Dr. Schutz

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 04.06.2015 Version number 10 Revision: 04.06.2015

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Identification of the substance/preparation:** *Dr. Schutz cross linker A*

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
SU21 Consumer uses: Private households / general public / consumers

· **Sector of Use**
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Application of the substance / the mixture** Coating compound/ Surface coating/ paint

· **1.3 Details of the supplier of the safety data sheet**

· **Company/undertaking identification:**
CC-Dr. Schutz GmbH
Holbeinstr. 17
D-53175 Bonn
Germany
Tel.: +49(0)228-95352-0,
Fax: +49(0)228-95352-28
info@dr-schutz.com

For the UK and Ireland:
Dr. Schutz U.K.
Unit 24
Anglo Buisness Park,
Smeaton Close Aylesbury
Bucks HP19 8UP
Tel.: 0044/1296-437827
Fax: 0044/1296-334219
E-Mail: steve@dr-schutz.com

· **Further information obtainable from:** Department for product development

· **1.4 Emergency telephone number:**
GBK Gefahrgut Büro GmbH
telephone: +49 (0)6132 84463
(24-Hour-Number)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

GHS07

Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335	May cause respiratory irritation.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS07

· **Signal word** Warning

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· **Hazard-determining components of labelling:**
Hexamethylene diisocyanate, oligomers
aliphatic polyisocyanate
cyclohexyldimethylamine
hexamethylene diisocyanate, oligomer
· **Hazard statements**
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
· **Precautionary statements**
P280 Wear protective gloves / eye protection.
P362 Take off contaminated clothing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Additional information:**
EUH204 Contains isocyanates. May produce an allergic reaction.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 28182-81-2 NLP: 500-060-2	Hexamethylene diisocyanate, oligomers Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	25-50%
CAS: 666723-27-9	aliphatic polyisocyanate Skin Sens. 1, H317; Aquatic Chronic 3, H412	25-50%
CAS: 282182-81-2	hexamethylene diisocyanate, oligomer Skin Sens. 1, H317	5-10%
CAS: 53880-05-0	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers Skin Sens. 1, H317	5-10%
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	1-5%
CAS: 9046-01-9	Polyethoxytridecyletherphosphat Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315	1-5%
CAS: 98-94-2 EINECS: 202-715-5	cyclohexyldimethylamine Flam. Liq. 3, H226; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Met. Corr.1, H290; Skin Corr. 1B, H314	1-5%
CAS: 822-06-0 EINECS: 212-485-8 Index number: 615-011-00-1	hexamethylene-di-isocyanate Acute Tox. 1, H330; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	0.1-1%

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· **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
After each cleaning use treatment creams, for very dry skin greasy ointments.
Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Call a doctor immediately.
Do not leave affected persons unattended.
Rinse out mouth and then drink plenty of water.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **5.2 Special hazards arising from the substance or mixture** Danger of forming toxic pyrolysis products.
· **5.3 Advice for firefighters**
· **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.
Mouth respiratory protective device.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
Ensure adequate ventilation
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Follow instructions on the label and in the Technical Product Information Sheet.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:**
No special precautions are necessary if used correctly.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.
· **Information about storage in one common storage facility:** Store away from foodstuffs.
· **Further information about storage conditions:**
Store under lock and key and out of the reach of children.
Keep container tightly sealed.
Store receptacle in a well ventilated area.
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Exposure limit values:**	
123-86-4 n-butyl acetate	
WEL	Short-term value: 966 mg/m³, 200 ppm Long-term value: 724 mg/m³, 150 ppm
822-06-0 hexamethylene-di-isocyanate	
WEL	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Occupational exposure controls:**
· **General protective and hygienic measures:**
Clean skin thoroughly immediately after handling the product.
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
· **Respiratory protection:** Not necessary if room is well-ventilated.
· **Protection of hands:** Impervious gloves
· **Material of gloves**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**
Where there is a danger of the eyes coming into contact with splashes of liquid (i.e. when refilling larger quantities), safety goggles according to EN 166 (i.e. goggles with side shields) are recommended.

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· **Body protection:**
Not required.
Light weight protective clothing
· **Limitation and supervision of exposure into the environment**
Follow instructions for use, dosage and waste disposal.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Colour:	Colourless
· **Odour:**	Ester-like
· **Odour threshold:**	Not determined.
· **pH-value:**	Not applicable.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· **Flash point:**	62 °C (Seta Flash Closed Cup)
· **Flammability (solid, gaseous):**	Undetermined.
· **Ignition temperature:**	165 °C
· **Decomposition temperature:**	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	0.9 Vol %
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20 °C:**	1.098 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
water:	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic at 20 °C:	73 s (DIN 53211/4)
· **Solvent content:**	
Organic solvents:	22.8 %
VOC (EC)	22.80 %
Solids content:	76.9 %
· **9.2 Other information**	No further relevant information available.

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SECTION 10: Stability and reactivity

· **10.1 Reactivity**
· **10.2 Chemical stability**
· **Conditions to avoid:** No decomposition if used and stored according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:**
Reacts with alcohols, amines, aqueous acids and alkalis.
Reacts with water gently forming carbon dioxide. In case of moisture access pressure build-up and danger of bursting in closed packings.
· **10.6 Hazardous decomposition products:** Danger of forming toxic pyrolysis products.

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SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**

· **LD/LC50 values relevant for classification:**		
98-94-2 cyclohexyldimethylamine		
Oral	LD50	200-2000 mg/kg (rat)
Dermal	LD50	>400 mg/kg (rabbit)
Inhalative	LC50/4h	4.45 mg/l (rat)
822-06-0 hexamethylene-di-isocyanate		
Oral	LD50	738 mg/kg (rat)
Dermal	LD50	593 mg/kg (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Irritant to skin and mucous membranes.
· **Respiratory or skin sensitisation** Sensitisation possible through skin contact.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
· **Repeated dose toxicity** Undetermined.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)** Undetermined.

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SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** Undetermined.
· **12.2 Persistence and degradability** The solvent is biodegradable.
· **12.3 Bioaccumulative potential** Undetermined.
· **12.4 Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Harmful to aquatic organisms
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** Disposal must be made according to official regulations.

· **European waste catalogue**	
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
08 05 01*	waste isocyanates

· **Uncleaned packaging:**
· **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

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SECTION 14: Transport information

· **14.1 UN-Number** · **ADR, ADN, IMDG, IATA**	Void
· **14.2 UN proper shipping name** · **ADR, ADN, IMDG, IATA**	Void
· **14.3 Transport hazard class(es)** · **ADR, ADN, IMDG, IATA** · **Class**	Void
· **14.4 Packing group** · **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:** · **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

SECTION 15: Regulatory information

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

· **National regulations:**
· **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
People who suffer from allergies, asthma, chronic or recurring respiratory illnesses should not be deployed in any process using the product.

· **Other regulations, limitations and prohibitive regulations**
Other regulations (EC): Directive 2004/42/EC
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H226 Flammable liquid and vapour.
H290 May be corrosive to metals.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· **Training hints** ---

· **Recommended restriction of use**
Not intended for spraying and industrial processing.
Restricted to professional users.
People who suffer from allergies, asthma, chronic or recurring respiratory illnesses should not be deployed in any process using the product.

· **Department issuing MSDS:** Department for product development

· **Contact:** Dr. Reindl

· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Met. Corr.1: Corrosive to metals, Hazard Category 1
Acute Tox. 3: Acute toxicity, Hazard Category 3
Acute Tox. 1: Acute toxicity, Hazard Category 1
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

· **Sources** Safety data sheet for raw materials, eur-lex.europa.eu

· *** Data compared to the previous version altered.**