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

- **1.1 Product identifier**
- **Creation date version 1** 17.02.2005
- **Trade name** NEUKADUR Hardener Flexible Compound N 3
- **Article number:** P1006
- **Utilization of the substance of the formulation:**
Hardener for polyols for the production of polyurethanes
- **CAS Number:**
9016-87-9
- **EC number:**
618-498-9
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
For use in the do-it-yourself section is a further information available, see "Fact Sheet for resellers".
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Suter Kunststoffe AG
Aefligenstrasse 3
3312 Fraubrunnen
Tel. +41 (0)31 763 60 60
Fax. +41 (0)31 763 60 61
e-mail: info@swiss-composite.ch
- **Further information obtainable from:** Sales Team
- **1.4 Emergency telephone number:**
Tox Info Suisse phone : 145
International: +41 (0)44 251 51 51

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SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



health hazard

- Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Carc. 2 H351 Suspected of causing cancer.
 STOT RE 2 H373 May cause damage to the lung, the respiratory system and the respiratory tract through prolonged or repeated exposure.



- Acute Tox. 4 H332 Harmful if inhaled.
 Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2 H319 Causes serious eye irritation.

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Trade name NEUKADUR Hardener Flexible Compound N 3

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Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the GB CLP regulation.

Hazard pictograms

GHS07 GHS08

Signal word Danger**Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomeres and homologues

diphenylmethane-4,4'-di-isocyanate

Hazard statements

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H373 May cause damage to the lung, the respiratory system and the respiratory tract through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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.

As from 24 August 2023 adequate training is required before industrial or professional use.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients**3.1 Substances****CAS No. Description**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

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- Identification number(s)
- EC number: 618-498-9

· Dangerous components:

CAS: 101-68-8 EINECS: 202-966-0 Reg.nr.: 01-2119457014-47-xxxx	diphenylmethane-4,4'-di-isocyanate ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5% Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	25-50%
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* SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

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

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:

In contact with the skin preferably with cleaners based

Polyethylene wash or clean with plenty of hot water and soap. In reactions of Skin doctor immediately.

If skin irritation continues, consult a doctor.

· After eye contact:

Protect unharmed eye.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Do not induce vomiting; call for medical help immediately.

If swallowed, rinse mouth with water (only if the person is conscious).

A person vomiting while laying on their back should be turned onto their side.

Call a doctor immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

The product is irritating to the respiratory tract and may trigger skin and

Respiratory sensitization. Treatment of acute irritation or bronchial

is primarily symptomatic. Depending on the degree of exposure and the

Complaints may be necessary long-term medical care.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

- Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray.

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- **For safety reasons unsuitable extinguishing agents:**
Water with full jet
Water
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, formation of carbon monoxide, nitrogen oxide, isocyanate vapour, and traces of hydrogen cyanide is possible. Fireman have to wear self-contained breathing apparatus. Do not let enter contaminated extinguishing water into the soil, groundwater or surface waters.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **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**
Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Remove mechanically, with residual wet, absorbent material (eg sawdust, chemical binder based on Calcium silicate hydrate, sand). After approx 1 hour transfer to waste container and do not seal (evolution of CO₂). Keep damp in a safe ventilated area for several days. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 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**
At workplaces or system parts where isocyanate aerosols and / or vapors in higher concentrations can arise (e.g. pressure relief, mold ventilation, Blowing through mixing heads with compressed air), the occupational hygiene limit values are prevented. The air movement must be carried out by the people be done away. The effectiveness of the systems must be checked at regular intervals. Air limit values mentioned in Chapter 8 must be monitored. The personal protective measures described in Chapter 8 must be observed. Contact with the skin and eyes as well as the inhalation of the vapors absolutely avoid. Keep away from food and luxury items. Hands before breaks and at the end of work wash and apply protective skin ointment. Store work clothes separately. Soiled, Take off soaked clothing immediately.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.

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Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Keep container tightly closed and dry and storage in a good ventilated room.

Storage temperature: 20 - 25 °C.

· Information about storage in one common storage facility:

Store away from water.

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

Store away from foodstuffs.

· Further information about storage conditions:

Protect from humidity and water.

Keep container tightly sealed.

· Storage class: 10

· 7.3 Denomination of Origin Made in Germany

· Processing information Homogenize content before use

· General remark For processing instructions see data sheet

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SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEL (Great Britain) Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

AGW (Germany) Long-term value: 0.05 E mg/m³
I;=2=(I);DFG, H, Sah, Y, 12

101-68-8 diphenylmethane-4,4'-di-isocyanate

WEL (Great Britain) Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

AGW (Germany) Long-term value: 0.05 E mg/m³
I;=2=(I);DFG, 11, 12, H, Sah, Y

MAK (Austria) Short-term value: 0.1 mg/m³, 0.01 ppm
Long-term value: 0.05 mg/m³, 0.005 ppm
siehe Anhang III B

· DNELs

101-68-8 diphenylmethane-4,4'-di-isocyanate

Oral DNEL Acute - systemic effects 20 mg/kg bw/day (General population)

Dermal DNEL Acute - local effects 17.2 mg/cm² (General population)

28.7 mg/cm² (workers)

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Inhalative	DNEL Acute - systemic effects	25 mg/kg bw/day (General population) 50 mg/kg bw/day (workers)
	DNEL systemic effects - long term exposure	0.025 mg/m ³ (General population) 0.05 mg/m ³ (workers)
	DNEL local effects - long term exposure	0.025 mg/m ³ (General population) 0.05 mg/m ³ (workers)
	DNEL Acute - systemic effects	0.05 mg/m ³ (General population) 0.1 mg/m ³ (workers)
	DNEL Acute - local effects	0.05 mg/m ³ (General population) 0.1 mg/m ³ (workers)

· **PNECs**

101-68-8 diphenylmethane-4,4'-di-isocyanate

PNEC	1 mg/kg (soil (Boden))
PNEC STP	1 mg/L (sewage plant)
PNEC	1 mg/l (freshwater)
	0.1 mg/l (marine water)
	10 mg/l (intermittent releases)

· **Ingredients with biological limit values:**

101-68-8 diphenylmethane-4,4'-di-isocyanate

BMGV (Great Britain)	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine
BGW (Germany)	10 µg/g Kreatinin Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: 4,4'-Diaminodiphenylmethan

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

· **8.2 Exposure controls**

- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Respiratory protection:**

In inadequately ventilated places and during spraying respirator necessary. Recommended to be fresh-air mask or filter combination for short-term work A2-P2



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Not necessary if room is well-ventilated.

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· Hand protection

Preventive skin protection (3-point program) required



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection

Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties****· General Information**

· Colour:	Brown
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	>300 °C
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	>200 °C
· Auto-ignition temperature:	>600 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic at 20 °C:	200 mPas
· Solubility	
· water:	Insoluble.

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· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 25 °C:	0.00001 hPa
· Density and/or relative density	
· Density at 20 °C:	1.24 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
9.2 Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Not determined.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· VOC (EC)	0.0 g/l
· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

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SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: > 200 °C polymerisation, CO₂ separation.
- 10.3 Possibility of hazardous reactions
Exothermic reaction with amines and alcohols; reacts with water forming CO₂, in closed containers risk of bursting owing to increase of pressure.

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· **10.4 Conditions to avoid**

Moisture. Heat, open flames and other ignition sources. With contaminated pipes and tanks or corroded or rusty containers may lead to increased formation of hydrogen. Detail in section 7.

· **10.5 Incompatible materials:**

water, alcohol, amine, base and acid

Incompatible with oxidizing agents, acids

· **10.6 Hazardous decomposition products:** At the air > 300 °C: acrolein**SECTION 11: Toxicological information**· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**· **Acute toxicity**

Harmful if inhaled.

· **LD/LC50 values relevant for classification:**

Acute toxicity, by inhalation:

LC50 rat: 0.31 mg / l, 4 h

Converted acute toxicity: 1.5 mg / l

Test atmosphere: dust / mist

Method: Professional assessment

Assessment: Harmful if inhaled.

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

Oral	LD50	>10,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	>9,400 mg/kg (rabbit) (OECD 402 Acute Dermal Toxicity)

101-68-8 diphenylmethane-4,4'-di-isocyanate

Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>9,400 mg/kg (rabbit) (OECD 402 Acute Dermal Toxicity)

· **Skin corrosion/irritation**

Primary skin irritation

Diisocyanate: isomers and homologues

Species: rabbit

Result: Slightly irritating

Method: OECD Test Guideline 404

Primary mucous membrane irritation

Species: rabbit

Result: non-irritant

Classification: No eye irritation

Method: OECD Test Guideline 405

Toxicological examination of a comparable product.

· **Serious eye damage/irritation**

Causes serious eye irritation.

· **Respiratory or skin sensitisation**

Diisocyanate: isomers and homologues

Skin sensitization according to Magnusson / Klingman (maximization test):

Species: guinea pig

Result: negative

Classification: Does not cause skin sensitization

Method: OECD Test Guideline 406

Skin sensitization (local lymph node assay (LLNA)):

Species: Mouse

Result: positive

Classification: May cause sensitization by skin contact.

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Trade name NEUKADUR Hardener Flexible Compound N 3

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Method: OECD Test Guideline 429

Toxicological examination of a comparable product.

Respiratory sensitization:

Species: rat

Result: positive

Classification: May cause sensitization by inhalation

· **Germ cell mutagenicity**

Genotoxicity in vitro:

Diphenylmethanediisocyanate, isomers and homologues

Test type: Salmonella / microsome test (Ames test)

Test system: Salmonella typhimurium

Metabolic activation: with / without

Result: negative

Method: OECD Test Guideline 471

· **Carcinogenicity**

Diphenylmethanediisocyanate, isomers and homologues

Application Route: Inhalation

Species: rat

Dosage: 0 to 0.2 - 1 - 6 mg / m³

Exposure duration: 2

Frequency of treatment: 6 hours a day, 5 days a week

Test substance: as aerosol

Method: OECD Test Guideline 453

Appearance of tumors in the highest dose group

· **Reproductive toxicity**

teratogenicity

Diphenylmethanediisocyanate, isomers and homologues

NOAEL (teratogenicity): 12 mg / m³

NOAEL (maternal): 4 mg / m³

NOAEL (developmental toxicity): 4 mg / m³

Species: rat

Application Route: Inhalation

Doses: 0 - 01/04/12 mg / m³

Frequency of treatment: 6 hours per day (exposure duration: 10 days (Day 6 - 15 pc))

Test duration: 20 days

Test substance: as aerosol

Method: OECD Test Guideline 414

NOAEL (developmental toxicity): 4 mg / m³

Did not show teratogenic effects in animal experiments.

· **STOT-single exposure**

Diphenylmethanediisocyanate, isomers and homologues

Route of exposure: inhalation

Target organs: respiratory system

May cause respiratory irritation.

· **STOT-repeated exposure**

Diphenylmethanediisocyanate, isomers and homologues

Route of exposure: inhalation

Target organs: respiratory system

Can cause damage to organs through prolonged or repeated exposure.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

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Trade name NEUKADUR Hardener Flexible Compound N 3

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· Subacute to chronic toxicity:*Diisocyanate: isomers and homologues**NOAEL: 0.2 mg / m³**LOAEL: 1 mg / m³**Application Route: Inhalation**Species: rat**Dosage: 0 to 0.2 - 1 - 6 mg / m³**Exposure duration: 2**Frequency of treatment, 6 hours a day, 5 days per week**Target organs: lungs, nasal cavities**Test substance: as aerosol**Method: OECD Test Guideline 453**Findings: irritation of the nasal cavity and the lungs.**Investigation of a comparable product.***· Additional toxicological information:**

Over-exposure - especially when spraying isocyanate based varnishes without protective measures - there is a risk of concentration-dependent irritation eye, nose, throat and airways. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may already be initiated at low isocyanate concentrations, also below the value MAK.

· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity: In vitro tests show no mutagenic effects. If the available data basis, the classification criteria are not met.

Teratogenicity: is based on the available data, the classification criteria are not met.

Reproductive toxicity: is based on the available data, the classification criteria are not met.

· 11.2 Information on other hazards**· Endocrine disrupting properties**

None of the ingredients is listed.

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SECTION 12: Ecological information**· 12.1 Toxicity****· Aquatic toxicity:****9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

<i>LC50 (96 h)</i>	<i>>1,000 mg/l (Danio Rerio) (OECD 203 Fish, Acute Toxicity Test)</i>
<i>EC50 (24h)</i>	<i>>1,000 mg/l (Daphnia Magna) (OECD 202)</i>
<i>EC50(3h)</i>	<i>>100 mg/l (activated sludge) (OECD209 Activated Sludge, Respiration Inhibition Test)</i>
<i>NOEC / 21d</i>	<i>>10 mg/l (Daphnia Magna) (OECD 202 Daphnia sp. Acute Immobilisation Test)</i>
<i>NOEC / 14d</i>	<i>>1,000 mg/kg (Eisenia fetida (Regenwurm)) (OECD 207 Earthworm, Acute Toxicity Tests)</i>
<i>ErC50/72h</i>	<i>>1,640 mg/l (Scenedesmus subspicatus) (OECD 201 Alga, Growth Inhibition Test)</i>
<i>EC50 (grow inhibition)</i>	<i>1,000 mg/l (Avena sativa (Hafer))</i>
	<i>1,000 mg/l (Lactuca Sativa (Kopfsalat))</i>

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Trade name NEUKADUR Hardener Flexible Compound N 3

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101-68-8 diphenylmethane-4,4'-di-isocyanate

LC50 (96 h)	>1,000 mg/l (Danio Rerio) (OECD 203 Fish, Acute Toxicity Test)
EC50 (24h)	>1,000 mg/l (Daphnia Magna) (OECD 202 Daphnia sp. Acute Immobilisation Test)
EC50(3h)	>100 mg/l (activated sludge) (OECD209 Activated Sludge, Respiration Inhibition Test)
NOEC / 21d	>10 mg/l (Daphnia Magna) (OECD 202 Daphnia sp. Acute Immobilisation Test)
NOEC / 14d	>1,000 mg/kg (Eisenia fetida (Regenwurm)) (OECD 207 Earthworm, Acute Toxicity Tests)
	>1,000 mg/kg (Avena sativa (Hafer)) (OECD 208 Terrestrial Plant Test)
	>1,000 mg/kg (Lactuca Sativa (Kopfsalat)) (OECD 208 Terrestrial Plant Test)
ErC50/72h	>1,640 mg/l (Scenedesmus subspicatus) (OECD 201 Alga, Growth Inhibition Test)

12.2 Persistence and degradability

biodegradation:

Diphenylmethanediisocyanate, isomers and homologues

Test type: Aerobic

Inoculum: Activated sludge

Biodegradation: 0%, 28 d, ie not potentially degradable

Method: OECD Test Guideline 302C

According to the results of tests of biodegradability this product is not readily biodegradable.

Stability in water:

Diphenylmethanediisocyanate, isomers and homologues

Test Type: hydrolysis

Half-life: at 25 ° C for 20 h

The cloth rapidly hydrolyzed in water.

Investigation of a comparable product

Photodegradation:

Diphenylmethanediisocyanate, isomers and homologues

Test Type: phototransformation in air

Temperature: 25 ° C

Sensitizer: OH radicals

Sensitizer concentration: 500,000 l / cm³

Indirect photolysis half-life: 0.92 d

Method: SRC-AOP (calculation)

After release or contact with air is a moderate photochemical degradation of the substance.

Investigation of a comparable product.

Other information: Elimination by adsorption onto activated sludge**12.3 Bioaccumulative potential**

Diphenylmethanediisocyanate, isomers and homologues

Bioconcentration factor (BCF): <14

Species: Cyprinus carpio (Carp)

Exposure time: 42 d

Concentration: 0.2 mg / l

Method: OECD Test Guideline 305C

Accumulation in aquatic organisms is not expected.

Investigation on hydrolyzate.

The substance rapidly hydrolyzed in water.

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Trade name NEUKADUR Hardener Flexible Compound N 3

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- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate waste code according to the European Waste Catalogue (EWC) should be used.
No disposal via the sewage
- **Uncleaned packaging:**
- **Recommendation:**
Packaging must be emptied directly after the last product removal (tear drops, powder rest, scraped carefully). After neutralization of adhering to the walls of residues are product and labeling of hazardous substances to devalue. These packages can packaging-specifically to access points to the existing collection systems chemical industry will be given for recycling. Containers must be recycled in accordance with national legislation and environmental regulations occur.
Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|--|
| · 14.1 UN number or ID 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: | Not applicable. |
| · 14.6 Special precautions for user | No dangerous cargo.
Avoid temperatures below 0 ° C. Heat above +50 ° C.
Protect from moisture. |

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Trade name NEUKADUR Hardener Flexible Compound N 3

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.	Keep away from food, stimulants, acids and alkalis
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· UN "Model Regulation":	Void

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SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the GB CLP regulation.
- Hazard pictograms



GHS07 GHS08

- Signal word Danger
- Hazard-determining components of labelling:
diphenylmethanediisocyanate, isomeres and homologues
diphenylmethane-4,4'-di-isocyanate
- Hazard statements
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to the lung, the respiratory system and the respiratory tract through prolonged or repeated exposure.
- Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P284 [In case of inadequate ventilation] wear respiratory protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.

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GB

Trade name NEUKADUR Hardener Flexible Compound N 3

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· **National regulations:**· **Technical instructions (air):**

Class	Share in %
I	75-100

· **Waterhazard class:** Water hazard class 1 (VwVwS 17.05.99): slightly hazardous for water.· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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**

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 organs through prolonged or repeated exposure.

EUH204 Contains isocyanates. May produce an allergic reaction.

· **Recommended restriction of use**

The information in this safety data sheet corresponds to the best of our knowledge at the time of the revision. The information should give you clues for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The details are not transferable to other products. Insofar as the product mentioned in this safety data sheet is mixed with other materials, mixed or processed, or subjected to processing, the information in this safety data sheet, unless expressly stated otherwise, can not be transferred to the new material produced in this way.

· **Department issuing SDS:** environment protection department· **Contact:** Herr Ottensmann Tel. +49 (0)2056-25863-7· **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)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international 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)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

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Trade name NEUKADUR Hardener Flexible Compound N 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
*** Data compared to the previous version altered.**

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