SDS.
7. HANDLING AND STORAGE

Precautions for Safe Handling
Safe handling:
Limit all unnecessary personal contact.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area.
When handling DO NOT eat, drink or smoke.

Other information:
Store in original containers.
Keep containers securely sealed.
Store in a cool, dry, well-ventilated area.
Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities
Suitable container:
Polyethylene or polypropylene container.
Packing as recommended by manufacturer.
Check all containers are clearly labelled and free from leaks.

Storage incompatibility:
Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
Avoid storage with oxidisers

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values
Control parameters:
OCCUPATIONAL EXPOSURE LIMITS (OEL):
INGREDIENT DATA:
Not Available

EMERGENCY LIMITS:
Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
Material name: Triazine-1,3,5(2H,4H,6H)-triethanol, s-; (Onyxide 200)
TEEL-1: 2.3 mg/m³
TEEL-2: 25 mg/m³
TEEL-3: 150 mg/m³

Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
Original IDLH: Not Available
Revised IDLH: Not Available

Ingredient: Ingredients determined not to be hazardous
Original IDLH: Not Available
Revised IDLH: Not Available

Ingredient: water
Original IDLH: Not Available
Revised IDLH: Not Available

Appropriate Engineering Controls
Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
The basic types of engineering controls are:
Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation
that strategically "adds" and "removes" air in the work environment.

**Respiratory Protection**
Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

**Eye Protection**
Safety glasses with side shields
Chemical goggles.
Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience.

**Hand Protection**
Wear chemical protective gloves, e.g. PVC.

**Thermal Hazards**
Not Available

**Footwear**
Wear safety footwear.

**Body Protection**
Overalls.
Eyewash unit.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form**
Liquid

**Appearance**
Dark green liquid with amine-like odour; mixes with water.

**Odour**
Not Available

**Decomposition Temperature**
Not Available

**Solubility in Water**
Miscible

**pH**
11-12 (as supplied)
Not Available (as a solution (1%))

**Vapour Pressure**
3.16 kPa @ 25 C.

**Vapour Density (Air=1)**
>1

**Evaporation Rate**
Not Available

**Physical State**
Liquid

**Odour Threshold**
Not Available

**Viscosity**
Not Available

**Volatile Component**
Not Available

**Partition Coefficient: n-octanol/water**
Not Available
Surface tension
Not Available

Flash Point
>150°C

Flammability
Not Applicable

Auto-Ignition Temperature
Not Available

Explosion Limit - Upper
Not Applicable

Explosion Limit - Lower
Not Applicable

Explosion Properties
Not Available

Molecular Weight
Not Applicable

Oxidising Properties
Not Available

Initial boiling point and boiling range
100°C

Relative density
1.14-1.16 (Water = 1)

Melting/Freezing Point
Not Available

Other Information
Taste: Not Available
Gas group: Not Available
VOC g/L: Not Available

10. STABILITY AND REACTIVITY

Reactivity
See section 7

Chemical Stability
Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.

Conditions to Avoid
See section 7

Incompatible materials
See section 7

Hazardous Decomposition Products
See section 5

Possibility of hazardous reactions
See section 7

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Rocol Ultraguard B
TOXICITY: Not Available
Hexahydro-1,3,5-tris(hydroxyethyl)triazine

**TOXICITY:**

- **Dermal (rat)** LD50: >2000 mg/kg[2]
- **Inhalation (rat)** LC50: 0.37 mg/L/4h *[2]
- **Oral (rat)** LD50: 488 mg/kg[2]

**IRRITATION:**

- [Manufacturer 2]
  - **Eye (rabbit):** slight (OECD 405)
  - **Eye (rabbit):** moderate to SEVERE
  - **Skin (rabbit):** 0.15 mg/3d-I-mild
  - **Skin (rabbit):** not irritating(OECD 403)

**Water**

- **TOXICITY:** Oral (rat) LD50: >90000 mg/kg[2]
- **IRRITATION:** Not Available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS.

Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

**HEXAHYDRO-1,3,5-TRIS(HYDROXYETHYL)TRIAZINE:**

The following information refers to contact allergens as a group and may not be specific to this product.

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema.

The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.

No significant acute toxicological data identified in literature search.

A ban on the use of s-triazine-based biocides in metal working fluids (MWFs) has been proposed or is in place in certain jurisdictions. The most widely used antimicrobial compounds function by releasing formaldehyde once inside the microbe cell. Some, especially triazines, release detectable levels of formaldehyde into the air space above MWFs especially when pH has dropped. This is often due to excess growth of micro-organisms that can generate organic acid as a by-product of growth. Formaldehyde generators ( releasers) are often used as preservatives. The maximum authorised concentration of free formaldehyde is 0.2% and must be labelled with the warning sign "contains formaldehyde" where the concentration exceeds 0.05%. The use of formaldehyde-releasing preservatives ensures that the level of free formaldehyde in the products is always low but sufficient to inhibit microbial growth - it disrupts metabolism to cause death of the organism. However there is a concern that formaldehyde generators can produce amines capable of causing cancers (nitrosamines) when used in formulations containing amines.

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.

For 78% aqueous solution Sensitisation possible by skin contact * * Aerosol OECD 403 - Thor Chemical SDS for Emulcid

**WATER:** No significant acute toxicological data identified in literature search.

**Acute Toxicity:** Data required to make classification available

**Ingestion**

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

Ingestion may result in nausea, abdominal irritation, pain and vomiting.

Triazine derivatives have been shown to cause structural damage to the liver in animal studies.

**Inhalation**

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.

Inhalation of vapour is more likely at higher than normal temperatures.

**Skin**

There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.
Eye
This material can cause eye irritation and damage in some persons.

Skin corrosion/irritation
Data Not Available to make classification

Serious eye damage/irritation
Data Not Available to make classification

Mutagenicity
Data Not Available to make classification

Respiratory sensitisation
Data required to make classification available

Skin Sensitisation
Data required to make classification available

Carcinogenicity
Data Not Available to make classification

Reproductive Toxicity
Data Not Available to make classification

STOT-single exposure
Data Not Available to make classification

STOT-repeated exposure
Data Not Available to make classification

Aspiration Hazard
Data Not Available to make classification

Chronic Effects
Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Epidemiological studies show that long-term exposure to triazine herbicides increases the risk of cancer of the ovary and the breast.
12. ECOLOGICAL INFORMATION

Ecotoxicity
Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 1.97382mg/L
Source: 3

Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
Endpoint: EC50
Test Duration (hr): 96
Species: Crustacea
Value: 2.3mg/L
Source: 4

Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
Endpoint: EC50
Test Duration (hr): 48
Species: Crustacea
Value: 11.9mg/L
Source: 2

Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
Endpoint: EC50
Test Duration (hr): 72
Species: Algae or other aquatic plants
Value: 6.66mg/L
Source: 2

Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
Endpoint: NOEC
Test Duration (hr): 72
Species: Algae or other aquatic plants
Value: 1.56mg/L
Source: 2

Ingredient: water
Endpoint: EC50
Test Duration (hr): 384
Species: Crustacea
Value: 199.179mg/L
Source: 3

Ingredient: water
Endpoint: EC50
Test Duration (hr): 96
Species: Algae or other aquatic plants
Value: 8768.874mg/L
Source: 3

Ingredient: water
Endpoint: LC50
Test Duration (hr): 96
Species: Fish
Value: 897.520mg/L
Source: 3
DO NOT discharge into sewer or waterways.

**Persistence and degradability**
Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
- Persistence: Water/Soil: HIGH
- Persistence: Air: HIGH

Ingredient: water
- Persistence: Water/Soil: LOW
- Persistence: Air: LOW

**Mobility**
Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
- Mobility: LOW (KOC = 10)

Ingredient: water
- Mobility: LOW (KOC = 14.3)

**Bioaccumulative Potential**
Ingredient: hexahydro-1,3,5-tris(hydroxyethyl)triazine
- Bioaccumulation: LOW (LogKOW = -4.6674)

Ingredient: water
- Bioaccumulation: LOW (LogKOW = -1.38)

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal**
Product / Packaging disposal:
Recycle wherever possible or consult manufacturer for recycling options.
Consult State Land Waste Management Authority for disposal.
Treat and neutralise with dilute acid at an effluent treatment plant.
Recycle containers, otherwise dispose of in an authorised landfill.

### 14. TRANSPORT INFORMATION

**U.N. Number**
None Allocated

**UN proper shipping name**
None Allocated

**Transport hazard class(es)**
None Allocated

**Other Information**
Labels Required:
- Marine Pollutant: NO
- HAZCHEM: Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
Transport in bulk according to Annex II of MARPOL and the IBC code:
Not Applicable

15. REGULATORY INFORMATION

Regulatory information
Safety, health and environmental regulations / legislation specific for the substance or mixture:
HEXAHYDRO-1,3,5-TRIS(HYDROXYETHYL)TRIAZINE (4719-04-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS:
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

WATER (7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS:
Australia Inventory of Chemical Substances (AICS)

National Inventory: Australia - AICS
Status: Y
National Inventory: Canada - DSL
Status: Y
National Inventory: Canada - NDSL
Status: N (water; hexahydro-1,3,5-tris(hydroxyethyl)triazine)
National Inventory: China - IECSC
Status: N (hexahydro-1,3,5-tris(hydroxyethyl)triazine)
National Inventory: Europe - EINEC / ELINCS / NLP
Status: Y
National Inventory: Japan - ENCS
Status: N (water)
National Inventory: Korea - KECI
Status: Y
National Inventory: New Zealand - NZIoC
Status: Y
National Inventory: Philippines - PICCS
Status: Y
National Inventory: USA - TSCA
Status: Y
Legend:
Y = All ingredients are on the inventory
N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)

Poisons Schedule
N/A

16. OTHER INFORMATION

Other Information
Version No: 6.1.1.1
Safety Data Sheet according to WHS and ADG requirements

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This SDS has been transcribed into Infosafe GHS format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF SDS