

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

- **1.1 Product identifier**
- **Trade name: Vasco 5000**
- **Article number:** 02850-04
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:**
For industrial use
Metalworking fluid concentrate
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
BLASER SWISSLUBE AG
Winterseistrasse 22
CH-3415 Hasle-Rüegsau
Switzerland
Tel.: +41 (0)34 460 01 01
E-mail: contact@blaser.com

- **JEMTECH (UK) Ltd.**
Ashdown Business Park
Maresfield
East Sussex TN22 2DU
United Kingdom
Tel.: +44 (0)1825 767640
E-mail: sales@jemtech.co.uk
www.jemtech.co.uk
- **Further information obtainable from:**
Product Safety Department
E-mail: sds@blaser.com
- **1.4 Emergency telephone number:**
For advice on chemical emergencies, spillages, fires or exposures: +44 1235 239670 (24h/7d)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture:**
- **Classification according to Regulation (EC) No 1272/2008**
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2 H319 Causes serious eye irritation.
- Skin Sens. 1 H317 May cause an allergic skin reaction.
- Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **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**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Carboxylic acids, neutralized with alkanolamines*
Cyclic alkanolamines*
Phosphoric acid ester, neutralized with alkanolamines*

(Contd. on page 2)

GB

Trade name: Vasco 5000

(Contd. of page 1)

Hazard statements

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

- P273 Avoid release to the environment.
- P280 Wear protective gloves / 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.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards None**Results of PBT and vPvB assessment**

- PBT:** Not applicable.
- vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

- Description:** Mixture of substances listed below with nonhazardous additions.

Declarable, or hazardous components:
CAS-no.

	Carboxylic acids, neutralized with alkanolamines* Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	>20-<40%
	Phosphoric acid esters, neutralized with alkanolamines* Aquatic Chronic 2, H411; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317	<2%
	Carboxylic acids, neutralized with alkanolamines* Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	<1%
	Cyclic alkanolamines* Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	>1-2.9%
EINECS: 224-235-5 Reg.nr.: 01-2119493635-27	Zinc alkyl dithiophosphate Eye Dam. 1, H318; Aquatic Chronic 2, H411	>1-2.9%
	Oleoyl sarcosine* Aquatic Acute 1, H400; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	<2%
EINECS: 223-296-5 Reg.nr.: n.a. (not applicable) BPR	Sodium omadine Acute Tox. 3, H311; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	<0.25%

Additional information:

- * Neutralisation product: Equilibrium of Ionic Pairs according to REACH Annex V, 4.
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:** Immediately remove any clothing soiled by the product.

(Contd. on page 3)

Trade name: Vasco 5000

(Contd. of page 2)

- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
Not applicable, as the concentrate is not volatile.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **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:** CO₂, powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
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**
No dangerous substances are released.
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**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
Observe the general safety regulations when handling chemicals.
- **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:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Do not store together with oxidising and acidic materials.
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Optimal storage temperature between -20°C and +40°C.
Minimum shelf life: In closed original container, at least 18 months.

(Contd. on page 4)

Trade name: Vasco 5000

(Contd. of page 3)

- **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 at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the resultant standard EN 374.
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.
The break through, among others, depending on material density and the type of glove and therefore must be determined in each individual case.
Gloves must be inspected prior to use. Replace when worn!
Impervious gloves: nitrile rubber, minimum thickness of 0.3 mm.
- **Penetration time of glove material**
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Eye protector with side protection (framed eyeglasses) EN 166.
- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Liquid
Colour:	Brown
Odour:	Specific type
Odour threshold:	Not determined.
- **pH-value:** 8.6-9.0 @ 50 g/l H₂O (DIN 51369 / ASTM D1287)
- **Change in condition:**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Not determined.
Drip point:	Not applicable

(Contd. on page 5)

Trade name: Vasco 5000

(Contd. of page 4)

Pour point:	< 0 °C (ISO 3016 / ASTM D97)
· Flash point:	180 °C (ISO 2592 / ASTM D92)
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	Not applicable not determined
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits (@1013 mbar):	
Lower:	Not determined.
Upper:	Not determined.
· Oxidising properties	Not applicable.
· Refractive index:	1.475
· Density at 20 °C:	0.96 g/cm ³ (DIN 51757 / ASTM D1217)
· Vapour density	Not applicable.
	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Emulsifiable.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Kinematic at 40 °C:	83.7 mm ² /s
· 9.2 Other information:	safety relevant data, which has to be considered as product specifications.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** None known if used as directed.
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Phosphorus compounds
Sulphur oxides (SO_x)
Metal oxides

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:**
* pure substance

ATE (Acute Toxicity Estimates)

Oral	LD50	42,081 mg/kg
Dermal	LD50	>29,344 mg/kg
Inhalative	LD50	1,100 mg/L

(Contd. on page 6)

GB

Trade name: Vasco 5000

(Contd. of page 5)

Cyclic alkanolamines*		
Oral	LD50	1,100 mg/kg (rat)
Dermal	LD50	>1,000 mg/kg (rat)
Zinc alkyl dithiophosphate		
Oral	LD50	>3,100 mg/kg (rat) (Acute Oral Toxicity)
Dermal	LD50	>5,000 mg/kg (rabbit) (Acute Dermal Toxicity)
Phosphoric acid ester, neutralized with alkanolamines*		
Oral	LD50	2,170 mg/kg
Dermal	LD50	>1,972 mg/kg
Carboxylic acids, neutralized with alkanolamines*		
Oral	LD50	358-1,694 mg/kg (rat)
Dermal	LD50	>1,638 mg/kg (rat)
Sodium omadine		
Oral	LD50	500 mg/kg (rat) Calculated from 40% solution.
Dermal	LD50	1,800 mg/kg (rabbit) Calculated from 40% solution.
Inhalative	LD50	0.5 mg/L (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Additional toxicological information:**
- **Repeated dose toxicity**
- **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:

Zinc alkyl dithiophosphate	
EC50/16h	380 mg/l (Bak) (OECD 209)
EC50/96h	1-10 mg/L (Oncorhynchus mykiss) (OECD 203)
EC50/48h	1-10 mg/L (Daphnia magna) (OECD 202)
EC50/72h	240 mg/L (Algae) (OECD 201)
Oleoyl sarcosine*	
LC50/96h	1-10 mg/l (Leuciscus idus)
EC50/48h	0.43 mg/L (Daphnia magna) (OECD 202)
EC50/72h	6.3 mg/L (Desmodesmus subspicatus)
Sodium omadine	
EC50/96h	0.00264 mg/L (Oncorhynchus mykiss) (OECD 203)
EC50/48h	0.0088 mg/L (Daphnia magna) (OECD 202)

(Contd. on page 7)

Trade name: Vasco 5000

(Contd. of page 6)

EC50/72h 0.0012 mg/L (Algae) (OECD 201)

- **12.2 Persistence and degradability** Easily biodegradable
- **Other information:**
Biodegradation according OECD 301 B; after 10 days: > 60%.
The product is easily biodegradable according to the OECD 301 and 302 guidelines.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Harmful to aquatic organisms
- **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.

- **European waste catalogue**

12 01 19*	readily biodegradable machining oil
12 01 10*	synthetic machining oils
12 01 09*	machining emulsions and solutions free of halogens

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number	
· ADR, ADN, IMDG, IATA	Not regulated
· 14.2 UN proper shipping name	
· ADR, ADN, IMDG, IATA	Not regulated
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Not regulated
· 14.4 Packing group	
· ADR, IMDG, IATA	Not regulated
· 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.
· Transport/Additional information:	Not dangerous according to the above specifications.
· IATA	IATA Dangerous Goods Regulation (DGR): latest edition

(Contd. on page 8)

Trade name: Vasco 5000

(Contd. of page 7)

· **UN "Model Regulation":** Not regulated

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008:** CLP/GHS label elements are issued under section 2.
- **National regulations:**
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**
This preparation does not contain any SVHC ("Substances of Very High Concern")
- **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.

- **Regulations / approvals / listings:**

Information on REACH registration numbers in section 3:

If no REACH registration numbers on substances in section 3 are mentioned, then they are exempt from the REACH registration requirements (e.g. polymers).

- **RoHS:**

The product is compliant with European Directives 2015/863/EC, 2011/65/EC, 2002/95/EC, WEEE 2002/96/EC, 2003/11/EC, 2005/53/EC and RoHS.

The following substances ARE NOT contained:

Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PBDE) and / or polybrominated biphenyls (PBB), Bis(2-ethylhexyl)phthalate (DEHP), Benzylbutylphthalate (BBP), Dibutylphthalate (DBP), Diisobutylphthalate (DIBP);

lead or it's compounds, cadmium or it's compounds, mercury or it's compounds, chromium Cr⁶⁺-compounds.

- **TSE/BSE:**

Materials and/or synthetically modified materials which are of animal origin from bovine, ovine, goats, cats, dogs, deer, elk and/or mink, are NOT included in this product.

- **Relevant phrases**

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

- **Department issuing SDS:** Product Stewardship

- **Contact:** Mrs. Wilson + Mr. Feller

- **Editor's notice:**

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

(Contd. on page 9)

Trade name: Vasco 5000

(Contd. of page 8)

- Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation
 RoHS: Restriction of Hazardous Substances
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 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)
 VOC: Volatile Organic Compounds (USA, EU)
 ISO: International Organisation for Standardisation
 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
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 ATE: Acute Toxicity Estimate
 Acute Tox. 3: Acute toxicity – Category 3
 Acute Tox. 4: Acute toxicity – 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
 Skin Sens. 1: Skin sensitisation – Category 1
 Skin Sens. 1B: Skin sensitisation – Category 1B
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- * Data compared to the previous version altered.

The asterisk (*) on the left side indicate the respective changes from the previous version.