SAFETY DATA SHEET
Prefere 4410

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

Product name
Prefere 4410

Part no.
90000600, 90000601, 90000603, 90000604, 90000608, 90000609, 90000610

Applications
ADHESIVE FOR THE WOOD INDUSTRY

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Contact person
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2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC no.</th>
<th>CAS no.</th>
<th>Content</th>
<th>Symbol</th>
<th>R-phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea formaldehyde polymer</td>
<td></td>
<td></td>
<td>90-100%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Formaldehyde ...%</td>
<td>200-001-8</td>
<td>50-00-0</td>
<td>&lt;0.8%</td>
<td>T</td>
<td>R-23/24/25, 34, 43, 40</td>
</tr>
</tbody>
</table>

See section 16 for explanations of R-phrases

Composition comments
Harmful components are listed according to guideline for safety data sheets. Other components, not classified as harmful, are indicated by a hyphen (-). FORMALDEHYDE: Conc. 0.2-1%: Xi, R-43. Given for solution 2:1 in water.

3. HAZARDS IDENTIFICATION

May cause sensitization by skin contact.

4. FIRST AID MEASURES

General

SYMPTOMS AND EFFECTS
Accidents and over exposure to powder/dust from this product may cause irritation to eyes and to the respiratory system. Accidents and over-exposure to this product may cause irritation by liquid/fumes in the eyes, liquid/fumes on the skin and by inhalation of fumes. Symptoms by exposure of liquid/fumes in the eyes are pain, tears and impaired vision. Symptoms by inhalation of powder/dust are coughing and difficulties with breathing. Symptoms by inhalation of fumes are upper respiratory irritation. Symptoms of exposure to skin and mucous membranes are irritation and discoloration.

GENERAL ADVICE CONCERNING FIRST AID
Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Keep affected person under observation. Get medical attention if necessary or contact emergency centre.
Inhalation  
Fresh air.

Ingestion  
If the affected person is awake, give water or other drink to flush the mouth and to dilute chemicals that have been swallowed. Contact doctor/hospital for continued treatment or transport to hospital.

Skin  
Wash skin with soap and water. Remove contaminated clothing. If any signs of damage/irritation to the skin, contact doctor or hospital.

Eyes  
Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact doctor/hospital for continued treatment or transport to hospital.

5. FIRE FIGHTING MEASURES

Extinguishing media  
Use extinguishing media appropriate for surrounding fire. DO NOT use CO2 or dry chemicals.

Specific hazards  
Dust could form explosive mixture with air.

Hazardous combustion products  
Common combustion products.

Protective measures in the event of fire  
Fire personnel exposed of gases from the product is recommended to use respiratory protection. Avoid skin contact/inhalation of dust/vapours. (Also see section 8).

6. ACCIDENTAL RELEASE MEASURES

Personal protection  
Wear necessary protective equipment. See section 8.

Environmental protection  
Limit the leakage field. Block up contaminated area. Runoff or release to sewer, waterway or ground is forbidden. The product is soluble in water.

Spill clean-up methods  
Collect in containers and seal securely. Remove containers and flush area with water. Inform Authorities if large amounts are involved. For disposal methods see section 13.

7. HANDLING AND STORAGE

Usage precautions  
Avoid spilling, skin and eye contact. Unngå innånding av støv. Provide sufficient ventilation. Eye wash facilities should be available when handling this product.

Usage description  
Read and follow manufacturer's recommendations.

Storage precautions  
Keep dry. in closed containeres

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS no.</th>
<th>Reference</th>
<th>LT Exp 8 Hrs</th>
<th>ST Exp 15 Min</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde ...%</td>
<td>50-00-0</td>
<td>MEL</td>
<td>2 ppm</td>
<td>2 ppm</td>
<td></td>
</tr>
<tr>
<td>Total inhalable dust</td>
<td></td>
<td>OES</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respirable dust</td>
<td></td>
<td>OES</td>
<td>4 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ingredient information  
MEL = Maximum Exposure Limit. OES = Occupational Exposure Standard.
Eye wash facilities should be available when handling this product.

**Ventilation**

Provide adequate general and local exhaust ventilation.

**Respirators**

Respiratory protection must be used if air concentration exceeds acceptable level. Recommended filter: Combination filter: Gas cartridge (organic substances). Gas cartridge (acid gases). Dust filter P2 (for fine dust).

**Protective gloves**

Use chemical resistant gloves that comply with acceptable standard. Suitable material: Polyvinyl chloride (PVC). Rubber (natural or latex). Neoprene. In the selection of protective equipment, the user must ensure that the equipment complies with the relevant standard. If there is any doubt the user should show this data sheet to the supplier of the equipment to ensure that the correct equipment is available to potential users.

**Eye protection**

Use approved safety goggles or face shield.

**Other protection**

Wear appropriate clothing to prevent any possibility of skin contact.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

| Appearance | Powder, dust. |
| Colour | White Yellowish |
| Odour | Formaldehyde. |

**Physical data comments**

For technical data and specifications; see technical data sheet.

**Solubility description**

Soluble in water.

**pH-value, diluted solution**

7.0-8.0

**Concentration %M**

2:1

**Flash point (°C)**

> 100

**Method**

Setaflash closed cup

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**10. STABILITY AND REACTIVITY**

**Stability**

The product is stable at the conditions of handling and storage stated in the technical data sheet.

**Hazardous decomposition products**

Unlikely under normal industrial use.

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**11. TOXICOLOGICAL INFORMATION**

**Sensitization**

Formaldehyde is classified as a recognised allergen by skin contact.

**Health hazards, general**

In the industry irritating properties represent the main hazard.

**Inhalation**

Dust may irritate respiratory system. Gas or vapour is harmful on prolonged exposure or in high concentrations.

**Ingestion**

May cause discomfort.

**Skin**

May cause sensitisation by skin contact. Prolonged or repeated exposure may cause severe irritation.

**Eyes**

Irritating to eyes.

**Medical considerations**

FORMALDEHYDE: Formaldehyde is classified as a category 3 carcinogen. In animal experiments carcinogenic effects have been demonstrated only at very high dose levels. Such effects have not been demonstrated in man.

**COMPONENT:**

Formaldehyde  ...%

**Toxic dose - LD50:**

800 mg/kg (oral rat)
12. ECOLOGICAL INFORMATION

Ecotoxicity
Not regarded as dangerous for the environment under current legislation.

Mobility
Soluble in water.

Bioaccumulative potential
No bioaccumulation expected.

Persistence and degradability
Urea formaldehyde polymer: Slowly but not readily biodegradable.
Formaldehyde: Readily biodegradable (BOD5/COD: 0.68).

13. DISPOSAL CONSIDERATIONS

Disposal methods
Disposal should take place according to national and local regulations. Confirm disposal procedures with local authorities.
Cured resin is regarded as not hazardous waste. Material safety data sheet for cured resin is available.

Waste class
EWC-code: 08 04 09.
EWC-code will depend on the use of this product.

Contaminated packaging
Empty packaging as much as possible. Drained packaging should be recycled if possible.

14. TRANSPORT INFORMATION

ROAD TRANSPORT (ADR):

ADR class
Not dangerous according to ADR/RID/IMDG/IATA.

15. REGULATORY INFORMATION

Label for supply

Contains
Formaldehyde ...%

Risk phrases
R-43 May cause sensitization by skin contact.

Safety phrases
S-22 Do not breathe dust.
S-24 Avoid contact with skin.
S-37 Wear suitable gloves.

UK regulatory references
Occupational Exposure Standard.

EU directives

16. OTHER INFORMATION

Explanations of R-phrases in Section 2
R-23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R-34 Causes burns. R-43 May cause sensitization by skin contact. R-40 Limited evidence of a carcinogenic effect.
NOTE:
The classification of this product as irritating for supply is consistent with the concentration of formaldehyde analysed by traditional volumetric techniques. This method includes the addition of water to the adhesive, so that the classification is relevant to the risk also when the resin is used.

An alternative method, approved by the UK Authorities, involves the measurement of formaldehyde gas emitted from the powder resin. By this method, very low concentrations of formaldehyde are analysed. Accordingly, the resin in the powder state, is not classified as a health hazard when this alternative method is used.

The classification and labelling of the resin will therefore differ, depending upon the analytical approach employed.

Customers should not therefore make a commercial preference, based upon the different approaches employed for classifying the products.

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