

Material Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



67552 Polysolvan O

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Revised edition: 17.09.2013

Version: 10

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1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Polysolvan O

Article No.: 67552

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Solvent, Synthesis chemical

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.de

E-Mail: info@kremer-pigmente.de

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to EC Regulation 1272/2008

	<i>Serious eye damage, hazard category 1</i>
	<i>Reproductive toxicity, category 2</i>
H318	Causes serious eye damage.
Cat.: 1	
H361	Suspected of damaging fertility or the unborn child.
Cat.: 2	

Classification according to EC Regulation No. 67/548 or No. 1999/45

Irritating (Xi)	R41	Risk of serious damage to eyes.
Repr. Cat. 3	R63	Possible risk of harm to the unborn child.

Safety Phrases:

Possible Environmental Effects:
See Section 12.

2.2. Label Elements

Classification according to EC Regulation 1272/2008

Hazard designation:

GHS05

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GHS08-2

Signal word:

Danger

Hazard designation:

H318 Causes serious eye damage.
H361 Suspected of damaging fertility or the unborn child.

Safety designation:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing.
P308+P313 If exposed or concerned: Get medical advice/attention.
P310 Immediately call a poison center or physician.

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: REACH Registratrion Number: 01-2119514685-36-0000

Hazardous Ingredients:

Butyl glycolate (Xn; R41-63; H318-361)	> 93 %	CAS-Nr: 7397-62-8 EINECS-Nr: 230-991-7 EC-Nr:
Butoxy acetic acid butyl ester	< 5 %	CAS-Nr: 10397-22-5 EINECS-Nr: EC-Nr:
Dibutyl-2,2'-oxy-bis-acetate	< 2 %	CAS-Nr: 6634-18-0 EINECS-Nr: 229-630-6 EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Remove contaminated clothes immediately.

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After inhalation:

Supply fresh air. If required give artificial respiration. Keep patient warm.

Consult physician if symptoms persist.

After skin contact:

Wash off with plenty of water and soap. Consult a physician if irritation persists.

After eye contact:

Rinse open eyes with plenty of water for at least 15 minutes. Consult physician.

After ingestion:

Do NOT induce vomiting. Consult a doctor.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

No further information available.

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Foam, CO₂, dry extinguishing powder.

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: formation of carbon oxides, toxic gases/vapors.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Contaminated extinguishing water and debris should be disposed of according to local regulations.

Cool exposed containers with water spray.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid contact with eyes and skin.

Keep away from sources of heat and ignition.

Ensure adequate ventilation.

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6. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Contain with absorbent material (sand, diatomaceous earth, acid binder, universal absorbent, saw dust) and dispose accordingly.

6. 4. Reference to other Sections

Protective clothing, see Section 8.

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

Provide adequate ventilation.

Hygienic measures:

Take off contaminated clothing immediately.

Do not eat or drink during work. Do not smoke.

7. 2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store product in a cool, dry and well ventilated area.

Requirements for storage areas and containers:

Open and handle container with care.

Information on fire and explosion protection:

Keep away from sources of ignition - do not smoke. Take measures to prevent electricity static discharge.

Ground and bond containers when transferring material.

Storage class (VCI):

3 B; combustible liquids

Further Information:

Temperature class T2 (ignition temperature > 300°C)

7. 3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8. 1. Parameters to be Controlled

Parameters to be controlled (DE):

none known

Parameters to be controlled (EC):

Derived No-Effect Level (DNEL):

34.7 mg/kg bw/d (worker, skin contact, long-term exposition - systemic effects)

21.2 mg/kg (worker, inhalation, long-term exposition - systemic

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effects)
2 mg/kg bw/d (consumer, swallowing, long-term exposition - systemic effects)
20.8 mg/kg bw/d (consumer, skin contact, long-term exposition - systemic effects)
43.5 mg/kg (consumer, inhalation, long-term exposition - systemic effects)
0.25 mg/kg (consumer, skin contact, long-term exposition - local effects)
43.5 mg/kg (consumer, inhalation, long-term exposition - local effects)

Predicted No-Effect Concentration (PNEC):

*Fresh water: 0.05 mg/l
Soil: 0.0112 mg/kg dw
Sediment: 0.203 mg/kg dw
Sewage treatment system (STP): 232 mg/l*

Additional Information:

8.2. Exposure Controls

Technical protective measures:

*Provide adequate ventilation/exhaust system.
Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.*

Personal Protection

General protective measures:

*Avoid contact with eyes and skin.
Remove contaminated clothing immediately.
Do not inhale vapor/dust.
Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.*

Respiratory protection:

Respiratory equipment required in case of insufficient ventilation, filter type A.

Hand protection:

Chemical protective gloves (EN 374 (Europe), F739 (US)).

Protective glove material:

Butyl rubber (480 min; 0.7 mm).

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Avoid contamination of sewage system, open water ways and ground water.

9. Physical and Chemical Properties

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9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>liquid</i>
<i>Color:</i>	<i>colorless</i>
<i>Odor:</i>	<i>slightly ester-like</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>neutral</i>
<i>Melting temperature:</i>	<i>< -20°C</i>
<i>Boiling temperature:</i>	<i>180°C (1013 hPa)</i>
<i>Flash point:</i>	<i>68°C</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>not applicable</i>
<i>Upper explosion limit:</i>	<i>not determined</i>
<i>Lower explosion limit:</i>	<i>not determined</i>
<i>Vapor pressure:</i>	<i>1.3 hPa (20°C)</i>
<i>Vapor density:</i>	<i>4.57 (Air=1)</i>
<i>Density:</i>	<i>1.01 g/ml (20°C)</i>
<i>Solubility in water:</i>	<i>46 g/l (20°C)</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>0.38 (calc.)</i>
<i>Auto-ignition temperature:</i>	<i>415°C (DIN 51794)</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>
<i>Viscosity, dynamic:</i>	<i>5.23 mPa.s (20°C)</i>
<i>Explosive properties:</i>	<i>not applicable</i>
<i>Oxidizing properties:</i>	<i>no information available</i>
<i>Bulk density:</i>	<i>not determined</i>

9.2. Further Information

Solubility in solvents:
Viscosity, kinematic

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Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

No information available.

10.4. Conditions to Avoid

Conditions to avoid:

*Avoid contact with heat, sparks, open fire and static discharge.
Avoid ignition sources.*

Thermal decomposition:

No data available.

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11. 1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

Butyl glycolate: > 4595 mg/kg (rat; OECD 401)

LD50, dermal:

No information available.

LC50, inhalation:

Butyl glycolate: > 6.2 mg/l (4h, rat)

Primary effects

Irritant effect on skin:

No information available

Irritant effect on eyes:

Strong irritant effect (rabbit; OECD 405).

Inhalation:

No information available.

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Ingestion:

No information available

Sensitization:

Not sensitizing (guinea pig; OECD 406).

Mutagenicity:

Not mutagenic (OECD 471 Bacterial Reverse Mutation Test)

Reproductive toxicity:

No information available.

Cancerogenicity:

No negative effects.

Teratogenicity:

Weakly teratogenic at 1000 mg/kg, middle dose of range-fitting study. Maternally and developmentally toxic and teratogenic only at the high dose (1250 mg/kg) of main study. NOAEL based on combined data from both range-finding and main toxicity studies. NOAEL: 5654 mg/kg (rat, oral)

Specific target organ toxicity (STOT):

No data available.

Additional toxicological information:

12. Ecological Information

12.1. Aquatic Toxicity

Butyl glycolate

Fish toxicity:

LC0: 50 mg/l (48h, *Leuciscus idus*)

Daphnia toxicity:

EC50: 280 mg/l (24h, *Daphnia magna*)

Bacteria toxicity:

EC50: 2320 mg/l (18h; *Pseudomonas putida*)

Algae toxicity:

EC50: > 87.44 mg/l (7d, *Lemna gibba*; OECD 221)

12.2. Persistency and Degradability

82 % (28d; OECD 301B)

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

According to Annex VIII to Regulation (EC) No. 1907/2006 (REACH): this product is neither a PBT (persistent/bioaccumulative/toxic) or vPvB (very persistent/very bioaccumulative/very toxic) substance nor does it contain a PBT or vPvB substance.

12.6. Other Adverse Effects

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Water hazard class:

1, slightly hazardous

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of product residues according to the waste disposal guidelines 2008/98/EC as well as according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Uncontaminated packaging may be recycled. Completely empty packaging can be disposed of with the regular waste.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA

14.2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR (land transportation).

IMDG/IATA:

No hazardous goods according to IMDG.

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel no.:

IMDG Class (sea):

Hazard no.:

EmS No.:

IATA Class:

Hazard no.:

14.4. Packaging Group

ADR/RID:

not applicable

IMDG:

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IATA:

14. 5. **Environmental Hazards**
Not classified as environmentally hazardous.
14. 6. **Special Precautions for User**
Not classified as a dangerous good under transport regulations.
14. 7. **Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code**
not applicable
14. 8. **Further Information**
Not classified as a dangerous good under transport regulations.

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

No restrictions are available for this product.

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment is not necessary for this product.

15. 3. Further Information

Listed in:

EINECS (EU), TSCA (US), AICS (AUS), DSL (CA), PICCS (PH), ENCS/ISHL (JP), KECI (KR), IECSC (CN), NZIoC (NZ)

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.