SAFETY DATA SHEET

Unicap TU35
Wanhua Chemical Group Co., LTD

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

Product Identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Unicap TU35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Hydrophobically Modified Ethoxylated Urethane</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

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

Relevant identified uses: Thickener

Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Registered company name</th>
<th>Wanhua Chemical Group Co., LTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>No.17, Tianshan Rd, YEDA, Yantai China</td>
</tr>
<tr>
<td>Telephone</td>
<td>0535-3031150</td>
</tr>
<tr>
<td>Fax</td>
<td>0535-339222-1150</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.whchem.com">http://www.whchem.com</a></td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:whsds@whchem.com">whsds@whchem.com</a></td>
</tr>
</tbody>
</table>

Emergency telephone number

<table>
<thead>
<tr>
<th>Association / Organisation</th>
<th>Emergency Center of China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency telephone numbers</td>
<td>+86 532-8389090</td>
</tr>
<tr>
<td>Other emergency telephone numbers</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

- **SUMMARY OF HAZARD IN AN EMERGENCY SITUATION**
  - Liquid.
  - Mixes with water. Does not burn.
  - Risk of serious damage to eyes.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1</th>
</tr>
</thead>
</table>

Label elements

<table>
<thead>
<tr>
<th>Hazard pictogram(s)</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SIGNAL WORD</th>
<th>DANGER</th>
</tr>
</thead>
</table>

Hazard statement(s)

- **H315** Causes skin irritation.
- **H318** Causes serious eye damage.

Precautionary statement(s) Prevention

Continued...
Physical and Chemical Hazard

- **Liquid.**
- **Mixes with water.**
- **Does not burn.**

### Health Hazards

**Inhaled**

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Not normally a hazard due to non-volatile nature of product.

**Ingestion**

Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis. The material may accentuate any pre-existing dermatitis condition.

Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.

**Eye**

When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.

**Chronic**

Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

### Environmental Hazards

See Section 12

### Other hazards

- May produce skin discomfort.*

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

**Substances**

See section below for composition of Mixtures

**Mixtures**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>% (weight)</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>69011-36-5*</td>
<td>15</td>
<td>Iso-C13-aliphatic alcohol ethoxylates-8</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>65</td>
<td>Water</td>
</tr>
</tbody>
</table>

### SECTION 4 FIRST AID MEASURES

#### Description of first aid measures

**Eye Contact**

- If this product comes in contact with the eyes:
  - Immediately hold eyelids apart and flush the eye continuously with 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.
  - Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
  - Transport to hospital or doctor without delay.
  - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact
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.

Inhalation
- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

Ingestion
- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Advisory for rescue team (PPE requirement for rescue personnel)
Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media
- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture
Fire Incompatibility
None known.

Advice for firefighters
Fire Fighting
- 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.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

Fire/Explosion Hazard
- Non combustible.
- Not considered a significant fire risk, however containers may burn.
- May emit corrosive fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
See section 8

Measures for Preventing Secondary Contamination
Refer to section above

Environmental precautions
See section 12

Methods and material for containment and cleaning up

Minor Spills
- 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.
- Wipe up.
- Place in a suitable, labelled container for waste disposal.

Major Spills
- Moderate hazard.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Neutralise/decontaminate residue (see Section 10 for specific agent).
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling
Safe handling
- Avoid all personal contact, including inhalation.
Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:
- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfuction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

Exposure 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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.
- Employers may need to use multiple types of controls to prevent employee overexposure.

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying 'escape' velocities which, in turn, determine the 'capture velocities' of fresh circulating air required to effectively remove the contaminant.

### Type of Contaminant

<table>
<thead>
<tr>
<th>Air Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent, vapours, degreasing etc., evaporating from tank (in still air)</td>
</tr>
<tr>
<td>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyor transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</td>
</tr>
</tbody>
</table>
direct spray, spray painting in shallow booths, drum filling, conveyor loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)

<table>
<thead>
<tr>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:</td>
<td>Room air currents minimal or favourable to capture</td>
</tr>
<tr>
<td>2:</td>
<td>Contaminants of low toxicity or of nuisance value only</td>
</tr>
<tr>
<td>3:</td>
<td>Intermittent, low production.</td>
</tr>
<tr>
<td>4:</td>
<td>Large hood or large air mass in motion</td>
</tr>
</tbody>
</table>

Grading 1-4: Room air currents minimal or favourable to capture

<table>
<thead>
<tr>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:</td>
<td>Disturbing room air currents</td>
</tr>
<tr>
<td>2:</td>
<td>Contaminants of high toxicity</td>
</tr>
<tr>
<td>3:</td>
<td>High production, heavy use</td>
</tr>
<tr>
<td>4:</td>
<td>Small hood - local control only</td>
</tr>
</tbody>
</table>

Within each range the appropriate value depends on:

<table>
<thead>
<tr>
<th>Lower end of the range</th>
<th>Upper end of the range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:</td>
<td>1:</td>
</tr>
<tr>
<td>2:</td>
<td>2:</td>
</tr>
<tr>
<td>3:</td>
<td>3:</td>
</tr>
<tr>
<td>4:</td>
<td>4:</td>
</tr>
</tbody>
</table>

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Personal 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 adsortion for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lenses should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

Eye and face protection

- Wear safety footwear or safety gumboots, e.g. Rubber
- Wear chemical protective gloves, e.g. PVC.
- Wear chemical protective gloves, e.g. PVC. (Select gloves tested to a relevant standard (e.g. EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long term use.
- Thicker gloves (up to 3 mm or more) may be required where there is mechanical (as well as a chemical) risk and 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.
- The exact breakthrough time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
- Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.
- Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:
  - frequency and duration of contact,
  - chemical resistance of glove material,
  - glove thickness and
  - dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

Skin protection

- Wear chemical protective gloves, e.g. PVC. (Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent) is recommended.
- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long term use.
- Thicker gloves (up to 3 mm or more) may be required where there is mechanical (as well as a chemical) risk and 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.
- The exact breakthrough time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
- Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Hands/feet protection

- Wear chemical protective gloves, e.g. PVC.
- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long term use.
- Thicker gloves (up to 3 mm or more) may be required where there is mechanical (as well as a chemical) risk and 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.
- The exact breakthrough time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
- Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Body protection

- Overalls.
- PVC apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.
Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: ‘Forsberg Clothing Performance Index’. The effect(s) of the following substance(s) are taken into account in the computer-generated selection:

<table>
<thead>
<tr>
<th>Material</th>
<th>CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUTYL</td>
<td>A</td>
</tr>
<tr>
<td>NEOPRENE</td>
<td>A</td>
</tr>
<tr>
<td>VITO</td>
<td>A</td>
</tr>
<tr>
<td>NATURAL RUBBER</td>
<td>C</td>
</tr>
<tr>
<td>PV</td>
<td>C</td>
</tr>
</tbody>
</table>

* CPI - Chemwatch Performance Index
  A: Best Selection
  B: Satisfactory; may degrade after 4 hours continuous immersion
  C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as 'feel' or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Translucent to slightly milky-white liquid</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>Auto-ignition temperature (°C) Not Available</td>
</tr>
<tr>
<td>Melting point / freezing point (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not Available</td>
</tr>
<tr>
<td>Upper Explosive Limit (%)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Lower Explosive Limit (%)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapour pressure (kPa)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Miscible</td>
</tr>
<tr>
<td>Vapour density (Air = 1)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Relative density (Water = 1)</td>
<td>1.04±0.05 at 20 °C</td>
</tr>
<tr>
<td>Partition coefficient n-octanol / water</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity (mPa.s)</td>
<td>26000-34000 at 25 °C</td>
</tr>
<tr>
<td>Molecular weight (g/mol)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Taste</td>
<td>Not Available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not Available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not Available</td>
</tr>
<tr>
<td>Surface Tension (dyn/cm or mN/m)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Volatile Component (%/vol)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Gas group</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH as a solution (1%)</td>
<td>Not Available</td>
</tr>
<tr>
<td>VOC g/L</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

SECTION 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.

Possibility of hazardous reactions

See section 7

Conditions to avoid

See section 7

Incompatible materials

See section 7

Hazardous decomposition products

See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Material</th>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unicap TU35</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Polyurethane</td>
<td>TOXICITY</td>
<td>IRRITATION</td>
</tr>
<tr>
<td></td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
**Section 12: Ecological Information**

**Toxicity**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Test Duration (HR)</th>
<th>Species</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iso-C13-aliphatic alcohol ethoxylates-8</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>2.5mg/L</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>1.5mg/L</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>2.3mg/L</td>
</tr>
<tr>
<td>water</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>897.520mg/L</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>96</td>
<td>Algae or other aquatic plants</td>
<td>8788.874mg/L</td>
</tr>
</tbody>
</table>

**Legend:**
- Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

### Persistence and Degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>LOW</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**Bioaccumulative Potential**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>LOW (LogKOW = -1.38)</td>
</tr>
</tbody>
</table>

**Mobility in Soil**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>LOW (KOC = 14.3)</td>
</tr>
</tbody>
</table>

### Other Adverse Effects

No data available

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**Section 13: Disposal Considerations**

---

**Ingredient:**

- Iso-C13-aliphatic alcohol ethoxylates-8
- water

**Persistence and Degradability**

- Water/Soil: LOW
- Air: LOW

**Bioaccumulative Potential**

- Water: LOW (LogKOW = -1.38)

**Mobility in Soil**

- Water: LOW (KOC = 14.3)

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**Legend:**

- LOW
- Not Available

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**Version No:** 1.1
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**Unicap TU35**

**Issue Date:** 28/01/2019
**Print Date:** 28/01/2019

Continued...
Waste treatment methods

Waste chemicals: Legislation addressing waste disposal requirements may differ by country, state and/or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible.

Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

Dispose of by: burial in a land-fill specifically licensed to accept chemical and/or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).

Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Contaminated packing materials: Refer to section above

Precautions for Transport: Refer to section above

SECTION 14 TRANSPORT INFORMATION

Labels Required

<table>
<thead>
<tr>
<th>Marine Pollutant</th>
<th>NO</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Land transport (UN): 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

Precautions for Transport

Suitable Containers

See section 7

SECTION 15 REGULATORY INFORMATION

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

POLYURETHANE IS FOUND ON THE FOLLOWING REGULATORY LISTS

| China Inventory of Existing Chemical Substances |
| ISO-C13-ALIPHATIC ALCOHOL ETHOXYLATES-8(69011-36-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS |
| China Inventory of Existing Chemical Substances |
| WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS |

| China Inventory of Existing Chemical Substances | IMO IBC Code Chapter 18: List of products to which the Code does not apply |

National Inventory Status

<table>
<thead>
<tr>
<th>National Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia - AICS</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada - DSL</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada - NDSSL</td>
<td>No (Polyurethane; water; Iso-C13-aliphatic alcohol ethoxylates-8)</td>
</tr>
<tr>
<td>China - IECSC</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe - EINEC / ELINCS / NLP</td>
<td>No (Polyurethane)</td>
</tr>
<tr>
<td>Japan - ENCS</td>
<td>No (Polyurethane; Iso-C13-aliphatic alcohol ethoxylates-8)</td>
</tr>
<tr>
<td>Korea - KECI</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand - NZIoC</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines - PICCS</td>
<td>Yes</td>
</tr>
<tr>
<td>USA - TSCA</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Legend: Yes = All ingredients are on the inventory

No = Not determined or one or more ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)
SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

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.

Definitions and abbreviations

PC — TWA: Permissible Concentration-Time Weighted Average
PC — STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit,
IDLH: Immediately Dangerous to Life or Health Concentrations
NOAEL: No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

Disclaimer

The information in the SDS applies only for the specified product and does not include mixtures of this product with other substances and mixtures. The SDS provides product safety information for personnel trained to use this product only.

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