

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

- **1.1 Product identifier**
- **Trade name: Unisol 4**
- **Article number:** 20530410
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Textile auxiliary
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bussetti & Co Ges.m.b.H.
Rötzerger, 57
1170 Wien
- **Further information obtainable from:** Labor
- **1.4 Emergency telephone number:**
business day:
Mo - Th: 9:00 - 16:00 Mr. Herbert Fischer
Fr: 9:00 - 13:00 Mr. Herbert Salzer
+43-(0)1-4861221-1542
msds@bussetti.at

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Eye Dam. 1 H318 Causes serious eye damage.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS05
- **Signal word** Danger
- **Hazard-determining components of labelling:**
alcohols ethoxylated
sulfosuccinate sodium salt
- **Hazard statements**
H318 Causes serious eye damage.
- **Precautionary statements**
P280 Wear eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
- **2.3 Other hazards** Not applicable
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

alcohols ethoxylated	Eye Dam. 1, H318; Acute Tox. 4, H302	10-25%
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alkyl ether alcohol	⚠ Eye Irrit. 2, H319	10-25%
glycol	⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	2.5-10%
sulfosuccinate sodium salt	⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315	2.5-10%
alkyl alcohol	⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	2.5-10%

· **Additional information:** 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:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Call for a doctor immediately.

· **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: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Water

Water haze

Foam

Fire-extinguishing powder

Carbon dioxide

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

5.3 Advice for firefighters

· **Protective equipment:** Wear fully protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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 disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

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- Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

alkyl ether alcohol

IOELV (European Union)	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm
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· **DNELs**

alkyl ether alcohol

Dermal	Long-term - systemic effects, worker	83 mg/kg bw/day (.)
Inhalative	Acute - local effects, worker	101.2 --- (.)
	Long-term - systemic effects, worker	67.5 mg/m ³ (.)
	Long-term - local effects, worker	67.5 mg/m ³ (.)

glycol

Dermal	Long-term - systemic effects, worker	34.72 mg/kg bw/day (.)
Inhalative	Long-term - local effects, worker	8.07 mg/m ³ (.)

· **DNEL (Derived No Effect Level) for the general population**

alkyl ether alcohol

Oral	Acute - systemic effects, general population	5 mg/kg bw/day (.)
Dermal	Long term - systemic effects, general population	50 mg/kg bw/day (.)
Inhalative	Acute - local effects, general population	60.7 mg/m ³ (.)
	Long-term - systemic effects, general population	40.5 mg/m ³ (.)
	Long-term - local effects, general population	40.5 mg/m ³ (.)

glycol

Oral	Long-term - systemic effects, general population	17.43 mg/kg bw/day (.)
Dermal	Long-term - local effects, general population	20.83 --- (.) (mg/kg bw/d)
Inhalative	Acute - systemic effects, general population	2.5 mg/m ³ (.)
	Long-term - local effects, general population	2.5 mg/m ³ (.)

· **PNECs**

alkyl ether alcohol

Aquatic compartment - freshwater	1.1 mg/L (.)
Aquatic compartment - marine water	0.11 mg/L (.)
Aquatic compartment - water, intermittent releases	11 mg/L (.)
Aquatic compartment - sediment in freshwater	4.4 mg/kg sed dw (.)
Aquatic compartment - sediment in marine water	0.44 mg/kg sed dw (.)
Terrestrial compartment - soil	0.32 mg/kg dw (.)
Sewage treatment plant	200 mg/L (.)
Oral secondary poisoning	56 mg/kg food (.)

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glycol

Aquatic compartment - freshwater	0.943 mg/L (.)
Aquatic compartment - marine water	0.0943 mg/L (.)
Aquatic compartment - sediment in freshwater	7.2366 mg/kg sed dw (.)
Aquatic compartment - sediment in marine water	0.7237 mg/kg sed dw (.)
Terrestrial compartment - soil	1.26 mg/kg dw (.)
Sewage treatment plant	24.8 mg/L (.)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **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**

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material** Not applicable

· **Eye protection:** Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.

· **pH-value at 20 °C:** 7-8

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 100 °C

· **Flash point:** >100 °C

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 200 °C

· **Decomposition temperature:** Not determined.

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|--|---|
| · Auto-ignition temperature: | Product is not selfigniting. |
| · Explosive properties: | Product does not present an explosion hazard. |
| · Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| · Vapour pressure at 20 °C: | 23 hPa |
| · Density at 20 °C: | 1.03 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Fully miscible. |
| · Partition coefficient: n-octanol/water: | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **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:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

alcohols ethoxylated

Oral	LD50	500-2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Irritation of skin	OECD 404	nicht reizend (rabbit)
Irritation of eyes	OECD 405	reizend (eye of rabbit)

alkyl ether alcohol

Oral	LD50	2,410 mg/kg (rat) (OECD 401)
Dermal	LD50	2,764 mg/kg (rbt) (OECD 402)

glycol

Oral	LD50	2,740 mg/kg (rat)
Dermal	LD50	5,000 mg/kg (rabbit)
Irritation of eyes	Augenreizung	irritant (.)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

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- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

alcohols ethoxylated

NOEC/21d	12.5 mg/l (<i>Daphnia magna</i>)
EC10/17h	48 mg/l (bacterias)
LC50/96 h	10-100 mg/l (<i>leuciscus idus</i>)
EC50/96h	10-100 mg/l (aquatic plants)
EC50/48 h	10-100 mg/l (aquatic invertebrates)

alkyl ether alcohol

LC50/96 h	1,300 mg/l (<i>Lepomis macrochirus</i>) (OECD 203 static)
EC50/48 h	>100 mg/l (<i>Daphnia magna</i>)
EC50	>100 mg/l (<i>Desmodesmus subspicatus</i>)
LC 50	2,850 mg/l (<i>Daphnia magna</i>)

glycol

NOEC	23 mg/l (<i>pimephales promelas</i>) (34d)
LC50/96 h	344 mg/l (<i>leuciscus idus</i>)
OECD 211	9.43 ppm (<i>Daphnia magna</i>) (21d)
EC 50/48h	>500 mg/l (<i>Daphnia magna</i>)

· 12.2 Persistence and degradability

alcohols ethoxylated

CSB	2.5 g O ₂ /g (.)
OECD 301 E	≥90 % (.)
OECD 301 B	>60 % (.)

alkyl ether alcohol

OECD 301 E	>70 % (28 d)
OECD 302 B	100 % (.)

glycol

log p _{OW}	1.2 (.) ((pH7 OECD 107))
OECD 301 A	90-100 % (15 d)

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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- **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**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Must be specially treated adhering to official regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** Void
- **14.4 Packing group**
- **ADR, IMDG, IATA** Void
- **14.5 Environmental hazards:**
- **Marine pollutant:** No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **UN "Model Regulation":** Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **National regulations:**
 - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| NK | 10-25 |
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
 - **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· **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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

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 - oral – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· *** Data compared to the previous version altered.**

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