

Trade name: Aurofilm Product no.: 52015/52019

Current version: 2.0.0, issued: 22.11.2012 Replaced version: 2.0.0. issued: 14.05.2012 Region: GB

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

Product identifier

Trade name

Aurofilm

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

Relevant identified uses of the substance or mixture

Manufacturing of dental prosthesis in a dental laboratory

1.3 Details of the supplier of the safety data sheet

Address

BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG Wilhelm-Herbst-Str. 1 28359 Bremen

Telephone no. +49/421/2028 - 0 Fax no. +49/421/2028 - 115

Information provided by / telephone

Research & Development Department - Materials, alloys and ceramics; +49/421/2028 - 130 (Chief Development

Officer alloys)

Advice on Safety Data Sheet

msds@bego.com

1.4 **Emergency telephone number**

For medical advice (in German and English): +49/551/192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

R10 R67 Xi; R41

2.2 Label elements

Labelling according to Directive 1999/45/EC

Hazard symbols



R phrases

10 Flammable.

41 Risk of serious damage to eyes.

Vapours may cause drowsiness and dizziness. 67

S phrases

7/9 Keep container tightly closed and in a well-ventilated place.

Keep away from sources of ignition — No smoking. 16

Do not breathe vapour/spray. 23.6

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

51 Use only in well-ventilated areas. 39 Wear eye/face protection. 24/25 Avoid contact with skin and eyes.



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Supplemental label elements

Contains: TRIISOBUTYLPHOSPHAT - May produce an allergic reaction.

2.3 Other hazards

PBT assessment No data available. vPvB assessment No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

Mixture (preparation)

Hazardous ingredients

No	Substance name		Additional information					
	CAS / EC / Index /	Classification 67/548/EEC	Cond	entratio	n			%-b.w.
	REACH no							
1	n-propanol, propan	-1-ol						
	71-23-8	F; R11	>	70.00	-	<	90.00	%-b.w.
	200-746-9	Xi; R41						
	603-003-00-0	R67						
	-							

Full Text for all R-phrases: pls. see section 16

Additional ingredients

	, taattoria: mgreatoric				
No	Substance name		Additional information		
	CAS / EC / Index /	Classification 67/548/EEC	Concentration	%-b.w.	
	REACH no				
	TRIISOBUTYLPHO	SPHAT			
	126-71-6	R43	< 1.00	%-b.w.	
	204-798-3				
	-				
	-				

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration. Summon a doctor immediately.

After skin contact

Wash off immediately with soap and water.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion

Do not induce vomiting. Summon a doctor immediately. Never give anything by mouth to an unconscious person.



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4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide; extinguishing powder; Water spray jet; Alcohol-resistant foam

Unsuitable extinguishing media

Full water iet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide and carbon dioxide; Formaldehyde

5.3 Advice for firefighters

Suppres gases/vapours/mists with water spray jet. Use self-contained breathing apparatus. Wear protective clothing. Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away sources of ignition. Refer to protective measures listed in sections 7 and 8.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation. Pick up rest with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

General protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale vapours. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion

Take precautionary measures against electrostatic loading (earthing necessary during loading operations). Vapours can form an explosive mixture with air. Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.



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Requirements for storage rooms and vessels

Keep only in the original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on storage assembly

Do not store together with: oxidizing substances; explosive substances; spontaneously combusting substances; flammable toxic substances; inflammatory substances; Oxidizing agents

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	n-propanol, propan-1-ol	71-23-8		200-746-9	
	List of approved workplace exposure limits (WELs) /	EH40			
	Propan-1-ol				
	STEL	625	mg/m³	250	ml/m³
	TWA	500	mg/m³	200	ml/m³
	Skin resorption / sensibilisation	Sk			

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective gloves should be tested in any case for its specific workstation suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour	
liquid	
pink	

Odour	
alkohol-like	



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Reference temperature

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Odour threshold			
No data available			
pH value		0.0	
Value		6.6	
Boiling point / boiling range No data available			
Melting point / melting range			
No data available			
Decomposition point / decomposition range			
No data available			
Flash point			
Value		30	°C
Auto-ignition temperature			
No data available			
Oxidising properties No data available			
Explosive properties No data available			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
No data available			
Upper flammability or explosive limits			
No data available			
Vapour pressure			
No data available			
Vapour density No data available			
Evaporation rate No data available			
Relative density			
No data available			
Density			
Value		0.828	g/cm³
Reference temperature		20	°C
Solubility in water			
No data available			
Solubility(ies)			
No data available			
Partition coefficient: n-octanol/water No data available			
Viscosity			
Value		2.4	mPa*s
Reference temperature		20	°C
Type Value	dynamic	2.9	mm²/s

kinematic



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9.2 Other information

Other information	
No data available.	

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Protect from sun.

10.5 Incompatible materials

Earth alkali metals; Alkali metals; Oxidizing agents

10.6 Hazardous decomposition products

In case of fire the following can be released: Formaldehyde

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity			
LD50		1870	mg/kg
Species	rat		
Reference substance	1-propanol		

Acute dermal toxicity				
LD50	4000 - 10000 mg/kg			
Species	rabbit			
Reference substance	1-propanol			

Acute inhalational toxicity				
LC50	>	33.8	mg/l	
Duration of exposure		4	h	
Species	rat			
Reference substance	1-propanol			

Skin corrosion/irritation		
Species	rabbit	
Reference substance	1-propanol	
Evaluation	No irritant effect.	

Serious eye damage/irritation		
Species	rabbit	
Reference substance	1-propanol	
Evaluation	irritant	



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Respiratory or skin sensitisation	
Route of exposure	respiratory tract
Species	guinea pig
Reference substance	1-propanol
Method	maximization test
Evaluation	Non-sensitizing
Route of exposure	Skin
Species	guinea pig
Reference substance	1-propanol
Method	maximization test
Evaluation	Non-sensitizing

Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration hazard

No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Inhalation of vapours may lead to headache, drowsiness and dizziness. Possibility of sensitisation through skin contact. Danger of acute eye damage. Inhalation of vapours in higher concentration may lead to irritation of eyes, nose and respiratory tract.

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity		
LC50	4480	mg/l
Duration of exposure	96	h
Species	Pimephales promelas	
Reference substance	1-propanol	

Daphnia toxicity			
EC50		3644	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Reference substance	1-propanol		
Method	92/69/EEC, C.2		

Algae toxicity		
EC50	3100 mg/l	
Duration of exposure	168 h ¯	
Species	Scenedesmus quadricauda	
Reference substance	1-propanol	
Method	cell multiplication inhibition test	



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Bacteria toxicity			
EC0		2700	mg/l
Duration of exposure		16	h
Species	Pseudomonas puti	ida	
Reference substance	1-propanol		
IC50	>	10000	mg/l
Duration of exposure		16	h
Species	bacteriae		
Reference substance	1-propanol		

12.2 Persistence and degradability

Biodegradability	
Value	83 - 92 %
Duration	28 d
Reference substance	1-propanol
Method	OECD 301 F
Evaluation	readily biodegradable

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information
Do not discharge into the drains or waters and do not store on public depositories.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class 3
Classification code F1
Packing group III
Hazard identification no. 30
UN number UN1274

Technical name n-PROPANOL (PROPYL ALCOHOL, NORMAL)

Tunnel restriction code D/E Label 3



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14.2 Transport IMDG

Class 3
Packing group III

UN number UN1274

Proper shipping name PROPANOL (PROPYL ALCOHOL, NORMAL)

EmS F-E+S-D

Label 3

14.3 Transport ICAO-TI / IATA

Class 3
Packing group III
UN number UN1274

Proper shipping name n-Propanol (Propyl alcohol, normal)

Label

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, pls. see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

Restriction of occupation

Adhere to the national sanitary and occupational safety regulations when using this product.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks Annex I, part 2, category 6

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC

National Threshold Limit Values of the corresponding countries as amended in each case.

 $\label{thm:continuous} \mbox{Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.}$

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

R11 Highly flammable.

Department issuing safety data sheet

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.



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