



Chemosil 222

MSDS-No. : 43657
V001.0
Revision: 26.04.2006
printing date: 10.05.2006

1. Identification of the substance/preparation and of the company/undertaking

Trade name:

Chemosil 222

Intended use:

rubber-metal-bonding agent, solvent-containing

Company name:

Lord Germany GmbH
Ottostr. 28
41836 Hückelhoven
Phone: +49243352570
Germany

Emergency information:

The Henkel information service also provides an around-the-clock telephone service on phone no.++49-(0)211-797-3350 for exceptional cases.

2. Composition / information on ingredients

General chemical description:

Adhesive

Declaration of ingredients according to 91/155/EC:

| Hazardous components CAS-No. | EINECS | content | Classification |
|---|-----------|---------|--|
| Xylene - mixture of isomeres 1330-20-7 | 215-535-7 | > 50 % | R10 Xn - Harmful; R20/21 Xi - Irritant; R38 |
| Tetrachloroethylene 127-18-4 | 204-825-9 | < 1 % | carcinogenic, category 3; Xn - Harmful; R40 N - Dangerous for the environment; R51, R53 |
| Ethyl benzene 100-41-4 | 202-849-4 | < 15 % | F - Highly flammable; R11 Xn - Harmful; R20 |
| lead compounds with the exception of those specified elsewhere in this Annex | | < 2 % | Toxic for reproduction - category 1.; T - Toxic; R61 Toxic for reproduction - category 3.; Xn - Harmful; R62 Xn - Harmful; R20/22 R33 N - Dangerous for the environment; R50, R53 |

3. Hazards identification

The product is classified as hazardous within the meaning of the valid (EU) preparation guideline.

T - Toxic

R61 May cause harm to the unborn child.

R20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.

R10 Flammable.

R33 Danger of cumulative effects.

R38 Irritating to skin.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First-aid measures

General information:

Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.

If unconscious place recovery position and inform emergency services.

Inhalation:

Fresh air, oxygen supply, warmth; seek specialist medical attention.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

Eye contact:

Wash with plenty of water immediately and continue for several minutes, holding eyelid open. Consult a doctor.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

5. Fire-fighting measures

Suitable extinguishing media:

carbon dioxide, foam, powder, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons:

Water jet (solvent-containing product).

Special protection equipment for firefighters:

Wear self-contained breathing apparatus.

Special hazards by the product itself:

Can form explosive gas/air mixtures.

Hazardous combustion products:

nitrogen oxides, hydrogen chloride, Hydrogen bromide

6. Accidental release measures

General information:

Keep away from sources of ignition and naked flames.

Personal precautions:

Avoid contact with skin and eyes.

Ensure adequate ventilation.

Leave danger area.

Wear protective equipment.

Keep unprotected persons away.

Environmental precautions:

Do not empty into drains / surface water / ground water.

Inform police and fire brigade when large amounts depart.

Inform authorities in the event of product spillage to water courses or sewage systems.

Clean-up methods:

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to item 13.

7. Handling and storage

Handling:

- Ensure that workrooms are adequately ventilated.
- No smoking.
- Avoid naked flames, sparking and sources of ignition.
- Avoid skin and eye contact.
- Take measures to prevent the build-up of electrostatic charges.

Storage:

- Ensure good ventilation/extraction.
- Take precautionary measures against static discharges during storage and transport.
- Keep only in the original container.

8. Exposure controls / personal protection**Components with specific control parameters for workplace:**

- Valid for
 - Germany
- Basis
 - Germany - Occupational Exposure Limits

| Ingredient | ppm | mg/m ³ | Type | Category | Remarks |
|---|-----|-------------------|--|----------|--|
| xylene 1330-20-7 | 100 | 440 | Occupational exposure limit value. | 2 | |
| | | | Skin designation. | | Can be absorbed through the skin. |
| | 50 | 221 | Time Weighted Average (TWA). | | |
| | 100 | 442 | Short Term Exposure Limit (STEL): | | |
| | | | Skin designation. | | Can be absorbed through the skin. |
| | | | Short Term Exposure Classification. | | Category II: substances with a resorptive effect. |
| ethylbenzene 100-41-4 | 100 | 440 | Occupational exposure limit value. | 2 | |
| | | | Skin designation. | | Can be absorbed through the skin. |
| | 100 | 442 | Time Weighted Average (TWA). | | |
| | 200 | 884 | Short Term Exposure Limit (STEL): | | |
| | | | Skin designation. | | Can be absorbed through the skin. |
| | | | Short Term Exposure Classification. | | Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages. |
| lead compounds with the exception of those specified elsewhere in this Annex 7439-92-1 | | 0,15 | Time Weighted Average (TWA). | | |
| | | | Biological Limit Value: | | |
| | | | TRGS 901 - Explanations and basis for exposure limits in the workplace air - Number: | | |
| | | | | | Listed. |
| | | | | | Listed. |
| | | 0,1 | Relevant German exposure-limit for working place (MAK-value) | 4 | |

Engineering controls:

- No further information, see section 7.

Respiratory protection:

The product should only be used at workplaces with intensive ventilation/extraction. If intensive ventilation/extraction is not possible then self-contained independent respiratory protection should be worn

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Fluorinated rubber (FKM; ≥ 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Fluorinated rubber (FKM; ≥ 0.7 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear tightly fitting goggles.

Advices to personal protection equipment:

Wash off any dirt that gets onto the skin with lots of soap and water, skin care.
Wash hands before work breaks and after finishing work.

General protection and hygiene measures:

When using do not eat or drink.
When using do not smoke.
Keep away from food, beverages and animal feed.
Immediately remove soiled or soaked clothing.
Avoid skin and eye contact.

9. Physical and chemical properties

| | |
|--|--|
| Appearance | liquid, suspension liquid black |
| Odor: | of solvent |
| Boiling point | 136 °C (276,8 °F) |
| Flash point | 27 °C (80,6 °F) |
| Density (20 °C (68 °F)) | 0,950 - 1,010 g/cm ³ |
| Viscosity (dynamic) (Brookfield; Instrument: LVT; 25 °C (77 °F); speed of rotation: 30 min ⁻¹ ; Spindle No.: 2) | 120 - 250 mPas |
| Solubility (qualitative) (20 °C (68 °F); Solvent: water) | insoluble |
| Explosion limit lower [vol%] upper [vol%] | 1,0 %(V) 7,8 %(V) The product is not explosive. The formation of explosive vapor/air mixtures is possible. |

10. Stability and reactivity

Conditions to avoid:

No decomposition if used according to specifications.

Materials to avoid:

None if used for intended purpose.

Hazardous decomposition products:

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x) are released.
No decomposition if used according to specifications.

11. Toxicological information

General toxicological information:

The present product is a chemical preparation within the meaning of the chemicals act. To avoid testing the product in animal experiments the evaluation is made on the basis of the toxicological data and content by weight of the individual ingredients according to 88/37/EEC or analogous evaluations of comparable products.

May cause harm to the unborn child.

Danger of cumulative effects.

Oral toxicity:

Harmful if swallowed.

Inhalative toxicity:

Harmful by inhalation.

Dermal toxicity:

Harmful in contact with skin.

Skin irritation:

Primary skin irritation: irritating

12. Ecological information

General ecological information:

The preparation contains organic halogen compounds (AOX) within the meaning of the Federal Water Management Act (WHG). Officially determined threshold values for wastewater (also for partial flows, if applicable) and local discharge guidelines must be observed.

The product contains organic solvents which are insoluble in water. According to the requirements of the ATV regulations for the discharge of wastewater from commercial and industrial plant, organic solvents which are immiscible with water can only be discharged to an extent which corresponds to their solubility in water. The local discharge regulations take precedence.

The product contains wastewater-relevant heavy metals. Officially determined threshold values for wastewater (also for partial flows, if applicable) and local discharge guidelines must be observed.

Harmful to aquatic organisms

May cause long-term adverse effects in the aquatic environment

13. Disposal considerations

Product

Disposal methods:

The valid EEC waste code numbers are not product-related but are largely source-related. The manufacturer is therefore unable to specify EEC waste codes for the articles or products used in the various sectors. These can be requested from the manufacturer.

14. Transport information

Road transport ADR:

| | |
|-------------------------|------------------------|
| Class: | 3 |
| Packaging group: | III |
| Classification code: | F1 |
| Hazard ident. number: | 30 |
| UN no.: | 1133 |
| Label: | 3 |
| Technical name: | ADHESIVES |
| Additional information: | Special provision 640E |

Railroad transport RID:

Class: 3
Packaging group: III
Classification code: F1
Hazard ident. number: 30
UN no.: 1133
Label: 3
Technical name: ADHESIVES
Additional information: Special provision 640E

Inland water transport ADN:

Class: 3
Packaging group: III
Classification code: F1
Hazard ident. number: 33
UN no.: 1133
Label: 3
Technical name: ADHESIVES

Marine transport IMDG:

Class: 3
Packaging group: III
UN no.: 1133
Label: 3
EmS: F-E ,S-D
Seawater pollutant: -
Proper shipping name: ADHESIVES

Air transport IATA:

Class: 3
Packaging group: III
Packaging instructions (passenger): 309
Packaging instructions (cargo): 310
UN no.: 1133
Label: 3
Proper shipping name: Adhesives

15. Regulations - classification and identification

Indication of danger:

T - Toxic



Contains

Xylene - mixture of isomers,
lead compounds with the exception of those specified elsewhere in this Annex

Risk phrases:

- R61 May cause harm to the unborn child.
- R20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.
- R10 Flammable.
- R33 Danger of cumulative effects.
- R38 Irritating to skin.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- S53 Avoid exposure - obtain special instructions before use.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

Restricted to professional users.

National regulations/information (Germany)

- | | |
|-------------------------------|---|
| WGK: | 2, water-endangering product. (German VwVwS of May 17, 1999) Classification in conformity with the calculation method |
| BG regulations, rules, infos: | BG data sheet: BGI 621 Solvents |
| Storage class VCI: | 3A |

16. Other information

Full text of the R-phrases indicated by codes in this safety data sheet. The labeling of the product is indicated in Section 15.

- R10 Flammable.
- R11 Highly flammable.
- R20 Harmful by inhalation.
- R20/21 Harmful by inhalation and in contact with skin.
- R20/22 Harmful by inhalation and if swallowed.
- R33 Danger of cumulative effects.
- R38 Irritating to skin.
- R40 Limited evidence of a carcinogenic effect.
- R50 Very toxic to aquatic organisms.
- R51 Toxic to aquatic organisms.
- R53 May cause long-term adverse effects in the aquatic environment.
- R61 May cause harm to the unborn child.
- R62 Possible risk of impaired fertility.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.