

Date of Issue: 15.07.2005
Replaced Data Sheet: ---
Product Name: Cast Resin EPL-701 (Hardener)

1 Identification of the Substance/Preparation and the Company

Product Name: **Cast Resin EPL-701 (Hardener)**
Application: Hardener component for the production of epoxy.
Producer/Supplier: HÖHNE GmbH
Mühlenstraße 76
D-25421 Pinneberg (Germany)
Telephone: +49 - (0)4101 / 5453 - 0 / Telefax: - 33
Internet: www.hoehne.de / E-Mail: info@hoehne.de
Emergency Phone No.: In an emergency dial your local Emergency Call.
Keep this Safety Data Sheet at hand.

2 Composition / Information on Ingredients

Chemical Characterization (Preparation):
Formulated polyamine.

Dangerous Components:

Substance:	CAS-No.:	Symbol:	R-Phrases:	Concentration:
m-Xylylenediamine (EC-No.: 216-032-5)	1477-55-0	C	R 20/22, R 34, R 43, R 52/53	≥ 28 - < 40 %
Benzyl alcohol (EC-No.: 202-859-9)	100-51-6	Xn	R 20/22	≥ 11 - < 19 %
4-Nonyl-phenol (EC-No.: 246-672-0)	25154-52-3	C, N	R 22, R 34, R 50/53	≥ 9 - < 17 %
4,4'-Isopropylidenediphenol (EC-No.: 201-245-8)	80-05-7	Xi	R 36/37/38, R 43	≥ 9 - < 17 %
2,4,6-Tris(dimethylamino- methyl)phenol (EC-No.: 202-013-9)	90-72-2	Xn	R 22, R 36/38	< 5 %

3 Hazards Identification

Hazard Designation:
C - Corrosive
N - Dangerous to the Environment

Information pertaining to particular dangers for man and environment:

R 20/22: Harmful by inhalation and if swallowed.
R 34: Causes burns.
R 43: May cause sensitisation by skin contact.
R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4 First-Aid Measures

General Information:
Remove immediately any clothing soiled by the product. Clean thoroughly before re-use.

After Inhalation:
Supply fresh air and call for doctor for safety reasons.
In case of unconsciousness bring patient into stable side position for transport.

After Skin Contact:
Wash off immediately with soap and plenty of water and rinse thoroughly. Do not use solvents.
If skin irritation continues, consult a doctor.

After Eye Contact:
Rinse immediately the open eye with plenty of water for a at least 15 minutes. A doctor (or eye specialist) should be consulted immediately.

After Swallowing:
Immediately give plenty of water (if possible charcoal slurry). If a person vomits lying on his back, place him in the recovery position. Do not induce vomiting. Medical advice is required.

5 Fire-Fighting Measures

Suitable Extinguishing Media: Extinguishing powder, alcohol-resistant foam, carbon dioxide, water spray.
Extinguishing Media which must not be used for safety reasons: Water jet.

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5 Fire-Fighting Measures (continued)

Special Exposure Hazards arising from the substance itself, combustion products, resulting gases:
Burning product sets free a complex mixture of gases and airborne particulates, including carbon monoxide, carbon dioxide, nitrogen oxides and other noxious and toxic gases and fumes.

Special Protective Equipment for Fire Fighting:

Use respiratory protection independent of recirculated air. Wear full protective suit.

Additional Information:

Collect contaminated fire fighting water separately. Do not allow to enter drains, sewers or watercourses.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental Release Measures

Personal Precautions:

Wear personal protection clothing (see Chapter 8).

Avoid contact with skin, eyes and clothing. Do not breathe vapours.

Keep away from sources of ignition and ensure sufficient ventilation.

Environmental Precautions:

Do not allow to enter drains, sewers or watercourses.

Clean-up Method:

Absorb spillages onto sand, earth or any suitable adsorbent material. Fill it into a clearly marked container and dispose of according to local/state/federal regulations (see Chapter 13).

7 Handling and Storage

Handling:

Handle and open container with care.

Avoid contact with skin and eyes. Avoid breathing vapours.

Ensure good ventilation/exhaustion at the workplace.

Precautions Against Fire and Explosion:

Keep away from sources of ignition - No smoking.

Storage:

Keep container tightly closed and store under cool and dry conditions in a well ventilated area.

Avoid direct sunlight and heat sources.

Keep away from food, drink and animal feeding stuff.

8 Exposure Controls / Personal Protection

Additional Information about design of technical systems:

No further data; see Chapter 7 "Handling and Storage".

Occupational Exposure Limits:

Germany: 4,4'-Isopropylidendiphenol - CAS-Nr.: 80-05-7

TRGS 900: 5 mg/m³ (in-breathable fraction); maximum limit of excess factor 1
(Remarks: DFG, Y)

Nonylphenol - CAS-Nr.: 25154-52-3

TRGS 905: Reproductive toxicity (RF): 3 / Development toxicity (RE): 3

Personal Protection:

Respiratory Protection: During good ventilation/exhaustion usually not required.

In case of higher concentration or insufficient ventilation wear suitable respiratory equipment.

Hand Protection: Use protective gloves (DIN EN 374).

Material: butyl rubber, nitrile rubber.

Break-through time not examined. After contamination dispose of.

Eye Protection: Tightly fitting chemical safety glasses (DIN EN 166) or full face shield.

Skin Protection: Protective work clothing.

General safety and hygienic measures:

Do not store foodstuff at the workplace. Do not eat, drink or smoke during work.

Avoid contact with eyes, skin and clothing.

Wash hands with water and soap before breaks and at end of work.

Remove contaminated clothing. Contaminated clothing should be thoroughly cleaned before re-use.

Store work clothes and street clothes separately.

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9 Physical and Chemical Properties

tested in accordance with

Form:	liquid		
Colour:	yellow brown		
Odour:	amine-like		
Boiling Point:	approx. 200°C	(at 1013 hPa)	
Flash Point:	approx. 120°C		DIN 51 758
Ignition Temperature:	not determined		
Vapour Pressure:	not determined		
Density:	approx. 1,07 g/cm ³	(at 20°C)	DIN 51 757
Viscosity:	550 - 750 mPa·s	(at 25°C)	Brookfield
Solubility in Water:	partly soluble	(at 20°C)	
Miscibility with Water:	immiscible		
pH value	approx. 12	(at 20°C / 1:1 in water)	

10 Stability and Reactivity

Conditions to Avoid:
No decomposition if used and stored according to specifications.

Materials to Avoid:
Strong acids and strong bases.
Strong oxidising agents.

Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide, nitrogen oxides. Burning produces noxious and toxic fumes.

11 Toxicological Information

No specific data available for this product.
Information given is based on data on the components and on similarly composed products.

Acute Toxicity:
LD₅₀ oral, rat: 1.300 mg/kg.

Primary Irritant Effects:
on the eye : Corrosive.
on the skin: Corrosive.
Sensitisation: Causes sensitisation by skin contact.

12 Ecological Information

No specific data available for this product.
Information given is based on data on the components and on similarly composed products.

General Information:
The contained environmentally hazardous components are specified in Chapter 2 (Dangerous Components).
Prevent product from entering drains. Do not contaminate surface water.
Prevent any penetration into the ground.

13 Disposal Considerations

Disposal of Residues:
Do not dispose of with domestic refuse. Do not allow to enter drains.
Dispose of according to regulations by incineration in a special waste incinerator.
The relevant EU Directives and local, regional and national regulations must be complied with.
It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste Catalogue. It is recommended that details be sorted out with the waste disposer responsible.

Uncleaned Packaging (Recommendation):
After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until "drip-dry"), any product residue adhering to their walls has been rendered harmless, and the product and hazard labelling has been invalidated, they can be sent to an appropriate collection point set up within the framework of the existing take-back scheme of the chemical industry.
Containers must be recycled in compliance with national legislation and environmental regulations.

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14 Transport Information

Land transport RID/ADR:
Class: 8
Classification Code: C7
Hazard Index Number: 80
Packaging Group: III
UN No.: 2735
Designation of Goods: Amines, Liquid, Corrosive, n.o.s.
(contains: m-xylylene diamine, 4-nonyl phenol)
Label: 8
Limited Quantity: LQ 19
Maritime transport IMDG: Advice on request.
Air transport ICAO/IATA: Advice on request.

15 Regulatory Information

Labelling in accordance with Annex I of directive 67/548/EEC and its amendments and adaptations:

Symbol and Hazard Description: C - Corrosive
N - Dangerous to the Environment

Hazardous Components which must be listed on the label:

m-Xylylenediamine
4-Nonyl-phenol

R-Phrases:

R 20/22: Harmful by inhalation and if swallowed.
R 34: Causes burns.
R 43: May cause sensitisation by skin contact.
R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-Phrases:

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28: After contact with skin, wash immediately with plenty of water and soap.
S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S 45: In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible.)
S 61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

National Regulation (Germany):

Water pollution class (WGK): 3 - Severe hazard to water.

WGK = Classification in accordance with the German Water Resources Act (VwVwS 1999-05-17)

16 Other Information

Listing of all R-Phrases indicated in this Safety Data Sheet:

R 20/22: Harmful by inhalation and if swallowed.
R 22: Harmful if swallowed.
R 34: Causes burns
R 36/38: Irritating to eyes and skin.
R 36/37/38: Irritating to eyes, respiratory system and skin.
R 43: May cause sensitisation by skin contact.
R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

In the Safety Data Sheet all chapters which have been changed since last edition are marked with an asterisk (*) in front of the chapter number.

This Safety Data Sheet replaces all previous information.

Revised and valid from: see date of issue.