Safety Data Sheet according to EC-Regulation 91/155/EEC

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

WABCOTHYL

Use of the substance/preparation

Refer to description of material or preparation.

Company/undertaking identification

Kraul & Wilkening u. Stelling KG GmbH & Co., Lohweg 39, D-30559 Hannover Telephone ++49 (0) 511/51005-0, Fax ++49 (0) 511/51005-39

Emergency telephone / Office for advice

Advisory office in case of poisoning:

Tel.:

Telephone number of the company in case of emergencies:

Tel. ++49 (0) 511/51005-33

2. **Composition/information on ingredients**

2.1 Chemical name	content %	symbol	R-phrases	CAS	EINECS, ELINCS
Butanone	1 -< 20	F/Xi	11-36-66-67		201-159-0
Ethanediol	1 -< 20	Xn	22		203-473-3
For complete wording of the R-phrases in	efer to point 16				

complete wording of the R-phrases, refer to point 16.

3. Hazards identification

To people 3.1

See point 11 and 15. Preparation is classified as hazardous in the sense of directive 1999/45/EC. Product is highly flammable.

3.2 To the environment

See point 12.

First aid measures 4.

4.1 Inhalation

Supply person with fresh air and consult doctor according to symptoms. Remove person from danger area.

4.2 Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

4.3 Skin contact

Wash thoroughly with soap and copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

4.4 Ingestion

Do not induce vomiting. Consult doctor immediately.

Keep Data Sheet available.

4.5 Special resources necessary for first aid

n.g.

Fire-fighting measures 5.

Suitable extinguishing media 5.1

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Alcohol resistant foam

Water jet spray CO2

Cool container at risk with water.

5.2 Extinguishing media which must not be used for safety reasons

High volume water jet

5.3 Special exposure hazards arising from the substance or preparation itself,

combustion products, resulting gases

In case of fire the following can develop:

Oxides of carbon

Explosive vapour/air mixture

Dangerous vapours heavier than air.

5.4 Special protective equipment for fire-fighters

Protective respirator with independent air supply Full protection, if necessary

5.5 Further information

Dispose of contaminated extinction water according to official regulations.

6. Accidental release measures

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental measures

If leakage occurs, dam up. Prevent surface and ground-water infiltration, as well as ground penetration.

Do not pour down the drain undiluted.

6.3 Methods for cleaning up

Collect using absorbant material (e.g. Universal binding medium), and dispose of according to point 13.

7. Handling and storage

7.1 Handling

Tips for safe handling:

See point 6.1

Keep away from sources of ignition - Do not smoke. Only use working methods according to operating instructions. Ensure good ventilation. Take precautions against electrostatic charges. Use explosion-proof equipment.

Observe directions on label and instructions for use.

7.2. Storage

Requirements for storage rooms and containers:

Store VbF products only in the specially provided installation.

Not to be stored in gangways or stair wells.

Do not store with flammable or self-igniting materials.

Store products only unopened, in original packing.

Solvent resistant floor

Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung"). **Special storage conditions:**

See point 10.2 Store cool

Protect from direct sunlight and warming.

8. Exposure controls/personal protection

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the OES, MEL or MAK values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

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Chemical name	content %	OES, MEL, MAK, TR	BMGV, BAT
Butanone	1 -< 20	200 ppm (600 mg/m3)	70 µmol/l (in urine) (BMGV
Ethonodial	1 < 20	(OES, EC)	
Ethanediol	1 -< 20	10 mg/m3 (particulate), 52 mg/m3 (vapour)	
		(OES), 20 ppm (52	
		mg/m3) (EC)	
Ethanol		1000 ppm (1920 mg/m3)	
8.1 Respiratory protection:	If OES M	EL- or MAK-value is exceede	d.
Gas mask filter A (EN 141)			
8.2 Hand protection:	Solvent res	istant protective gloves (EN 3	374).
Protective hand cream recommended.			
Protective nitrile gloves (EN 374)			
8.3 Eye protection: Tight fitting protective goggles (EN 166) with	side protection with dance	r of projections	
8.4 Skin protection:	side protection, with dange		
Protective working garments (e.g. safety sho	es EN 344, long-sleeved pr	otective working garments)	
According to operation.		,	
Apron			
Boots (EN 347)			
Additional information on hand protection - N			
Selection made for preparations according to		ige and information on the ing	gredients.
Selection of materials derived from glove ma Final selection of glove material must be made		times permeation rates	
and degradation into account.		umes, permeation rates	
Selection of a suitable glove depends not onl	v on the material but also c	on other quality characteristic	S
and varies from manufacturer to manufacture			-
In the case of preparations the resistance of		calculated in advance	
so it has to be tested before use. The exact b			
requested from the protective glove manufac	turer and must be observed	d.	
9.	Physical and chem	nical properties	
Physical state:	Liquid		
Colour:	Blue		
Odour:	Alcoholic		
pH-value undiluted:	5 - 7		
Boiling point/range (°C):	78 *		
Melting point/range (°C):	- 114 *		
Flash point (°C):	17,5		
Ignition temperature:	425°C *		
Minimum limit of explosion: Maximum limit of explosion:	3,4 Vol% * 15 Vol% *		
Vapour pressure:	59 hPa *		
Relative density (g/ml):	~ 0,81		
Solubility in water:	Mixable		
Partition coefficient (n-octanol/water)	- 0.32 *		

10. Stability and reactivity

1,19 mPas *

- 0,32 *

10.1 Conditions to avoid

Partition coefficient (n-octanol/water):

Viscosity: * Ethanol

See point 7 Heating, open flame, ignition sources Electrostatic charge

10.2 Materials to avoid

See point 7 Avoid contact with other chemicals. Avoid contact with strong oxidizing agents. Avoid contact with strong acids. Peroxides Acid chlorides

Alkali metals 10.3 Hazardous decomposition products

See point 5.3

11. Toxicological information

11.1 Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):	6200 *
Inhalation, LC50 rat inhal.(mg/l/4h):	> 8000 *
Skin contact, LD50 rat dermal (mg/kg):	> 20.000 *
Eye contact:	Irritant, *

11.2 Delayed and chronic effects

Sensitization:	No, *
Carcinogenicity:	n.g.
Mutagenicity:	n.g.
Reproductive toxicity:	*
Narcosis:	Possible

11.3. Further information

No classification according to calculation procedure. The following may occur: Vapours may cause drowsiness and dizziness Repeated exposure may cause skin dryness or cracking. Product removes fat Irritation of the eyes Irritation of the respiratory tract Headaches Dizziness Effect on the central nervous system In high doses: **Respiratory distress** Unconsciousness Ingestion: Nausea Vomiting Liver damage * Ethanol

12. Ecological information

Water hazard class (Germany): Self classification: Persistence and degradability: BSB5 0,93-1,67 CSB 1,99 g/g * Behaviour in sewage plants: According to the recipe, contains no AOX. Aquatic toxicity: Toxic to marine organisms:	1 Yes (VwVwS) OECD 94% Screening test *
LC50/48h Leuciscus idus 8140 mg/l * Ecological toxicity: * Ethanol	k.D.v.

13. Disposal considerations

13.1. for the material / preparation / residue

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances.

07 01 01 aqueous washing liquids and mother liquors

07 07 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

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13.2 for contaminated packing materia	I	
See point 13.1		
Pay attention to local and national official regulations 15 01 02 plastic packaging		
15 01 02 plastic packaging 15 01 01 paper and cardboard packaging		
15 01 04 metallic packaging		
14.	Transport	information
General statements		
UN-Number:	1170	
Road/Rail-transport (ADR/RID)		
Class/packing-group:	3/11	
Classification code:	F1	
	4	
Transport by sea	3/11	(class/packing-group)
Marine Pollutant:	3/11 n.a.	(ciass/packing-group)
ETHANOL SOLUTION		
Transport by air		
IATA:	3/-/11	(class/secondary danger/packing-group)
Ethanol solution		
Additional information:		
Minimum amount regulations have not Danger code and packing code on request.	been taken	into account.
15.	Regulator	y information
Classification according to Dangerous (67/548/EEC and 1999/45/EC)	Product Re	gulations incl. EC Directives
Symbols: F Indications of danger:	Highly	flammable
Indications of danger: R-phrases: 11 Highly flammable.	Highly	flammable
Indications of danger: R-phrases: 11 Highly flammable. S-phrases:	Highly	flammable
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MEL = Maximum exposure limit / BMGV = Biological monitoring guidance value / MAK = Maximum concentration for work place (Germany)

TRK = Technical guidance concentration (Germany) / BAT = Biological tolerance for work place (Germany)

VbF = Regulations for flammable liquids (Austria)

WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds

VwVwS = Administrative Order relating to substances hazardous to water (Germany)

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

Chemical Check GmbH, Beim Staumberge 3, D-32839 Steinheim, Tel.: 01805-CHEMICAL / 01805-243 642, Fax: 05233-941790

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