

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name** NEUKADUR PN 1695 Comp. B
- **Utilization of the substance of the formulation:**  
Hardener for polyols for the production of polyurethanes
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU12 Manufacture of plastics products, including compounding and conversion
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
ALTRROPOL KUNSTSTOFF GmbH  
Daimlerstraße 9  
D-23617 Stockelsdorf  
Tel. +49 (0)451-49960-0  
Fax. +49 (0)451-49960-20  
e-mail: info@altropol.de
- **Further information obtainable from:** environment protection department
- **Emergency telephone number:**  
During normal opening times (7 am - 5 pm )  
phone : +49 (0)451-49960-0 or +49 (0)176-10232577

## 2 Hazards identification

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



GHS08 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 organs through prolonged or repeated exposure.         |



GHS07

- |                   |  |
|-------------------|--|
| 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 4 | H413 May cause long lasting harmful effects to aquatic life. |

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

- |                  |   |
|------------------|---|
| R20-40-48-48/20: | Harmful by inhalation. Limited evidence of a carcinogenic effect. Danger of serious damage to health by prolonged exposure. Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
|------------------|---|



Xn; Sensitising

- |         |   |
|---------|---|
| R42/43: | May cause sensitisation by inhalation and skin contact. |
|---------|---|



Xi; Irritant

- |            |  |
|------------|--|
| R36/37/38: | Irritating to eyes, respiratory system and skin. |
|------------|--|

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· **Label elements**

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Xn Harmful

· **Hazard-determining components of labelling:**

oligomeres MDI

· **Risk phrases:**

- 20 Harmful by inhalation.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 40 Limited evidence of a carcinogenic effect.
- 42/43 May cause sensitisation by inhalation and skin contact.
- 48 Danger of serious damage to health by prolonged exposure.
- 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

· **Safety phrases:**

- 9 Keep container in a well-ventilated place.
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective clothing and gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 60 This material and its container must be disposed of as hazardous waste.

· **Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substance**

· **Identification number(s)** 615-005-00-9

· **Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

32055-14-4	oligomeres MDI ☒ Xn R20-40-48/20; ☒ Xn R42/43; ☒ Xi R36/37/38 Carc. Cat. 3 ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
	alkylated aromatic hydrocarbon R53 ⚠ Asp. Tox. 1, H304; Aquatic Chronic 4, H413	

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

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#### 4 First aid measures

- **Description of first aid measures**
- **General information:**  
Involve doctor immediately.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **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:** 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:** If symptoms persist consult doctor.

#### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

#### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
cover accouterment bear , exposed person remove
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **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.
- **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.

#### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **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: 15 - 25 °C.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Store away from water.

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· **Further information about storage conditions:** *Keep container tightly sealed.*

## 8 Exposure controls/personal protection

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

· **Control parameters**

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

*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*

· **DNELs**

### alkylated aromatic hydrocarbon

Oral	DNEL	2.1 mg/kg/d (General population)
Dermal	DNEL	2.1 mg/kg/d (General population) 4.3 mg/kg/d (workers)
Inhalative	DNEL	7.4 mg/m <sup>3</sup> (General population) 30 mg/m <sup>3</sup> (workers)

· **PNECs**

### alkylated aromatic hydrocarbon

Oral	PNEC	25 mg/kg (-)
	PNEC STP	0.15 mg/L (-)
	PNEC aqua	0.26 ug/L (freshwater)
		0.026 ug/L (marine water)
	PNEC sediment	0.94 mg/kg (freshwater)
0.094 mg/kg (marine water)		
PNEC soil	0.19 mg/kg (-)	

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

· **Exposure controls**

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

· **Protection of hands:**



*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*

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· **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 protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing\* **9 Physical and chemical properties**· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	Fluid
Colour:	Yellow
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range:	41°C
Boiling point/Boiling range:	300°C

· **Flash point:** 250°C· **Ignition temperature:** 400°C· **Danger of explosion:** Product does not present an explosion hazard.· **Vapour pressure at 25°C:** 0.0002 hPa· **Density at 20°C:** ca. 1.2 g/cm<sup>3</sup>· **Solubility in / Miscibility with**

**water:** reacts with water forming CO<sub>2</sub>, risk of bursting

· **Viscosity:**

Dynamic at 20°C:	ca. 35 mPas
VOC (EC)	0.00 %

**10 Stability and reactivity**· **Reactivity**· **Chemical stability**· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions**

Exothermic reaction with amines and alcohols; reacts with water forming CO<sub>2</sub>, in closed containers risk of bursting owing to increase of pressure.

· **Incompatible materials:** Avoid contact with strong oxidizing agents.· **Hazardous decomposition products:** Hydrogen cyanide (prussic acid)

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**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

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

**32055-14-4 oligomeres MDI**

Oral	LD50	> 2000 mg/kg (Ratte)
Inhalative	LC50/4 h	490 mg/l (Ratte)

**alkylated aromatic hydrocarbon**

Oral	LD50	> 4000 mg/kg (Ratte)
Dermal	LD50	>4000 mg/kg (Ratte)
Inhalative	LC50/4 h	> 5.6 mg/l (Ratte)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
Sensitization possible through inhalation.  
Sensitization possible through skin contact.

**12 Ecological information**

- **Toxicity**

- **Acquatic toxicity:**

**32055-14-4 oligomeres MDI**

EC50 (48 h)	1000 mg/l (D)
-------------	---------------

**alkylated aromatic hydrocarbon**

EC50 (48 h)	> 0.16 mg/l (D)
EC50 (72 h)	0.15 mg/l (A)
LC50 (96 h)	> 0.5 mg/l (F)

- **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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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**14 Transport information**

- Land transport ADR/RID (cross-border)
- ADR/RID class: -

- Maritime transport IMDG:



- IMDG Class: 9
- UN Number: 3082
- Label: 9
- Packaging group: III
- EMS Number: F-A,S-F
- Marine pollutant: Yes  
Symbol (fish and tree)
- Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(alkylated aromatic hydrocarbon )

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -

- UN "Model Regulation": -
- Special precautions for user Not applicable.

**15 Regulatory information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water hazard class 1 (VwVwS 17.05.99): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

**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

- H304 May be fatal if swallowed and enters airways.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 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.  
 H413 May cause long lasting harmful effects to aquatic life.
- 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.  
 R53 May cause long-term adverse effects in the aquatic environment.

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· **Department issuing MSDS:** environment protection department

· **Contact:**

Herr Karasmann Tel. +49 (0)451-49960-0

Herr Grützmacher Tel. +49 (0)2056-25863-6

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

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