

EC safety data sheet

Trade name: Giessharz Isocyanat LG-Härter

Product no.: B7

Version: 1.0.0 / GB

Status: 18.08.2011

1.) Identification of the substance/mixture and of the company/undertaking

Trade name

Giessharz Isocyanat LG-Härter

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

filling compound for electrotechnical use

Details of the supplier of the safety data sheet

Address

Cellpack GmbH

Electrical Products

Carl-Zeiss-Strasse 20

79761 Waldshut-Tiengen

Telephone no. +49 (0)7741 6007-0

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Information provided by / telephone

+49 (0)7741 6007-0

Emergency telephone

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

Advice on Safety Data Sheet

msds@cellpack.com

2.) Hazards identification

Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Acute Tox. 4; H332

Carc. 2; H351

Eye Irrit. 2; H319

Resp. Sens. 1; H334

Skin Irrit. 2; H315

Skin Sens. 1; H317

STOT RE 2; H373

STOT SE 3; H335

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

Carc.Cat.3; R40

R42/43

Xi; R36/37/38

Xn; R20

Xn; R48/20

Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS07



GHS08

Signal word

Danger

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Hazardous component(s) to be indicated on label, contains:

 Formaldehyde, oligomeric reaction products with aniline and phosgene
 Aromatic polyisocyanate prepolymer
 diphenylmethanediisocyanate, isomeres and homologues

Hazard statements

H373i	May cause damage to organs through prolonged or repeated exposure if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.

Supplemental label elements

Contains isocyanates. Observe manufacturer's instructions.

Other hazards

The product may be a skin sensitiser. It may also be a severe skin irritant. In case of respiratory system hypersensitivity (asthma, chronic bronchitis) do not handle this product.

3.) Composition / information on ingredients
Substance / product identification
Chemical characterization

Mixture (preparation)

Hazardous ingredients

Nr.	Substance name			Additional information	
	CAS / EC / Index / REACH no	Classification 67/548/EEC	Classification (EC) 1272/2008 (CLP)	Concentration	%-b.w.
1	Formaldehyde, oligomeric reaction products with aniline and phosgene				
	32055-14-4 500-079-6 - -	Xn; R20 Xi; R36/37/38 Carc.Cat.3; R40 R42/43 Xn; R48/20	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373	> 50,00 - < 75,00	%-b.w.
2	Aromatic polyisocyanate prepolymer				
	72088-97-2 - - -	R42/43	Resp. Sens. 1; H334 Skin Sens. 1; H317	> 10,00 - < 25,00	%-b.w.

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3	diphenylmethandiisocyanate, isomeres and homologues							
9016-87-9	Xn; R20	Carc. 2; H351	>	10,00	-	<	25,00	%-b.w.
-	Xi; R36/37/38	Acute Tox. 4; H332						
-	R42/43	STOT SE 3; H335						
-	Carc.Cat.3; R40	STOT RE 2*; H373						
	Xn; R48/20	Eye Irrit. 2; H319						
		Skin Irrit. 2; H315						
		Resp. Sens. 1; H334						
		Skin Sens. 1; H317						

Full Text for all R-phrases , H-phrases and EUH-phrases: pls. see section 16

(*, **, ***, ****) detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2 .

Nr.	Note	Specific concentration limits	M-factor
1	-	Resp. Sens. 1; H334: C >= 0,1% Eye Irrit. 2; H319: C >= 5% Skin Irrit. 2; H315: C >= 5% STOT SE 3; H335: C >= 5%	-
3	-	Resp. Sens. 1; H334: C >= 0,1% Eye Irrit. 2; H319: C >= 5% STOT SE 3; H335: C >= 5% Skin Irrit. 2; H315: C >= 5%	-

4.) First aid measures
General information

In all cases of doubt, or when sickness symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Remove soiled or soaked clothing immediately.

After inhalation

Remove to fresh air, keep patient warm and at rest. Irregular breathing/no breathing: artificial respiration. If unconscious place in recovery position and seek medical advice.

After skin contact

Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners !

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

After ingestion

Do not induce vomiting. Summon a doctor immediately. Never give anything by mouth to an unconscious person. Keep at rest.

Advice to doctor
Treatment

Treat symptomatically.

5.) Fire-fighting measures
Suitable extinguishing media

Alcohol resistant foam, CO2, powders, water spray

Extinguishing media that must not be used for safety reasons

Full water jet

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Special protective equipment for fire-fighters

Appropriate breathing apparatus may be required.

Other information

Cool endangered containers with water in case of fire. DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES: Fire residues must be disposed of in a proper manner.

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6.) Accidental release measures

Personal precautions

Exclude sources of ignition and ventilate the area. Do not inhale vapours. Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Do not allow to enter drains. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Add the same decontaminant to the remnants and let stand for several days until no further reaction in non-sealed container. Once this stage is reached, close container and dispose according to local regulations.

Methods for cleaning up/taking up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see chapter 13). Clean preferably with a detergent; avoid use of solvents.

Additional informations (chapter 6)

Immediately clean contaminated areas with following substances :

usable(flammable):	Water	45 Vol.%
	Ethanol or Isopropyl Alcohol	50 Vol.%
	Ammonia solution (density=0,88)	5 Vol.%

Alternative applicable to that (not flammable):

Sodium Carbonate	5 Vol.%
Water	95 Vol.%

7.) Handling and storage

Handling

Advice on safe handling

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used !; The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Comply with the health and safety at work laws.

Advice on protection against fire and explosion

No special measures necessary.

Storage

Requirements for storage rooms and vessels

Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access!; Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on storage assembly

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.

Further information on storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep container dry in a cool, well-ventilated place. Precautions should be taken to minimise exposure to atmospheric humidity or water: CO₂ will be formed which in closed containers can result in pressurisation. DO NOT KEEP THE CONTAINERS SEALED !!; store at 15 - 30 °C.

8.) Exposure controls / personal protection

Exposure limit values

N O N E

Exposure controls

Occupational exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. Air-fed protective respiratory equipment must be worn by spray operator even when good ventilation is provided.

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Personal protective equipment**Respiratory protection**

By spraying: air-fed respirator

By other operations than spraying: in well ventilated areas, air-fed respirators could be replaced by a combination of charcoal filter and particulate filter mask.

Hand protection

Adhere to the professional organisation rule "Use of protective gloves".

Appropriate chemicals resistant glove tested in compliance with EN 374.

Recommendation for protection against components generally found in the products:

For short-term contact (i.e. splash protection):

Appropriate material: nitrile rubber, Neopren

Material thickness: > 0,4 mm

Breakthrough time: > 480 min

Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties).

Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves.

Protective gloves shall be replaced immediately when physically damaged or worn. Preventive hand protection (skin protection cream) recommended. Wash immediately contaminated skin).

Design operations thus to avoid permanent use of protective gloves.

Eye protection

Wear safety goggles to protect against solvent splashes.

Skin protection

Personal should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact.

General protective and hygiene measures

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used. Do not eat or drink during work - no smoking. Avoid product contact with skin, eyes and clothing

9.) Physical and chemical properties**General information**

Form	liquid
Colour	brown
Odour	Earthy; musty

Important health, safety and environmental information**Changes in physical state**

Type	Boiling point		
Value	>	300	° C

Flash point

Value	>	230	° C
Method	DIN 51758		

Ignition temperature

Value	>	500	° C
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Vapour pressure

Value		14	hPa
Reference temperature	20	° C	
Method	92/69/EEC, A.4		
Value		71	hPa
Reference temperature	50	° C	
Method	92/69/EEC, A.4		

Density

Value	appr.	1,22	g/cm ³
Method	DIN 51757		

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Reference temperature	20	° C	
Viscosity			
Type	dynamic		
Value	appr.	165	mPa*s
Method	DIN 53211		
Reference temperature	20	° C	
Solubility in water			
Remarks	immiscible		
pH value			
Remarks	not determined		

10.) Stability and reactivity
Conditions to avoid

Stable under recommended storage and handling conditions(See section 7).

Materials to avoid

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result distortion blowing and in extreme cases bursting of the container.

Hazardous decomposition products

In a fire, hazardous decomposition products, such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomers of isocyanates, amines and alcohols may be produced.

11.) Toxicological information
Acute toxicity
Acute oral toxicity

LD50	>	2000	mg/kg
Species	rat		
Reference substance	Formaldehyde, oligomeric reaction products with aniline and phosgene		
Reference substance	Diphenylmethandiisocyanat, Isomere und Homologen		
Remarks	Toxikologische Untersuchungen an einem vergleichbaren Produkt.		

Acute inhalational toxicity

LC50		490	mg/m ³
Reference substance	Formaldehyde, oligomeric reaction products with aniline and phosgene		
Duration of exposure	4	h	
Species	rat		
Remarks	Aerosol		
Reference substance	Diphenylmethandiisocyanat, Isomere und Homologen		
Remarks	Test conducted with a similar formulation.		

Irritant/corrosive effects
Irritant effect on skin

Species	rabbit
Reference substance	Formaldehyde, oligomeric reaction products with aniline and phosgene
Evaluation	irritant
Method	OECD 404
Reference substance	Diphenylmethandiisocyanat, Isomere und Homologen
Remarks	Toxikologische Untersuchungen an einem vergleichbaren Produkt.

Respiratory tract irritation

Species	rabbit
Reference substance	Formaldehyde, oligomeric reaction products with aniline and phosgene
Evaluation	non-irritant
Remarks	Schleimhautreizung
Reference substance	Diphenylmethandiisocyanat, Isomere und Homologen

Sensitisation

Reference substance	Formaldehyde, oligomeric reaction products with aniline and phosgene
Evaluation	sensitizing

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Reference substance Diphenylmethandiisocyanat, Isomere und Homologen
Remarks Test conducted with a similar formulation.

Experience in practice

Prolonged contact with the skin may produce tannic effects and lead to irritation. Eye contact with the product can cause severe eye irritation with redness and conjunctival swelling. Repeated or prolonged skin contact may cause allergic skin reactions in sensitive individuals which can be seen as redness.

Other information

Based on the properties of the isocyanate components and considering toxicological data on similar preparations: This preparation may cause acute irritation and/or sensitisation of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

12.) Ecological information**Ecotoxicity****Fish toxicity**

LC50 > 1000 mg/l
Species Brachydanio rerio
Duration of exposure 96 h
Method OECD 203
Reference substance Formaldehyde, oligomeric reaction products with aniline and phosgene
Reference substance Diphenylmethandiisocyanat, Isomere und Homologen

Daphnia toxicity

EC50 > 1000 mg/l
Species Daphnia magna
Duration of exposure 24 h
Method OECD 202
Reference substance Formaldehyde, oligomeric reaction products with aniline and phosgene
Reference substance Diphenylmethandiisocyanat, Isomere und Homologen

Bacteria toxicity

EC50 > 100 mg/l
Species activated sludge
Duration of exposure 3 h
Method OECD 209
Reference substance Formaldehyde, oligomeric reaction products with aniline and phosgene
Reference substance Diphenylmethandiisocyanat, Isomere und Homologen

Persistence and degradability**Biodegradability**

Value 0 %
Method OECD 302 C
Evaluation not readily biodegradable
Reference substance Formaldehyde, oligomeric reaction products with aniline and phosgene
Reference substance Diphenylmethandiisocyanat, Isomere und Homologen

Other information

The product should not be allowed to enter drains or water courses. The product reacts with water in the boundary layer forming CO₂ and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by watersoluble solvents. According to experience to date, polyurea is inert and is not degradable.

13.) Disposal considerations**Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

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Packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.

14.) Transport information

Other information

If transported within the user's premises: To be transported always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of conduct in case of incident or spillage. The product is not defined under national/international road, rail, sea and air dangerous goods transport regulations as a hazardous material.

15.) Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Restriction of occupation

Adhere to the national sanitary and occupational safety regulations when using this product.

16.) Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of R-phrases referred to under section 3

R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R42/43	May cause sensitisation by inhalation and skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Full text of H-phrases and EUH-phrases referred to under section 3

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer
H373	May cause damage to auditory system through prolonged or repeated exposure by ingestion and inhalation.

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.