



Chemosil 411

MSDS-No. : 43669
V001.0
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1. Identification of the substance/preparation and of the company/undertaking

Trade name:

Chemosil 411

Intended use:

rubber-metal-bonding agent, solvent-containing

Company name:

Lord Germany GmbH
Ottostr. 28
41836 Hückelhoven
Phone: +49-243352570
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	>= 25 %	R10 Xn - Harmful; R20/21 Xi - Irritant; R38
Ethyl benzene 100-41-4	202-849-4	>= 10 - <= 25 %	F - Highly flammable; R11 Xn - Harmful; R20
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5- dione 3006-93-7	221-112-8	<= 3 %	T+ - Very toxic; R26 Xi - Irritant; R38 Xi - Irritant; R41 Xi - Irritant; R43
lead compounds with the exception of those specified elsewhere in this Annex		<= 10 %	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

N - Dangerous for the environment

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

R10 Flammable.

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

R33 Danger of cumulative effects.

R38 Irritating to skin.

R43 May cause sensitization by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First-aid measures

General information:

If unconscious place recovery position and inform emergency services.

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

Inhalation:

Move to fresh air, administer oxygen, keep warm; hospitalise.

Delayed effects possible after inhalation.

Skin contact:

Immediately rinse with copious amounts of running water (for 10 minutes). Remove contaminated clothes. Put on a bandage with sterile gauze, seek medical attention in hospital.

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:

All common extinguishing agents are suitable.

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.

Wear protective equipment.

Hazardous combustion products:

Sulphur dioxide, nitrogen oxides, hydrogen chloride

6. Accidental release measures

Personal precautions:

Avoid contact with skin and eyes.

Wear protective equipment.

Leave danger area.

Wear protective equipment.

Environmental precautions:

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

Clean-up methods:

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

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
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.
xylene 1330-20-7			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.
	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):		
lead compounds with the exception of those specified elsewhere in this Annex 7439-92-1			Skin designation.		Can be absorbed through the skin.
			Short Term Exposure Classification.		Category II: substances with a resorptive effect.
		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:

For short-term or slight exposure, use a respiratory mask with filter, for intensive or long-term exposure wear full respiratory protection apparatus

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): Isobutylene-isoprene rubber (IIR; ≥ 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; ≥ 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:

Goggles which can be tightly sealed.

Body protection:

Wear protective equipment.

General protection and hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Avoid contact with skin and eyes. Remove soiled or soaked clothing immediately. Wash off any contamination that gets onto the skin with plenty of water and soap, skin care.

Use only in well ventilated areas.

9. Physical and chemical properties

Appearance	liquid, suspension liquid
Odor:	black of solvent
Boiling point (1.013 hPa)	136 °C (276,8 °F)
Flash point	25 °C (77 °F)
Density (20 °C (68 °F))	0,96 - 1,00 g/ml
Viscosity (dynamic) (Brookfield; Instrument: LVT2; 25 °C (77 °F); speed of rotation: 30 min-1; Spindle No.: 2; Conc.: 100 % product)	200 - 600 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) and carbon dioxide (CO₂) 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.

Danger of cumulative effects.

May cause harm to the unborn child.

Possible risk of impaired fertility.

Oral toxicity:

Harmful if swallowed.

Inhalative toxicity:

Harmful by inhalation.

Dermal toxicity:

Harmful in contact with skin.

Skin irritation:

Primary skin irritation: irritating

Sensitizing:

May cause sensitization by skin contact.

12. Ecological information

General ecological information:

Do not empty into drains, soil or bodies of water.

Toxic 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

N - Dangerous for the
environment**Contains**

1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione,
Xylene - mixture of isomeres,
lead compounds with the exception of those specified elsewhere in this Annex

Risk phrases:

R61 May cause harm to the unborn child.
R62 Possible risk of impaired fertility.
R10 Flammable.
R20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.
R33 Danger of cumulative effects.
R38 Irritating to skin.
R43 May cause sensitization by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- S53 Avoid exposure - obtain special instructions before use.
- S16 Keep away from sources of ignition - No smoking.
- 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: | Observe the German BG-Chemie data sheet: M017 - 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.
- R26 Very toxic by inhalation.
- R33 Danger of cumulative effects.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitization by skin contact.
- R50 Very 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.