

According to Regulation (EC) No 1907/2006 (REACH) Sheet consists 1 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017

SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

Identification on the label / Trade name: Aromatic Polyester Polyol, Polyester Polyol, Neopolyol (NEOPOLYOL 240, NEOPOLYOL 240K, NEOPOLYOL 240L, NEOPOLYOL 240U, NEOPOLYOL 240S, NEOPOLYOL 320, NEOPOLYOL 380, NEOPOLYOL D). CAS No.: N/A EC No.: N/A REACH registration No.: N/A Polyester polyol is a polymer and exempted from Registration according to the Article 2 (9) of Regulation EC 1907/2006 REACH.

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

Production of Polyurethane. Polyol for production of PU (polyurethane) or PIR (polyisocyanurate) foams (panels, sandwiches, tube layer insulation, spray foam and etc.)

1.3 Details of the supplier of the safety data sheet:

Manufacturer UAB NEO GROUP Industrijos st.2, LT—95346 Rimkai, Klaipeda district, LITHUANIA Tel.:+370 46 466710 Fax: +370 46 466711 e-mail: <u>msds@neogroup.eu</u> www.neogroup.eu

1.4 Emergency telephone numbers:

Lithuanian Poison Control and Information Office: +370 5 236 20 52 or +370 687 53378 (24h) General emergency number: (+370) 112 (24h)

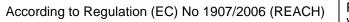
SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Substance is not classified as dangerous according to EC Regulation 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects: No other hazards.



Sheet consists 2 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017

Neogroup

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [CLP]

Substance is not classified as dangerous according to EC Regulation 1272/2008 (CLP).

Precautionary Statements Disposal:

P501 Dispose of adsorbed material in accordance with regulations

2.3 Other hazards

Not applicable. The substance is not PBT / vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Hazordous components name	CAS No	EC No	Index No	REACH Registration No	Content, % (wt.)	Classification according to Regulation (EC) No 1272/2008 (CLP)
Polyester Polyol	N/A	N/A	N/A	N/A	95-99%	not classified as hazardous
Diethylene glycol (2,2'- oxybisethanol)*	111-46-6	203-872- 2	603-140-00- 6	01- 2119457857- 21-XXXX	1-5%	Acute Tox. 4, H302 STOT RE 2, H373

* - additive necessary to preserve polyester polyol stability

3.2 Mixtures

Not applicable

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

Eyes: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

Skin: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention. Clean shoes thoroughly before reuse.

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention. **Ingestion:** If the material swallowed, get immediate medical attention or advice.

4.2 Most important symptoms and effects, both acute and delayed No future relevant information available

4.3 Indication of any immediate medical attention and special treatment needed

Continued on next page



According to Regulation (EC) No 1907/2006 (REACH)	Sheet consists 3 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017
---	---

Treat symptomatically. Contact poison specialist immediately, if material swallowed.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Dry chemical, alcohol resistant foam, carbon dioxide, water fog. Unsuitable extinguishing media: Do not use direct water stream. May spread fire.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

5.3 Advice for firefighters

Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Isolate spill or leak area immediately. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. Provide adequate ventilation

6.2 Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Contain spilled material if possible. Collect in suitable and properly labeled containers. Small spills: Stop leak if without risk. Move containers from spill area. Absorb or cover with dry earth, sand or other inert dry material and transfer to appropriate waste disposal containers. Large spills: Stop leak if without risk. Move containers from spill area. Dike ahead of liquid spill for later disposal. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand or other inert dry material or pump and transfer to appropriate waste disposal containers.

6.4 Reference to other sections

Section 1 - for emergency contact information.

Section 8 - personal protection

Section 9 - chemical and physical properties

Section 13 - disposal



According to Regulation (EC) No 1907/2006 (REACH)	Sheet consists 4 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017
---	---

SECTION 7: HANDLING & STORAGE

7.1 Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Keep ignition sources away – do not smoke. Protect against electrical charges.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container. Protect from frost and direct sunlight. Store in a dry and well-ventilated area, away from incompatible materials (see Section 10) food and drink. Recommended storage temperature $25 \div 60^{\circ}$ C. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s): Not available

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits: The product does not contain any relevant quantities of the material with critical values that have to be monitored at the workplace. There is no occupational exposure limit value for diethylene glycol established by European Commission. The limit value according the national regulation on the maximum permissible concertation of diethylene glycol in the work environment is 45 mg/m³ or 10 ppm as an 8-hour time-weighted average.

Exposure controls: Provide adequate ventilation.

Personal protection equipment:

Eye and face protection: Wear approved safety goggles.

Skin protection: Wear suitable protective clothing as protection against splashing or contamination.

Hand protection: Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection: Respiratory protection may be needed for non-routine or emergency situations.

Environmental exposure controls: Avoid seepage into groundwater and drains. See Section 6.



According to Regulation (EC) No 1907/2006 (REACH)	Sheet consists 5 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017
---	---

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Physical appearance Odor	viscous liquid, colour from yel irritant	low to brown
Odor threshold	no data available	
Flash Point	>93.9°C; (> 201 F)	
Flamability (solid, gas)	Supporting combustion	
Boiling Point	>240.6°C; (465 F)	
Melting point	Undetermined	
Specific Gravity	1.2-1.3 g/ml; (10 lb/gal)	
Vapour Density	Estimated heavier than air	
Viscosity	1.000-7.000 mPas @ 25 (cps	@ 25 C)
Evaporation Rate	Slower than ethyl ether	
pH Value	3.8 in 14:1 Acetone/Water	
Solubility	soluble in acetone and ethyl a	acetate
Upper/lower flammability o	or explosive limits Undeter	rmined
Partition coefficient n-octar	nol/water Undete	rmined
Auto-ignition temperature	Undeter	mined
Decomposition temperatur	re Undeter	mined
Explosive properties	Undeter	mined
Oxidising properties	Undeter	mined

SECTION 10: STABILITY & REACTIVITY

Reactivity: Slightly chemically reactive substance Chemical Stability: stable under normal conditions. Hygroscopic substance. Possibility of hazardous reactions: not applicable Condition to avoid: strong oxidizing agents. Incompatible materials: strong oxidizing agents. Hazardous decomposition products: combustion products as carbon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

No experimental toxicological data on the substance. This health risk assessment is based on data available on diethylene glycol component.

Acute toxicity oral:

LD50: 19600 mg/kg bw (rat male);

LD50: 16500 mg/kg bw (rat male/female);

LD50: 1120 mg/kg bw

Acute toxicity inhalation:

LC50 (4 h): > 4.6 mg/L air (No animals died during the 14-day observation period). The LC50 for the test item as aerosol was above 4.6 mg/L, which was the maximum attainable concentration.

Acute toxicity dermal: LD50: 13300 mg/kg bw (rabbit). For the dermal route of exposure, classification is not needed.

Skin corrosion/irritation: not irritating

Continued on next page



According to Regulation (EC) No 1907/2006 (REACH)	Sheet consists 6 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017
---	---

Serious eye damage/irritation: In animal studies, (Draize Test - rabbits - 0.5 ml), there was no eye irritation.

Respiratory or skin sensitization: the substance is not classified as hazardous in this class.

mutagenicity: the substance is not classified as hazardous in this class.

carcinogenicity: the substance is not classified as hazardous in this class.

reproductive toxicity: the substance is not classified as hazardous in this class.

STOT-repeated exposure: STOT RE 2 with regard to oral exposure. Target organ – kidney.

Aspiration hazard: not available

SECTION 12: ECOLOGICAL INFORMATION

No experimental toxicological data on the mixture. This health risk assessment is based on data available on diethylene glycol component.

12.1 Toxicity

Acute (short-term) toxicity:

Fish: *Pimephales promelas* LC50 (96 h) - 75200mg/L test mat (nominal) Crustacea: *Daphania – Daphnia magna* EC50 (24h) - >10000 mg/L Algae/aquatic plants: With high probability the test substance is acutely not harmful to aquatic algae

Other organisms: not available

Chronic (long-term) toxicity:

Fish: *Pimephales promelas* NOEC (7d.): 15380 mg/L, LC50 (28 d.): >1500 mg/L Crustacea: not available

Algae/aquatic plants: With high probability, the test substance is acutely not harmful to aquatic algae

Other organisms: not available

12.2 Persistence and degradability

Abiotic Degradation: not available Physical- and photo-chemical elimination: 50%; 0.72 d Biodegradation: not available

12.3 Bioaccumulative potential: low

Partition coefficient n-octanol /water (logPow): -1.98 Bioconcentration factor (BCF): 100

12.4 Mobility in soil: Not available

12.5 Results of PBT and vPvB assessment: Not applicable. The substance is not PBT / vPvB.

12.6 Other adverse effects: Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal: The generation of the waste should be avoided or minimized wherever possible. Disposal of this product should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used,

Continued on next page

Material safety data sheet (MSDS) - NEOPOLYOL

According to Regulation (EC) No 1907/2006 (REACH)	Sheet consists 7 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017
---	---

contaminated and residual materials, additional evaluations may be required. Do not dump into any sewers, on the ground, or into any body of water.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its containers must be disposed of a safe way. Care should be taken, when handling emptied containers, which have not been cleaned or rinsed out. Empty containers may retain some product residues. Avoid dispersal of split material and runoff and contact with soil, waterways, drains and sewers.

Waste codes / waste designations according to LoW: proposed waste codes 16 05 08 (16 - other wastes from industry, 05 -gases in pressure containers and discarded chemical, 08 - discarded organic chemical consisting of or containing hazardous substances) or 16 03 05 (16 - other wastes from industry, 03 – off-specification batches and unused products, 05 – organic wastes containing hazardous substances).

SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulations on the transport of dangerous goods. UN number: Not hazardous for transport

UN Proper Shipping Name: Not hazardous for transport

Transport Hazard Class: Not hazardous according the transport rules IMO, ADR/RID, ICAO Packing group: Not hazardous according the transport rules IMO, ADR/RID, ICAO

Environmental hazards: Not hazardous according the transport rules IMO, ADR/RID, ICAO Special precautions for user: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations for all EU Member states:
 - Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006. Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency with following amendments.
 - Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008. On classification, labeling and packaging of substances and mixtures (CLP), amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006.
 - Regulation (EU) No 453/2010 of the Commission of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
 - Regulation (EC) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
 - Regulation (EC) 649/2012 of the European Parliament and of the Council of 4 July 2012. Concerning the export and import of hazardous chemicals.
 - European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)

Continued on next page

NEOGROUP

Material safety data sheet (MSDS) - NEOPOLYOL



According to Regulation (EC) No 1907/2006 (REACH)	Sheet consists 8 of 8 pages Printing date: October 8, 2015 Version: 2.1-EN Revision date: September 22, 2017
---	---

Authorisations and/or restrictions on use:

 Substances of very high concern (SVHC) according to Article 59(10) of the REACH Regulation

Other EU regulations:

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Information on MSDS updates:

Version 1.0: initial issue 14-10-2011 Version 2.0: Changes from the previous version: section 1-16 Version 2.1: Changes from the previous version: section 1-3, 9, 16

Relevant phrases:

Abbreviations and acronyms:

SDS	Safety data sheet
CAS	Chemical Abstracts Service (Division of the American Chemical Society)
EC	European Commission
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation EC 1907/2006
CLP	Classification, Labelling and Packaging Regulation EC 1272/2008
PBP	Persistent, Bioaccumulative and Toxic
vPvB	Very Persistent and very Bioaccumatalive
STOT RE	Specific Target Organ Toxicity repeated exposure
logPow	octanol-water partition coefficient
LCxx	Lethal Concentration, for xx percent of test population
LDxx	Lethal Dose, for xx percent of test population.
N/A	Not available
PU	polyurethane
PIR	polyisocyanurate
GHS	Globally Harmonized System
LoW	List of Waste
NOEC	No Observed Effect Concentration
UN	United Nations
BCF	Bioconcentration factor
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
IMO	International Maritime Organization
RID	Règlement Concernant le Transport International Ferroviaire Marchandises Dangereuses (transport of dangerous goods by rail)
ICAO	International Civil Aviation Organization

This information is based upon the present state of our knowledge. 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 it is specified in the text.

End of safety data sheet