

**Safety Data Sheet**  
in accordance with HSNO

Printing date 16.01.2019

Version number 42

Revision: 16.01.2019

**SECTION 1: Identification of the substance or mixture and of the supplier**

- **1.1 Product identifier**
- **Trade name** Okamul PU; Komp. B
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** **Do not use for splashing / spraying  
none**
- **Sector of Use** **SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)**
- **Application of the substance / the mixture** **Hardening agent/ Curing agent**
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** **Polyflor New Zealand  
2 Narek Place  
Manukau 2104  
New Zealand  
Phone: 0800765935  
sales@polyflor.co.nz**
- **Informing department:** **Laboratory, departments of environmental protection and labor protection**
- **1.4 Emergency telephone number:** **Poison Information Center Freiburg Tel.: +49(0)761/ 19240  
(24h German and English)**

**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 organs through prolonged or repeated exposure.**



**Acute Tox. 4 H312 Harmful in contact with skin.**

**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.**

- **Determined by Kiesel using GHS/HSNO Criteria** **6.1D, 6.1E, 6.3A, 6.4A, 6.5A, 6.5B, 6.7B, 6.9B**

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

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## · Hazard pictograms



GHS07 GHS08

## · Signal word

Danger

 · Hazard-determining components of labelling:  
 · Hazard statements

diphenylmethanediisocyanate, isomeres and homologues  
 H312+H332 Harmful in contact with skin or 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 organs through prolonged or repeated exposure.

## · Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P281 Use personal protective equipment as required.  
 P285 In case of inadequate ventilation wear respiratory protection.  
 P302+P352 IF ON SKIN: Wash with plenty of water/.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## · Additional information:

Restricted to professional users  
 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

## · Dangerous components:

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	50-100%
	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	

## · Additional information

Have also a look to point 8 "Exposure controls and personal protection"  
 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

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- **After inhalation** **Keep patient calm, remove to fresh air, summon medical help. Symptoms can appear later. Provide plenty of fresh air. In case of unconsciousness bring patient into stable side position for transport.**
- **After skin contact** **Instantly wash with water and soap and rinse thoroughly.**
- **After eye contact** **Rinse immediately and thoroughly with eyelids open for 15 minutes under running water, consult eye specialist. In case of persistent symptoms consult doctor.**
- **After swallowing**
- **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.**

## SECTION 5: Fire fighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents** **Use fire fighting measures that suit the environment.**
- **5.2 Special hazards arising from the substance or mixture** **Formation of toxic gases is possible during heating or in case of fire. No further relevant information available.**
- **5.3 Advice for firefighters**
- **Protective equipment:** **Wear non-circulation breathing equipment and chemical-protective clothing. Do not inhale explosion gases or fire fumes.**

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** **Ensure adequate ventilation**
- **6.2 Environmental precautions:** **No special measures required.**
- **6.3 Methods and material for containment and cleaning up:** **Take-up with liquid binding material (sand, diatomaceous earth, acid binding agent, universal binding agent). Dispose of contaminated material as waste according to item 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 information on disposal.**

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** **Do not leave the container standing open. Ensure good ventilation/exhaustion at the workplace. Open and handle container with care. Prevent formation of aerosols.**

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- **Information about protection against explosions and fires:** *Keep breathing equipment ready.*
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep container tightly sealed.*
- **7.3 Specific end use(s)** *No further relevant information available.*

## SECTION 8: Exposure controls/personal protection

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

### · 8.1 Control parameters

- **Components with critical values that require monitoring at the workplace:**

**CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

<b>WES (New Zealand)</b>	<b>Short-term value: 0.07 mg/m<sup>3</sup></b> <b>Long-term value: 0.02 mg/m<sup>3</sup></b> <b>sen, vapours, mist, dust; as -NCO</b>
<b>NES (Australia)</b>	<b>Short-term value: 0.07 mg/m<sup>3</sup></b> <b>Long-term value: 0.02 mg/m<sup>3</sup></b> <b>Sen, as -NCO</b>
<b>WES (Australia)</b>	<b>Short-term value: 0.07 mg/m<sup>3</sup></b> <b>Long-term value: 0.02 mg/m<sup>3</sup></b> <b>Sen, as -NCO</b>

- **Additional information:** *The lists that were valid during the compilation were used as basis.*

### · 8.2 Exposure controls

- **Personal protective equipment**
- **General protective and hygienic measures**

*Do not eat, drink or smoke while working.  
Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Store protective clothing separately.  
Avoid contact with the eyes and skin.*

- **Breathing equipment:** *In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.*

- **Protection of hands:** *Protective gloves.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
- **Material of gloves** *Nitrile rubber, NBR  
Fluorocarbon rubber (Viton)*

- **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.*

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· **Eye protection:** **Tightly sealed safety glasses.**

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## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · Appearance:

· <b>Form:</b>	<b>Fluid</b>
· <b>Colour:</b>	<b>Brown</b>
· <b>Smell:</b>	<b>earthy, slightly musty.</b>
· <b>Odour threshold:</b>	<b>Not determined.</b>

· **pH-value:** **n.a.**

#### · Change in condition

· <b>Melting point/freezing point:</b>	<b>41 °C</b>
· <b>Initial boiling point and boiling range:</b>	<b>&gt;200 °C ((DIN))</b>

· **Flash point:** **> 100 °C ((DIN))**

· **Inflammability (solid, gaseous)** **Not applicable.**

· **Ignition temperature:** **400 °C ((DIN))**

· **Decomposition temperature:** **Not determined.**

· **Self-inflammability:** **Product is not selfigniting.**

· **Explosive properties:** **Product is not explosive.**

#### · Critical values for explosion:

· <b>Lower:</b>	<b>Not determined.</b>
· <b>Upper:</b>	<b>Not determined.</b>

· **Steam pressure at 25 °C:** **0.0002 hPa ((DIN))**

· <b>Density at 20 °C</b>	<b>1.275 g/cm<sup>3</sup></b>
· <b>Relative density</b>	<b>Not determined.</b>
· <b>Vapour density</b>	<b>Not determined.</b>
· <b>Evaporation rate</b>	<b>Not determined.</b>

#### · Solubility in / Miscibility with Water:

**less miscible**

· **Partition coefficient: n-octanol/water:** **Not determined.**

#### · Viscosity:

· <b>dynamic at 20 °C:</b>	<b>220 mPas</b>
· <b>kinematic:</b>	<b>Not determined.</b>

· **9.2 Other information** **No further relevant information available.**

## SECTION 10: Stability and reactivity

· **10.1 Reactivity** **No further relevant information available.**

· **10.3 Possibility of hazardous reactions** **No dangerous reactions known**

· **10.4 Conditions to avoid** **No further relevant information available.**

· **10.5 Incompatible materials:** **No further relevant information available.**

· **10.6 Hazardous decomposition products:** **None known.**

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## SECTION 11: Toxicological information

### · 11.1 Information on toxicological effects

· **Acute toxicity** Harmful in contact with skin or if inhaled.

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

**CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rab)
Inhalative	LC50/4 h	0.493 mg/l (rat)

· **Primary irritant effect:**

· **Skin corrosion/irritation** Causes skin irritation.

· **Serious eye damage/irritation** Causes serious eye irritation.

· **Respiratory or skin sensitisation** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

· **Subacute to chronic toxicity:** Subacute-chronical toxicity

Length of trials: 2 years

Application: inhalative (rat): > 0.2 < 1 mg/m<sup>3</sup> aerosol (PMDI).

Findings: when inhaled, the substance caused clear local irritation in the rats with epithelium damage.

Application: inhalative (rat): 6 mg/m<sup>3</sup> aerosol (PMDI).

Findings: when inhaled, the substance caused clear local irritation in the rats with epithelium damage. Some of the animals also suffered local tumour growth after this.

· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

Carc.2

· **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

· **Carcinogenicity**

Suspected of causing cancer.

· **Reproductive toxicity**

Based on available data, the classification criteria are not met.

· **STOT-single exposure**

May cause respiratory irritation.

· **STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

· **Aspiration hazard**

Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### · 12.1 Toxicity

· **Aquatic toxicity:**

**CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

EC50(3h)	≥1,000 mg/l (Belebtschlamm Bakterien)
LC 50 (96h)	>1,000 mg/l (Danio rerio (Zebrabärbling))
	>1,000 mg/l (Akute Fischtoxizität (Zebrafisch))

· **12.2 Persistence and degradability**

No further relevant information available.

· **12.3 Bioaccumulative potential**

No further relevant information available.

· **12.4 Mobility in soil**

No further relevant information available.

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- **Additional ecological information:**
- **General notes:**                      **Water hazard class 1 (Self-assessment): slightly hazardous for water.**  
**Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.**
- **12.5 Results of PBT and vPvB assessment**
- **PBT:**                                      **Not applicable.**
- **vPvB:**                                    **Not applicable.**
- **12.6 Other adverse effects**        **No further relevant information available.**

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**                      **Must be forwarded for special treatment in accordance with local authority regulations, e.g. suitable incineration plant.**
- **Recommendation**                      **Disposal according to official regulations**
- **Uncleaned packagings:**
- **Recommendation:**                      **Disposal must be made according to official regulations.**

### SECTION 14: Transport information

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>  | Void   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>                            | Void   |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Class</b></li> </ul> | Void   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | Void   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>                                | No   |
| <ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> </ul>  | Not applicable.  |
| <ul style="list-style-type: none"> <li>· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> </ul>                        | Not applicable.  |
| <ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>  | Not classified as dangerous in the meaning of transport regulations. |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>   | Void   |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**                      **This substance is to be managed using the conditions specified in an applicable Group Standard**
- | HSR Number        | Group Standard                            |
|-------------------|---|
| HSR002624<br>2006 | N.O.S. (Subsidiary Hazard) Group Standard |

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**HSR002535 Compressed Gas Mixtures (Subsidiary Hazard) Group Standard 2006**  
**HSR002596 Laboratory Chemicals and Reagent Kits Group Standard 2006**  
**HSR002530 Cleaning Products (Subsidiary Hazard) Group Standard 2006**  
**HSR002585 Fuel Additives (Subsidiary Hazard) Group Standard 2006**  
**HSR002519 Aerosols (Subsidiary Hazard) Group Standard 2006**  
**HSR002521 Animal Nutritional and Animal Care Products Group Standard 2006**  
**HSR002606 Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2006**  
**HSR002644 Polymers (Subsidiary Hazard) Group Standard 2006**  
**HSR002647 Reagent Kits Group Standard 2006**  
**HSR002612 Metal Industry Products (Subsidiary Hazard) Group Standard 2006**  
**HSR002670 Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006**  
**HSR002503 Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006**  
**HSR002638 Photographic Chemicals (Subsidiary Hazard) Group Standard 2006**  
**HSR002565 Embalming Products (Subsidiary Hazard) Group Standard 2006**  
**HSR002578 Food Additives and Fragrance Materials (Subsidiary Hazard) Group Standard 2006**  
**HSR002558 Dental Products (Subsidiary Hazard) Group Standard 2006**  
**HSR002684 Water Treatment Chemicals (Subsidiary Hazard) Group Standard 2006**  
**HSR002573 Fire Fighting Chemicals Group Standard 2006**  
**HSR100425 Pharmaceutical Active Ingredients Group Standard 2010**  
**HSR002600 Leather and Textile Products (Subsidiary Hazard) Group Standard 2006**  
**HSR002571 Fertilisers (Subsidiary Hazard) Group Standard 2006**  
**HSR002648 Refining Catalysts Group Standard 2006**  
**HSR002653 Solvents (Subsidiary Hazard) Group Standard 2006**  
**HSR002544 Construction Products (Subsidiary Hazard) Group Standard 2006**  
**HSR002549 Corrosion Inhibitors (Subsidiary Hazard) Group Standard 2006**  
**HSR002552 Cosmetic Products Group Standard 2006**  
**HSR100757 Veterinary Medicine (Limited Pack Size, Finished Dose) Standard 2012**  
**HSR100758 Veterinary Medicines (Non-dispersive Closed System Application) Group Standard 2012**  
**HSR100759 Veterinary Medicines (Non-dispersive Open System Application) Group Standard 2012**  
**HSR100628 Straight-chained Lepidopteran Sex Pheromone Group Standard 2012**

· New Zealand Inventory of Chemicals

All ingredients are listed.

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· **New Zealand HSNO Hazard Classes and Categorie**

**None of the ingredients is listed.**

· **Directive 2012/18/EU**  
 · **Named dangerous substances - ANNEX I**  
 · **15.2 Chemical safety assessment:**

**None of the ingredients is listed.**

**A Chemical Safety Assessment has not been carried out.**

## SECTION 16: Other information

**This information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. It does not constitute a legal warranty regulations. The delivery specifications are contained in the corresponding product sheet.**

· **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.**

· **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)**  
**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)**  
**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**  
**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.**

· **Comment**

**The information is based on our knowledge we do have so far. However it is not a confirmation of product features and does not establish contractual legal relationship. Use, operation and processing are the responsibility of the customer.**