

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

- **1.1 Product identifier**
- **Creation date version 1** 24.01.2020
- **Trade name** NEUKADUR MultiCast 12 TZ 12
- **Article number:** P2371
- **Utilization of the substance of the formulation:** Polyol for Polyurethanes
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
ALTROPOL KUNSTSTOFF GmbH  
Rudolf-Diesel-Str 9 - 13  
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
- **1.4 Emergency telephone number:**  
During normal opening times (7 am - 5 pm )  
phone : +49 (0)451-49960-0  
Members of the public seeking specific information on poisons should contact:  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111

**SECTION 2: Hazards identification**

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



Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H319 Causes serious eye irritation.
- **Precautionary statements**  
P264 Wash thoroughly after handling.  
P280 Wear eye protection / face protection.

(Contd. on page 2)

## Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 1)

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

P337+P313 If eye irritation persists: Get medical advice/attention.

## · 2.3 Other hazards

## · Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

## · 3.2 Mixtures

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

## · Dangerous components:

CAS: 28553-12-0 EINECS: 249-079-5 Reg.nr.: 01-2119430798-28-xxxx	di-"isononyl" phthalate substance with a Community workplace exposure limit	10-25%
CAS: 25322-69-4 Reg.nr.: 01-2119457556-29-xxxx	Polypropylenglykol ⚠ Acute Tox. 4, H302	10-25%
CAS: 102-60-3 EINECS: 203-041-4 Reg.nr.: 01-2119552434-41-xxxx	1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol ⚠ Eye Irrit. 2, H319	10-25%
CAS: 8002-13-9 EINECS: 232-299-0	Rape oil substance with a Community workplace exposure limit	5-10%
EC number: 918-973-3 Reg.nr.: 01-2119458871-30	Kohlenwasserstoffe, C13-C16, Isoalkane, Cycloalkane, <2% Aromaten ⚠ Asp. Tox. 1, H304	1-2.5%

· Additional information: For the wording of the listed hazard 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; consult doctor in case of complaints.

## · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

## · After eye contact:

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

## · After swallowing:

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

Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

(Contd. on page 3)

**Trade name NEUKADUR MultiCast 12 TZ 12**

(Contd. of page 2)

- **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:**  
*CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
- **5.2 Special hazards arising from the substance or mixture**  
*In case of fire, the following can be released:*  
*toxic fume*  
*carbon dioxide*  
*Carbon monoxide (CO)*  
*Nitrogen oxides (NO<sub>x</sub>)*
- **5.3 Advice for firefighters**
- **Protective equipment:** *Wear self-contained respiratory protective device.*
- **Additional information**  
*Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.*  
*Collect contaminated fire fighting water separately. It must not enter the sewage system.*

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
*Ensure adequate ventilation*  
*Wear protective equipment. Keep unprotected people away.*
- **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 section 13.*
- **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.*

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
*Inform personnel of the affiliated with the product hazards and risks*  
*Ensure good ventilation / exhaustion at the workplace.*  
*Use and open container with care.*
- **Information about fire - and explosion protection:**  
*Protect from heat.*  
*Keep ignition sources away - Do not smoke.*  
*Protect against electrostatic charges.*

(Contd. on page 4)

GB

## Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 3)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Use only receptacles specifically permitted for this substance/product.  
Prevent any seepage into the ground.  
Store only in the original receptacle.
- **Information about storage in one common storage facility:**  
Store away from oxidising agents.  
Store away from water.  
Store away from foodstuffs.  
Do not store together with oxidising and acidic materials as well as heavy-metal compounds.
- **Further information about storage conditions:**  
Store in dry conditions.  
Protect from frost.
- **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

**SECTION 8: Exposure controls/personal protection**· **8.1 Control parameters**· **Ingredients with limit values that require monitoring at the workplace:****28553-12-0 di-"isononyl" phthalate**WEL (Great Britain) Long-term value: 5 mg/m<sup>3</sup>**8002-13-9 Rape oil**AGW (Germany) Long-term value: 5 A mg/m<sup>3</sup>  
4(II);DFG, Y· **DNELs****28553-12-0 di-"isononyl" phthalate**

Oral	DNEL Long-term - systemic effects	4.4 mg/kg bw/day (General population)
	DNEL Chronic - systemic effects	4.4 mg/kg bw/d (workers)
Dermal	DNEL Long-term - systemic effects	220 mg/kg bw/day (General population)
	DNEL chronic - systemic effects	366 mg/kg bw/day (workers)
Inhalative	DNEL Long-term - systemic effects	220 mg/kg bw/d (General population)
	DNEL chronic - systemic effects	366 mg/kg bw/d (workers)
	DNEL Long-term - systemic effects	15.3 mg/m <sup>3</sup> (General population)
	DNEL systemic effects - short term	51.72 mg/m <sup>3</sup> (workers)
	DNEL chronic - systemic effects	15.3 mg/m <sup>3</sup> (General population)
		51.72 mg/m <sup>3</sup> (workers)

**102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol**

Oral	DNEL Long-term - systemic effects	2.5 mg/kg (General population)
Dermal	DNEL Long-term - systemic effects	2.5 mg/kg (General population)
		4.2 mg/kg (workers)
Inhalative	DNEL Long-term - systemic effects	8.7 mg/m <sup>3</sup> (General population)

(Contd. on page 5)

## Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 4)

	29.4 mg/m <sup>3</sup> (workers)
· <b>PNECs</b>	
<b>28553-12-0 di-"isononyl" phthalate</b>	
PNEC soil	30 mg/kg (soil ( Boden))
PNEC Secondary poisoning	150 mg/kg (food)
<b>102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol</b>	
PNEC STP	70 mg/L (sewage plant)
PNEC sediment	0.0193 mg/kg (marine water)
	0.193 mg/kg (freshwater- sediment)
PNEC soil	0.0183 mg/kg (soil ( Boden))
PNEC	0.085 mg/l (freshwater)
	0.0085 mg/l (marine water)
	1.51 mg/l (intermittent releases)

· **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:**

The usual precautionary measures are to be adhered to when handling chemicals.

· **Respiratory protection:** Not necessary if room is well-ventilated.

· **Hand protection**

Preventive skin protection (3-point program) required

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. 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**

Suitable materials for protective gloves, EN 374-3:

Polychloroprene - CR: thickness > = 0.5 mm, breakthrough time > = 480 min.

NBR - NBR: thickness > = 0,35 mm, Breakthrough time > = 480 min.

Butyl rubber - IIR: thickness > = 0.5 mm, breakthrough time > = 480 min.

Fluorine rubber - FKM: thickness > = 0.4 mm; breakthrough time > = 480 min.

Recommendation: Dispose of contaminated gloves ..

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

· **Eye/face protection**



Tightly sealed goggles

(Contd. on page 6)

GB

Printing date 05.07.2023

Version number 15 (replaces version 14)

Revision: 21.04.2023

Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 5)

· **Body protection:** Protective work clothing**SECTION 9: Physical and chemical properties**· **9.1 Information on basic physical and chemical properties**· **General Information**

· <b>Colour:</b>	Whitish
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Boiling point or initial boiling point and boiling range</b>	Undetermined.
· <b>Flammability</b>	Not applicable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	> 100 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic at 20 °C:</b>	160 mPas
· <b>Solubility</b>	
· <b>water:</b>	Insoluble.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	0.95 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.

· **9.2 Other information**

· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	8.3 %
· <b>VOC (EC)</b>	32.4 g/l
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.

· **Information with regard to physical hazard classes**

· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void

(Contd. on page 7)

GB

Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 6)

· 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

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Violent reaction with concentrated alkali and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**  
Incompatible with oxidizing agents, acids  
water, alcohol, amine, base and acid
- **10.6 Hazardous decomposition products:** if handled accordingly no products of decomposition.

**SECTION 11: Toxicological information**

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:****28553-12-0 di-"isononyl" phthalate**

Oral	LD50	>10,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	>3,160 mg/kg (rabbit)

**25322-69-4 Polypropylenglykol**

Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)

**102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol**

Oral	LD50	>2,000- <5,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402 Acute Dermal Toxicity)

**Kohlenwasserstoffe, C13-C16, Isoalkane, Cycloalkane, <2% Aromaten**

Oral	LD50	5,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
Dermal	LD50	2,000 mg/kg (rabbit) (OECD 402 Acute Dermal Toxicity)

(Contd. on page 8)



## Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 7)

Inhalative LC50/4 h 5 mg/l (rat) (OECD 403 Acute Inhalation Toxicity)

- **Skin corrosion/irritation** slightly irritating (OECD method 404), does not require labeling
- **Serious eye damage/irritation** slightly irritant, labelling not required (analogy conclusion)
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

## SECTION 12: Ecological information

· **12.1 Toxicity**· **Aquatic toxicity:****28553-12-0 di-"isononyl" phthalate**

LC0(96h)	>100 mg/l (Brachydanio rerio)
LC50 (96 h)	>100 mg/l (Brachydanio rerio)
EC50 (48 h)	>74 mg/l (D)
EC50 (24h)	>74 mg/l (Daphnia Magna)
EC50 (0,5h)	>83.9 mg/l (activated sludge)
NOEC/72h	88 mg/l (Scenedesmus subspicatus)
NOEC / 21d	≥100 mg/l (Daphnia Magna) (OECD 202 Daphnia sp. Acute Immobilisation Test)
ErC50 (72h)	>88 mg/l (Scenedesmus subspicatus)

**25322-69-4 Polypropylenglykol**

LC50 (96 h)	>100 mg/l (Oncorhynchus mykiss)
EC50 (48 h)	>100 mg/l (Daphnia Magna)
ErC50 (72h)	>100 mg/l (Scenedesmus subspicatus)

**102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol**

LC50 (96 h)	>100 mg/l (Leuciscus)
EC50 (48 h)	>100 mg/l (Daphnia Magna)
EC50 (72 h)	>100 mg/l (Desmodesmus subspicatus)
EC20(0,5h)	>1,000 mg/l (activated sludge)

**Kohlenwasserstoffe, C13-C16, Isoalkane, Cycloalkane, <2% Aromaten**

EL50 (72h)	>1,000 mg/l (A) (OECD 201 Alga, Growth Inhibition Test)
EL50 (48h)	>1,000 mg/l (Daphnia Magna) (OECD 202 Daphnia sp. Acute Immobilisation Test)
LL50(96h)	>1,000 mg/l (F) (OECD 203 Fish, Acute Toxicity Test)

- **12.2 Persistence and degradability** No further relevant information available.

(Contd. on page 9)



Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 8)

- **Other information:** Elimination by adsorption onto activated sludge
- **12.3 Bioaccumulative potential** No further relevant information available.
- **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 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
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.
- **Uncleaned packaging:**
- **Recommendation:**  
The empty containers may only be disposed of after the residues stuck to the container walls have been removed.  
Disposal according to official regulations.

**SECTION 14: Transport information**

- |   |                 |
|---|-----------------|
| · <b>14.1 UN number or ID number</b>                                  |                 |
| · <b>ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>14.2 UN proper shipping name</b>                                 |                 |
| · <b>ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>14.3 Transport hazard class(es)</b>                              |                 |
| · <b>ADR, ADN, IMDG, IATA</b>   |                 |
| · <b>Class</b>  | Void            |
| · <b>14.4 Packing group</b>   |                 |
| · <b>ADR, IMDG, IATA</b>  | Void            |
| · <b>14.5 Environmental hazards:</b>                                  | Not applicable. |
| · <b>14.6 Special precautions for user</b>                            | Not applicable. |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b> | Not applicable. |

(Contd. on page 10)

Trade name NEUKADUR MultiCast 12 TZ 12

(Contd. of page 9)

· UN "Model Regulation":

Void

**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 product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H319 Causes serious eye irritation.
- **Precautionary statements**  
P264 Wash thoroughly after handling.  
P280 Wear eye protection / face 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.  
P337+P313 If eye irritation persists: Get medical advice/attention.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
NK	1-2.5

- **Waterhazard class:** Water hazard class 2 (Self-assessment): 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**  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.
- **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

(Contd. on page 11)

**Trade name NEUKADUR MultiCast 12 TZ 12**

(Contd. of page 10)

*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.*

*UFI code is valid in:*

*Germany*

*Portugal*

· **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*

*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*

*Asp. Tox. 1: Aspiration hazard – Category 1*