Safety data sheet: VCT Shield
According to 1907/2006/EC, Article 31
Interior & Exterior

1. Product and Company Identification

**VCT Shield**
(Use: Raw material, for industrial use only)

Firma:
isi GmbH
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2. Hazards Identification

**Emergency overview**

CAUTION:
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
INGESTION MAY CAUSE GASTRIC DISTURBANCES.

State of matter: liquid
Colour: white
Odour: faint odour

**Potential health effects**

**Primary routes of exposure:**
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute toxicity:**
Ingestion may cause gastrointestinal disturbances. The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Irritation / corrosion:**
Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes. The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Chronic toxicity:**
Repeated dose toxicity: No adverse effects were observed after repeated inhalative exposure in animal studies. The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Potential environmental effects**

**Aquatic toxicity:**
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.
3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>40.0 - 60.0 %</td>
<td>Water</td>
</tr>
<tr>
<td></td>
<td>40.0 - 60.0 %</td>
<td>NJTS-50078-NCD</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

**General advice:**
Remove contaminated clothing.

**If inhaled:**
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

**If on skin:**
Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

**If in eyes:**
Flush with copious amounts of water for at least 15 minutes. If irritation develops, seek medical attention.

**If swallowed:**
Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

5. Fire-Fighting Measures

- **Flash point:** > 300 °F (Unspecified)
- **Lower explosion limit:** not applicable
- **Upper explosion limit:** not applicable
- **Self-ignition temperature:** not self-igniting

**Suitable extinguishing media:**
water spray, foam, dry powder

**Hazards during fire-fighting:**
No particular hazards known.

**Protective equipment for fire-fighting:**
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.
## 6. Accidental release measures

**Personal precautions:**
Use personal protective clothing. Avoid contact with skin and eyes.

**Environmental precautions:**
Do not release untreated into natural waters.

**Cleanup:**
Spills should be contained, solidified, and placed in suitable containers for disposal.

**Further information:**
High risk of slipping due to leakage/spillage of product.

## 7. Handling and Storage

**Handling**
*General advice:*
Handle in accordance with good industrial hygiene and safety practice. No special measures necessary provided product is used correctly. Ensure adequate ventilation.

**Storage**
*General advice:*
Store protected against freezing.

## 8. Exposure Controls and Personal Protection

**Personal protective equipment**

**Respiratory protection:**
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed. Wear respiratory protection if ventilation is inadequate.

**Hand protection:**
Chemical resistant protective gloves

**Eye protection:**
Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

**General safety and hygiene measures:**
Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.
9. 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>Odour</td>
<td>faint odour</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>pH value</td>
<td>7.5 - 9.0 (DIN ISO 976)</td>
</tr>
<tr>
<td>Melting point</td>
<td>0 °C</td>
</tr>
<tr>
<td>Information on: Water</td>
<td></td>
</tr>
<tr>
<td>Boiling point</td>
<td>100 °C</td>
</tr>
<tr>
<td>Information on: Water</td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>23.4 hPa (20 °C)</td>
</tr>
<tr>
<td>Density</td>
<td>approx. 1.04 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>700 - 1,500 mPa.s (23 °C)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>partly soluble</td>
</tr>
<tr>
<td>Miscibility with water</td>
<td>miscible</td>
</tr>
<tr>
<td>Other Information:</td>
<td>Range of particle size: &lt; 0.1 μm - 10 μm</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Conditions to avoid:
Avoid extreme heat.

Substances to avoid:
metal salts

Hazardous reactions:
The product is chemically stable.

Decomposition products:
Hazardous decomposition products: carbon dioxide, carbon monoxide, hydrocarbons

Thermal decomposition:
No decomposition if used correctly.

Corrosion to metals:
Corrosive effects to metal are not anticipated.

Oxidizing properties:
not fire-propagating
11. Toxicological information

Acute toxicity

Oral:
Type of value: LD50
Species: rat
Value: > 2,000 - 10,000 mg/kg
Irritation / corrosion

Skin:
Species: rabbit
Result: non-irritant
Method: OECD Guideline 404

Eye:
Species: rabbit
Result: non-irritant
Method: OECD Guideline 405

Other Information:
Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The statement was derived from products of similar composition.

12. Ecological Information

Fish
Acute: OECD Guideline 203 static
Brachydanio rerio/LC50 (96 h): > 100 mg/l

Aquatic invertebrates
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): > 100 mg/l

Aquatic plants
Toxicity to aquatic plants:
OECD Guideline 201 green algae/EC50 (72 h): > 100 mg/l
Nominal concentration.

Microorganisms
Toxicity to microorganisms:
DIN EN ISO 8192-OECD 209-88/302/EEC,P. C activated sludge, domestic/EC20 (0.5 h): > 100 mg/l
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.
## Degradability / Persistence
### Biological / Abiological Degradation
<table>
<thead>
<tr>
<th>Test method</th>
<th>OECD 302B; ISO 9888; 88/302/EEC, part C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method of analysis</td>
<td>DOC reduction</td>
</tr>
<tr>
<td>Degree of elimination</td>
<td>&gt; 70%</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Easily eliminated from water.</td>
</tr>
</tbody>
</table>

The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge.

### Bioaccumulation
Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

### Other adverse effects:
Do not release untreated into natural waters. At the present state of knowledge, no negative ecological effects are expected. Ecological data are determined by analogy.

## 13. Disposal considerations
### Waste disposal of substance:
Incinerate or dispose of in a licensed facility. Do not discharge into drains/surface waters/groundwater.

### Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

## 14. Transport Information
### Land transport
- **USDOT**: Not classified as a dangerous good under transport regulations
- **Sea transport**: Not classified as a dangerous good under transport regulations
- **IMDG**: Not classified as a dangerous good under transport regulations
- **Air transport**: Not classified as a dangerous good under transport regulations

## 15. Regulatory Information
### Federal Regulations
#### Registration status:
Chemical TSCA, US released / listed

#### OSHA hazard category:
Not hazardous;

#### EPCRA 311/312 (Hazard categories):
Not hazardous;

#### State regulations
State RTK CAS Number Chemical name
NJ, PA, MA NJTS-50078-NCD

### CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.
16. Other Information

**HMIS III Rating**

| Health: 1 | Flammability: 1 | Physical hazard: 0 |

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger.

Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

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