

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date : 27.11.09
(replaces previous issue)
Print : date: 17.11.10

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ISO-EPOXYDHARZ HP 89/7 (Component A : resin)

1 Identification of substance/preparation and company

Product name

ISO-EPOXYDHARZ HP 89/7 (Component A : resin)

Area of application

Resin component of a potting compound

Supplier:

ISO-ELEKTRA Elektrochemische Fabrik GmbH

Im Mühlenfeld 5

Tel. : +49 5068 / 925-0

D - 31008 Elze

Fax: : +49 5068 / 925-25

Prepared by : Dr. Ulrich Schomburg **email :** sdb@iso-elektra.de

Emergency telephone numbers

contact supplier

or the next toxic information center e.g. :

. Berlin Tel. : **49-30-3035-3466

2 Hazards Identification

Classification symbol :

Xi (irritating)

Human Health Hazards:

R 36 / 38 - irritating to eyes and skin.

R 43 - may cause sensitization by skin contact.

Hazards for the environment

It can be moderately toxic to aquatic animals.

3 Composition /Information on Ingredients

Preparation Description

Ingredients:

Epoxy resin

Dangerous components:

CAS No	Substance	% (m / m)	symbols	risk phrases
25068-38-6	Bisphenol-A-Epoxidharz	70-90	Xi, N	36/38-43-51/53
68609-97-2	C12-C14- Alkylglycidether	10-30	Xi	36/38-43

4 First Aid Measures

after inhalation:

Remove to fresh air . Call a physician or transport to medical facility for safety reasons.

after skin-contact:

Do not delay. Remove contaminated clothing. Wash skin with water , using soap if available.

after eye-contact:

Rinse immediately with plenty of water for at least 15 minutes and seek immediately medical advice.

after ingestion:

Do not induce vomiting and seek immediately medical advice.

Advice to physicians:

Treat symptomatically.

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5 Fire Fighting Measures

Extinguishing media:

Dry chemical powder, carbon dioxide, sand / earth, alcohol resistant foam, if water is used it must be sprayed.

Specific hazard:

Carbon monoxide is possible where incomplete combustion occurs. This product is not in the flammable range but will burn.

special equipment:

Firefighters must wear a self - contained breathing apparatus for a large fire.

6 Accidental Release Measures

Personal precautions:

Wear protective equipment .Keep unprotected persons away.

Environmental precautions:

Do not allow product to reach sewage system or water bodies. Prevent material from reaching sewage system, holes and cellars. Inform respective authorities in case product reaches water or sewage system.

Clean - up methods:

Absorb with liquid - binding material (sand , diatomite , acid binders , universal binders , sawdust) .
Ensure adequate ventilation

7 .Handling and storage

Handling

Advices for safe handling:

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation / exhaustion at the workplace. Prevent formation of aerosols.

Advices to prevent fire and explosion

Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

Storage

Keep containers dry and sealed tight.

8 Exposure controls / Personal protection

Additional information

The lists that were valid during the compilation were used as basis.

Protective and hygienic measures : Wash hands during breaks and at the end of work.

Keep away from food. Remove contaminated clothes immediately.

Respiratory protection : In case of brief exposure or low pollution use breathing filter apparatus .In case of intensive or longer exposure use breathing apparatus that is independent of circulating air. Use breathing protection in case of insufficient ventilation.

Hand protection: Gloves are to be used.

Eye protection: Tightly sealed safety glasses.

Body protection: Protective work clothing.

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ISO-EPOXYDHARZ HP 89/7 (Component A : resin)

9 Physical and Chemical properties

Form: Liquid		colour: pale yellow or coloured
	Value / Range	Methode
pH-:	n.a	
Change of physical state:	approx. - 8 °C	
Pourpoint:		
Boiling point:		
Flashpoint:	> 140°C	
Decompositionpoint	> 200 °C	
Flammability limit	Flammability limit-upper: n.a. Flammability limit -lower n.a.	
Vapor pressure:	n.a.	
Density:	1.14 g/cm ³ / 20 °C	
Solubility in water:	insoluble	
Kin .Viscosity	approx. 1000-1300 mPa·s / 25°C	

10 Stability / Reactivity

Stability:

Stable under normal conditions at ambient temperature. Stable on storage in daylight, although UV - light induces a slow oxidation process in the presence of oxygen. Decomposition starts at about 200 - 250 °C

Materials / conditions to avoid:

Caustic can induce a vigorous polymerisation at temperatures around 200 °C. Hazardous decompositions products:

11 None. Toxicological Information

Acute toxicity:

LD 50 expected to be :

		Value	Species
Epoxy resin (Bisphenol-A	oral	> 11400 mg/kg	rat
Epichlorhydrin resin)	dermal	> 2000 mg/kg	rabbit

Specific symptomatic results:

skin

May cause moderate irritation.

eyes

May cause moderate irritation.

Sensitisation:

Skin sensitizer in man.

12 Ecological information

Degradation:

Product is not readily biodegradable. Bioaccumulation is possible.

Ecotoxicity:

Water hazard class 2 (estimated): hazardous for water.

+ fish LD 50 (96) : 3,6 mg / l

+ Daphnia EC 50 (48) : 2,8 mg / l

+ algae EC 50 (96) : 220,0 mg / l

Additional ecological information

Assessment largely or completely based on data for similar material. Prevent from entering sewers or drains. Prevent from flowing into ground - or surface water.

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ISO-EPOXYDHARZ HP 89/7 (Component A : resin)

13 Disposal Considerations

Product

Customers are adviced to check their national , state and local legislation concerning the disposal of waste materials.

Precautions

Must not be disposed of together with household garbage . Do not allow product to reach sewage system. EWC-No.: 07 02 08

Container disposal: Empty container thoroughly . Disposal must be made according to local regulations.

14 Transport information

Land transport ADR / RID and GGVS / GGVE (cross - border / domestic)

+ADR / RID - GGVS / E Class : 9

+ Kemler Number : 90

+ UN-Number : 3082

+ correct technical name : Enviromentally hazardous substance, liquid n.o.s. (epoxide derivatives)

Maritime transport IMDG / GGVSea :

+IMDG / GGVSea Class 9

+ UN Number : 3082

+ Packaging group : III

+ EMS Number: none

+ MFAG : none

Marine pollutant yes

+ Correct technical name Enviromentally hazardous substance, liquid n.o.s. (epoxide derivatives)

Air transport ICAO - TI and IATA - DGR :

+ICAO / IATA Class : 9

+ UN / ID Number : 3082

+ Packaging group : III

+ Correct technical name Enviromentally hazardous substance, liquid n.o.s. (epoxide derivatives)

15 Regulatory Information

Classification according to annex 1 of council Directive 67 / 548 / EEC (Dangerous Substances Directive) (EEC lable).

Hazard Symbol : Xi (irritant)

N (dangerous for environment)

contains : Bisphenol-A-epichlorohydrin resin

Risk Phrases:

36/38 Irritating to eyes and skin.

43 May cause sensitisation by skin contact.

51 / 53 Toxic to waterorganism, may cause damage in water.

Safety Phrases:

28 After contact with skin , wash immediately with plenty of water and soap.

37 / 39 When handling wear appropriate gloves and protective glasses.

61 Avoide spilling.Get special advice.Use safety data sheet.

National regulations

BG - Advice

M 004 irritating / acid material

M 051 dangerous material

16 Other information

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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ISO-EPOXYDHARZ HP 89/7 (Component A : resin)

Issuing agent

ISO-ELEKTRA Elektrochemische Fabrik GmbH
Abteilung Produktsicherheit

contact

Dr. Michael Piepho Tel. : +49 5068/925-14

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ISO-EPOXYDHARZ HP 89/7 (Component B : hardener)

1 Identification of substance/preparation and company

Product name

ISO-EPOXYDHARZ HP 89/7 (Component B : hardener)

Area of application

Hardener component of a potting compound

Supplier:

ISO-ELEKTRA Elektrochemische Fabrik GmbH

Im Mühlenfeld 5

Tel. : +49 5068 / 925-0

D - 31008 Elze

Fax: : +49 5068 / 925-25

Prepared by : Dr. Ulrich Schomburg **email :** sdb@iso-elektra.de

Emergency telephone numbers

contact supplier

or the next toxic information center e.g. :

. Berlin Tel. : **49-30-3035-3466

2 Hazards Identification

Classification symbol : C (corrosive).

Human Health Hazards:

R 20/21/22 Harmful by inhalation, ingestion and contact with skin.

R34 Causes burns.

R 43 May cause sensitisation by skin contact.

3 Composition /Information on Ingredients

Preparation Description

Ingredients:

Epoxy resin Hardener.

Dangerous components:

CAS No	Substance	% (m / m)	symbols	risk phrases
100-51-6	Benzylalcohol	25 - 50	Xn	20/22
2855-13-2	Isophorondiamin	25 - 50	C	21/22-34-43

4 First Aid Measures

after inhalation:

Remove to fresh air. Call a physician or transport to medical facility for safety reasons.

after skin-contact:

Do not delay. Remove contaminated clothing. Wash skin with water and soap. Cover affected skin with antiseptic material.

after eye-contact:

Rinse immediately with plenty of water for at least 15 minutes and seek medical advice.

after ingestion:

Rinse mouth with - and drink plenty of water. Seek medical advice.

Advice to physicians:

Treat symptomatically.

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ISO-EPOXYDHARZ HP 89/7 (Component B : hardener)

5 Fire Fighting Measures

Extinguishing media

CO₂ ; extinguishing powder or water jet. Fight larger fires with water jet or alcohol - resistant foam.

For safety reasons unsuitable extinguishing agents:

Water with full water jet.

Specific hazard:

Co, No_x, Ammoniac.

special equipment:

Fire-fighters must wear a full-face positive -pressure self-contained breathing apparatus and full protective clothing

6 Accidental Release Measures

Personal precautions:

Wear protective equipment .Keep unprotected persons away.

Environmental precautions:

Do not allow product to reach sewage system or water bodies. Prevent material from reaching sewage system, holes and cellars. Inform respective authorities in case product reaches water or sewage system.

Clean - up methods:

Absorb with liquid - binding material (sand , diatomite , acid binders , universal binders , sawdust)
.For disposal of contaminated water see item 13.

7 .Handling and storage

Handling

Advices for safe handling:

Ensure ventilation when handling. Under normal conditions no special measures must be taken.

Advices to prevent fire and explosion

none.

Storage

Keep containers cool dry and sealed tight. Ensure adequate ventilation. Prevent product from entering ground.

Classification:

Storage class : 8 (Acid)

8 Exposure controls / Personal protection

Additional information

The lists that were valid during the compilation were used as basis.

Protective and hygienic measures : Wash hands during breaks and at the end of work. Keep away from food. Remove contaminated clothes immediately. Avoid skin contact.

Respiratory protection : When good ventilation is ensured not necessary.

Hand protection: Gloves are to be used.

Eye protection: Tightly sealed safety glasses.

Body protection: Protective work clothing.

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ISO-EPOXYDHARZ HP 89/7 (Component B : hardener)

9 Physical and Chemical properties

Form	colour	odour
liquid	pale yellow	characteristic
	Value / Range	Methode
pH-:	(30 g/l) app. 11 at 20°C	DIN 16916
Change of physical state:		
Pourpoint:	n.a.	
Boiling point:	> 200°C	DIN 53171
Flashpoint:	108°C	DIN 51758
Auto- ignition temp.	> 350°C	DIN 51794
Decompositionpoint	> 250°C	
Flammability limit	Flammability limit- upper: 13 %. Flammability limit - lower 1.3 %.	
Vapor pressure:	0.28 mbar / 20°C.	
Density:	1.00 – 1.04 g / cm ³ / 20 °C	DIN 51757
Solubility in water:	light	
Kin .Viscosity	0.4 - 0.6 Pa·s / 20°C	DIN 51562

10 Stability / Reactivity

Stability:

Stable under normal conditions.

Materials / conditions to avoid:

Acid induces a vigorous exothermic reaction.

Hazardous decompositions products:

Acid vapour and Ammoniac.

11 None. Toxicological Information

Acute toxicity:

LD 50 expected to be :

Component		Value	Species
Benzyl alcohol	oral	1230 mg / kg	rat
	dermal	2000 mg / kg	rabbit
Isophorondiamin	oral	1030 mg / kg	rat

Specific symptomatic results:
skin

Acid to skin and mucous membrane.

eyes

Strong irritation .May cause damage.

Additional information:

If swallowed acid to mouth and throat.

12 Ecological information

Additional ecological information

Prevent from entering sewers or drains. Prevent from flowing into ground - or surface water.

13 Disposal Considerations

Product

Customers are advised to check their national , state and local legislation concerning the disposal of waste materials.

EWC-No.:

07 02 08

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ISO-EPOXYDHARZ HP 89/7 (Component B : hardener)

Container disposal:

Empty container thoroughly. After cleaning containers may be reused. Disposal of chemical wastes must be made according to local regulations.

14 Transport information

Land transport ADR / RID and GGVS / GGVE (cross - border / domestic)

+ADR / RID - GGVS / E Class : 8
+ Kemler Number : 80
+ UN-Number : 2735
+ correct technical name : Polyamines, liquid, corrosive

Maritime transport IMDG / GGVSea :

+IMDG / GGVSea Class 8
+ UN Number : 2735
+ Packaging group : III
+ EMS Number: none
+ MFAG : none
Marine pollutant yes
+ Correct technical name Polyamines, liquid, corrosive

Air transport ICAO - TI and IATA - DGR :

+ICAO / IATA Class : 8
+ UN / ID Number : 2735
+ Packaging group : III
+ Correct technical name Polyamines, liquid, corrosive

15 Regulatory Information

Hazard Symbol : C (acid)
contains : Isophorondiamin, Benzyl alcohol.

Risk Phrases:

R 20/21/22 Harmful by inhalation, ingestion and contact with skin.
R 34 Causes Burns.
R 43 May cause sensitisation by skin contact.

Safety Phrases:

26 In case of contact with eyes , rinse immediately with plenty of water and seek medical advice.
36/37/39 When handling wear appropriate gloves and protective glasses and face protection.
45 In case of accident or if you feel unwell , seek medical advice immediately (Show the label when possible).

Additional regularities: (national)

Störfallverordnung:

Not mentioned.

Classification according to Vbf :

n.a.

16 Other information

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Issuing agent

ISO-ELEKTRA Elektrochemische Fabrik GmbH
Abteilung Produktsicherheit

contact

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