

ARCOL POLYOL 5613

Version 2.7

Revision Date 23.11.2017

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

1.1 Product identifier

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1.2 Relevant identified uses of the substance or mixture and uses advised against

Use: Polyol components for the production of polyurethanes

1.3 Details of the supplier of the safety data sheet

Covestro (Hong Kong) Limited 43/F Hopewell Centre 183 QUEEN'S ROAD EAST, WANCHAI HONG KONG

Tel: +852 28955888 Fax: +852 25768862 e-mail: productsafetyapac@covestro.com

1.4 Emergency telephone number

TRANSPORTATION EMERGENCY: CALL CHEMTREC: 800-968-793 (Toll Free) Information Phone: +852 93161380, +852 96807276, +852 97269077

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification:

Non-hazardous substance according to GHS classification

2.2 Label elements

GHS-Labelling

Non-hazardous substance according to GHS classification

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Type of product: Mixture

3.2 Mixtures

polyether polyol mixture

No dangerous ingredients according to REACH-Regulation (EC) No. 1907/2006.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: Take off all contaminated clothing immediately.

If inhaled: Take the person into the fresh air and keep him warm, let him rest; if there is difficulty in breathing, medical advice is required.

In case of skin contact: In case of skin contact wash affected areas thoroughly with soap and plenty of water. Consult a doctor in the event of a skin reaction.

In case of eye contact: Hold the eyes open and rinse with preferably lukewarm water for a sufficiently long period of time (at least 10 minutes). Contact an ophthalmologist.

If swallowed: DO NOT induce the patient to vomit, medical advice is required.

4.2 Most important symptoms and effects, both acute and delayed

Notes to physician: Basic first aid, decontamination, symptomatic treatment.

4.3 Indication of any immediate medical attention and special treatment needed

Therapeutic measures: No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO2), Foam, extinguishing powder, in cases of larger fires, water spray should be used.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

5.3 Advice for fire-fighters

Firemen must wear self-contained breathing apparatus.

Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Put on protective equipment (see section 8). Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

6.2 Environment related measures

Do not allow to escape into waterways, wastewater or soil.

6.3 Methods and material for containment and cleaning up

Take up with absorbent for chemicals or, if necessary with dry sand and store in closed containers.

6.4 Reference to other sections

For further disposal measures see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.

In all workplaces or parts of the plant where high concentrations of aerosols and/or vapors may be generated (e.g. during pressure release, mold venting or when cleaning mixing heads with an air blast), appropriately located exhaust ventilation must be provided in such a way that the WEL is not exceeded.

The air should be drawn away from the personnel handling the product The efficiency of the exhaust equipment should be periodically checked.

Precautions should generally be taken against electrostatic charges according to the equipment used and the way the product is handled and packaged.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at the end of workday. Keep working clothes separately. Change contaminated or soaked clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry.

Further specific information see our :"Technical Information"

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No information on Exposure Limit Values necessary according to EC directive 2006/121/EG

For technical protective measures to limit exposure see also Section 7 "Handling and storage".

8.2 Exposure controls

Respiratory protection

Unless the product is entirely enclosed, do not handle it until you have studied the respiratory precautions issued by the appropriate authority or accident prevention association. If vapors form, respirators must be used. Put on full-mask respirator with filter type ABEK.

Hand protection

Protective gloves are recommended. Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (>= 0.35 mm) Breakthrough time not tested; dispose of immediately after contamination.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear suitable protective clothing.

Safety precautions for handling freshly molded polyurethane parts: see section 16

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	viscous
Colour:	colourless
Odour:	slight inherent odour
Odour Threshold:	not established
pH:	6,5
Pour point:	-36 °C
Initial boiling point:	> 200 °C
Flash point:	235 °C
Evaporation rate:	not established
Flammability (solid, gas):	not applicable
Burning number:	not applicable
Vapour pressure:	0,00133 hPa at 25 °C
Vapour density:	not established
Density:	1,02 g/cm3 at 20 °C
Water solubility:	slightly soluble
Surface tension:	not established
Partition coefficient (n-octanol/water):	not established
Auto-ignition temperature:	not applicable
Ignition temperature:	not established
Decomposition temperature:	not established
Viscosity, dynamic:	788 mPa.s at 20 °C
	575 mPa.s at 25 °C
	50 mPa.s at 95 °C
Explosive properties:	not established
Dust explosion class:	not applicable
Oxidising properties:	not established

9.2 Other information

The indicated values do not necessarily correspond to the product specification. Please refer to the product information sheet or the technical information sheet for specification data.

SECTION 10: Stability and reactivity

10.1 Reactivity

This information is not available.

10.2 Chemical stability

No decomposition below initial boiling point.

10.3 Possibility of hazardous reactions

No hazardous reactions when used as directed.

10.4 Conditions to avoid

This information is not available.

10.5 Incompatible materials

This information is not available.

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10.6 Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

SECTION 11: Toxicological information

Toxicological studies on the product are not yet available.

Please find below the toxicological data available to us for the components.

11.1 Information on toxicological effects

Acute toxicity, oral Polyether polyol LD50 rat: > 5.000 mg/kg

Acute toxicity, dermal

Polyether polyol LD50 rat, male/female: > 2.000 mg/kg Method: OECD Test Guideline 402

Acute toxicity, inhalation

Polyether polyol LC50 rat: > 3,2 mg/l, 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity

Primary skin irritation

Polyether polyol Species: rabbit Result: slight irritant Classification: No skin irritation

Primary mucosae irritation

Polyether polyol Species: rabbit Result: slight irritant Classification: No eye irritation

Sensitisation

Polyether polyol Skin sensitisation: Species: Guinea pig Result: negative Classification: Does not cause skin sensitization. Method: OECD Test Guideline 406

Subacute, subchronic and prolonged toxicity Polyether polyol

No data available.

Carcinogenicity

Polyether polyol No data available.

Reproductive toxicity/Fertility

Polyether polyol No data available.

Reproductive toxicity/Teratogenicity Polyether polyol

No data available.

Genotoxicity in vitro

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Polyether polyol Test type: Ames test Test system: Salmonella typhimurium Metabolic activation: with/without Result: negative Method: OECD Test Guideline 471

Test type: Ames test Test system: Escherichia coli Metabolic activation: with/without Result: negative Method: OECD Test Guideline 471

Genotoxicity in vivo

Polyether polyol No data available.

STOT evaluation – one-time exposure

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

STOT evaluation – repeated exposure

Polyether polyol No data available.

Aspiration toxicity

Polyether polyol No data available.

CMR Assessment

Polyether polyol Carcinogenicity: No data available. Mutagenicity: Based on available data, the classification criteria are not met. Teratogenicity: No data available. Reproductive toxicity/Fertility: No data available.

SECTION 12: Ecological information

Ecotoxicological studies of the product are not available.

Do not allow to escape into waterways, wastewater or soil.

Please find below the ecotoxicological data available to us for the components.

12.1 Toxicity

Acute Fish toxicity

Polyether polyol LC50 > 100 mg/l Species: Oncorhynchus mykiss (rainbow trout) Exposure duration: 96 h Method: OECD Test Guideline 203

Chronic Fish toxicity Polyether polyol No data available.

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Acute toxicity for daphnia

Polyether polyol EC50 > 100 mg/l Species: Daphnia magna (Water flea) Exposure duration: 48 h Method: OECD Test Guideline 202

Chronic toxicity to daphnia

Polyether polyol No data available.

Acute toxicity for algae

Polyether polyol ErC50 > 100 mg/l Species: Pseudokirchneriella subcapitata (green algae) Exposure duration: 72 h Method: OECD Test Guideline 201

Acute bacterial toxicity

Polyether polyol EC10 > 10.000 mg/l Test type: Respiration inhibition Species: activated sludge Exposure duration: 3 h Method: Directive 67/548/EEC, Annex V, C.11. Studies of a comparable product.

Ecotoxicology Assessment

Polyether polyol Acute aquatic toxicity: Based on available data, the classification criteria are not met. Chronic aquatic toxicity: Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Biodegradability

Polyether polyol Biodegradation: 0 %, 28 d, i.e. not readily degradable Method: OECD Test Guideline 301 F

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

Dispose in accordance with applicable international, national and local laws, ordinances and statutes.

For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

13.1 Waste treatment methods

After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until "drip-dry"), they can be sent to an appropriate collection point set up within the framework of the existing take-back scheme of the chemical industry. Containers must be recycled in compliance with national

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legislation and environmental regulations.

None disposal into waste water.

SECTION 14: Transport information

Land transport China

14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards	 Not dangerous goods 	
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14.3 Transport hazard class(es)	:	Not dangerous goods Not dangerous goods
14.4 Packing group 14.5 Environmental hazards		Not dangerous goods

14.6 Special precautions for user

See section 6 - 8.

Additional information	:	Not dangerous cargo.
		Keep away from foodstuffs, acids and alkalis.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Product name: Glycerol propoxylated/ethoxylated, Pollution category: Z $\,$ - Ship type: 3

SECTION 15: Regulatory information

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

Other regulations

Only China:Compliant with the following local regulations:

Only China: Decree 591 Regulations on the control over safety of hazardous chemicals Only China: GB/T 16483 Safety data sheet for Chemical products-Content and order of section Only China: GB 13690 General rule for classification and hazard communication of chemicals GB 30000.2-29 Safety rules for classification and labelling of chemicals Only China: GB 15258, General rules for preparation of precautionary label of chemicals

Any national regulations for the handling of hazardous substances must be observed.

SECTION 16: Other information

Safety precautions for handling freshly molded polyurethane parts:

Depending on the production parameters, any uncovered surfaces of freshly molded polyurethane parts using this raw material may contain traces of substances (e. g. starting and reaction products, catalysts, release agents) with hazardous characteristics. Skin contact with traces of these substances must be avoided. Therefore, during demolding or other handling of fresh molded parts, protective gloves tested according to DIN-EN 374 (e.g. nitrile rubber >= 1.3 mm thick, breakthrough time >= 480 min, or according to

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recommendations from glove makers thinner gloves that need to be changed in compliance with breakthrough times more frequently) must be used. Depending on formulation and processing conditions, the requirements may be different from handling of the pure substances. Closed protective clothing is required for the protection of other areas of skin.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.