# SAFETY DATA SHEET

Vasco 5000

## Section 1. Identification

: Vasco 5000 **Product identifier Product code** : 02850-04

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

**Identified uses** 

Industrial use only. Metal working fluids

**Uses advised against** 

Consumer use.

**Manufacturer** : BLASER SWISSLUBE AG

> Winterseistrasse 22 CH-3415 Hasle-Rüegsau

Switzerland

Tel:+41 (0)34 460 01 01 E-Mail: contact@blaser.com

Supplier's details Blaser Swisslube (S) Pte. Ltd.

No. 1 Yishun Industrial Street 1 A'Posh Bizhub #05-08

768160 Singapore Tel:+65 6339 6881

: reach@blaser.com

E-Mail: singapore@blaser.com

e-mail address of person responsible for this SDS

**Emergency telephone** 

number (with hours of

operation)

: +65 3165 2217 (24h/7d)

## Section 2. Hazards identification

Classification of the substance or mixture SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

SKIN SENSITISATION - Category 1

GHS label elements, including precautionary statements

**Hazard pictograms** 



Signal word : Warning

**Hazard statements** : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

**Precautionary statements** 

**Prevention** : P280 - Wear protective gloves. Wear eye or face protection.

P261 - Avoid breathing vapour.

P264 - Wash thoroughly after handling.

Date of issue/Date of revision 1/10 SG : 24. Aug. 2023 Version:1 Date of previous issue : No previous validation



## Section 2. Hazards identification

: P362 + P364 - Take off contaminated clothing and wash it before reuse. Response

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

**Storage** : Not applicable.

: P501 - Dispose of contents and container in accordance with all local, regional, **Disposal** 

national and international regulations.

Other hazards which do not : None known.

result in classification

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name                                      | %    | CAS number |
|--|------|------------|
| 2-piperidinoethanol                                  | ≤10  | 3040-44-6  |
| zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) | ≤3   | 4259-15-8  |
| pyridine-2-thiol 1-oxide, sodium salt                | ≤0.2 | 3811-73-2  |

### Additional information:

Neutralisation product: Equilibrium of Ionic Pairs according to REACH Annex V, 4.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

**Chemical formula** : Not applicable.

## Section 4. First aid measures

### **Description of necessary first aid measures**

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

Inhalation : Avoid breathing vapour or mist. If not breathing, if breathing is irregular or if

> respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or

waistband.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes.

Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before

reuse. Clean shoes thoroughly before reuse.

: Wash out mouth with water. Remove dentures if any. If material has been Ingestion swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs,

the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such

Date of issue/Date of revision 2/10 SG Version: 1 : 24. Aug. 2023 Date of previous issue : No previous validation



## Section 4. First aid measures

as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact**: Causes skin irritation. May cause an allergic skin reaction.

**Ingestion**: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain or irritation watering

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

irritation redness

redness

Ingestion : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear

gloves.

### See toxicological information (Section 11)

# Section 5. Firefighting measures

### Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing** 

media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide sulfur oxides phosphorus oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without

suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Date of issue/Date of revision : 24. Aug. 2023 Date of previous issue : No previous validation Version : 1 3/10 SG



## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and material for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

### **Precautions for safe handling**

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: -20 to 40°C (-4 to 104°F). Shelf life: 18 months. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.



# Section 8. Exposure controls/personal protection

### **Control parameters**

**Occupational exposure limits** 

None.

### **Biological exposure indices**

No exposure indices known.

# Appropriate engineering controls

# **Environmental exposure** controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### **Skin protection**

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Wear suitable gloves tested to EN374. Nitrile gloves. thickness 0.3 mm (minimum).

### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved before handling this product.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved before handling this product.

### **Respiratory protection**

: A respirator is not needed under normal and intended conditions of product use. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

# Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### **Appearance**

Physical state : Liquid.
Colour : Brown.

Odour : Characteristic.
Odour threshold : Not available.

**PH** : 8.7 to 9.4 [Conc. (% w/w): 5%]

Date of issue/Date of revision : 24. Aug. 2023 Date of previous issue : No previous validation Version : 1 5/10 SG



# Section 9. Physical and chemical properties and safety characteristics

Melting point/freezing point : Not available. **Pour point** -30°C (-22°F) **Boiling point, initial boiling** : Not available.

point, and boiling range

limit/flammability limit

Flash point : Open cup: >150°C (>302°F)

**Evaporation rate** : Not available. **Flammability** Not available. : Not available. Lower and upper explosion

Vapour pressure : Not available. Not available. Relative vapour density Relative density Not available.

**Density** 0.951 g/cm3 [20°C (68°F)]

Solubility in water Not available. : Not applicable.

Partition coefficient: n-

octanol/water

: Not available. **Auto-ignition temperature Decomposition temperature** Not available.

: Kinematic (40°C (104°F)): 81.3 mm<sup>2</sup>/s (81.3 cSt) **Viscosity** 

**Particle characteristics** 

Median particle size : Not applicable.

# Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : Shelf life: 18 months.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Incompatible materials** : No specific data.

**Hazardous decomposition** 

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

**SADT** : Not available.

# Section 11. Toxicological information

### Information on toxicological effects

### **Acute toxicity**

| Product/ingredient name                                      | Result                   | Species    | Dose                   | Exposure |
|--|--------------------------|------------|------------------------|----------|
| 2-piperidinoethanol  | LD50 Oral                | Rat        | >1000 mg/kg            | -        |
| zinc bis[O,O-bis<br>(2-ethylhexyl)] bis<br>(dithiophosphate) | LD50 Dermal              | Rabbit     | >5 g/kg                | -        |
| pyridine-2-thiol 1-oxide,                                    | LD50 Oral<br>LD50 Dermal | Rat<br>Rat | 3.1 g/kg<br>1800 mg/kg | -        |
| Socium Sait  | LD50 Oral                | Rat        | 1500 mg/kg             | -        |

Date of issue/Date of revision 6/10 SG Version:1 : 24. Aug. 2023 : No previous validation Date of previous issue



# **Section 11. Toxicological information**

### **Irritation/Corrosion**

Not available.

### **Conclusion/Summary**

Skin : pH value - Used for classification

Eyes : pH value - Used for classification

**Sensitisation** 

Not available.

**Mutagenicity** 

Not available.

**Carcinogenicity** 

Not available.

**Reproductive toxicity** 

Not available.

**Teratogenicity** 

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

**Aspiration hazard** 

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact**: Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

Date of issue/Date of revision : 24. Aug. 2023 Date of previous issue : No previous validation Version : 1 7/10 SG



# Section 11. Toxicological information

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

### Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

### **Numerical measures of toxicity**

### **Acute toxicity estimates**

| Product/ingredient name                              | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | Inhalation<br>(vapours)<br>(mg/l) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|--|------------------|-------------------|--------------------------------|-----------------------------------|--|
| Vasco 5000   | >2000            | >2000             | N/A                            | N/A                               | N/A  |
| 2-piperidinoethanol                                  | 500              | 1100              | N/A                            | N/A                               | N/A  |
| zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) | 3100             | N/A               | N/A                            | N/A                               | N/A  |
| pyridine-2-thiol 1-oxide, sodium salt                | 1500             | 1800              | N/A                            | N/A                               | 1.5  |

# Section 12. Ecological information

### **Toxicity**

| Product/ingredient name   | Result                | Species        | Exposure |
|---------------------------|-----------------------|----------------|----------|
| 2-piperidinoethanol       | Acute EC50 1.56 mg/l  | Aquatic plants | 72 hours |
|                           | Acute LC50 68.1 mg/l  | Fish           | 96 hours |
| pyridine-2-thiol 1-oxide, | Chronic EC10 4.3 mg/l | Daphnia        | 21 days  |
| sodium salt               | EC50 0.0012 mg/l      | Algae          | 72 hours |
| Sodium Sait               | EC50 0.0088 mg/l      | Daphnia        | 48 hours |

### Persistence/degradability

| Product/ingredient name | Aquatic half-life | Photolysis        | Biodegradability |
|-------------------------|-------------------|-------------------|------------------|
| 2-piperidinoethanol     | -                 | >90%; < 28 day(s) | Readily          |

### **Bioaccumulative potential**

| Product/ingredient name                                      | LogPow | BCF | Potential |
|--|--------|-----|-----------|
| zinc bis[O,O-bis<br>(2-ethylhexyl)] bis<br>(dithiophosphate) | 3.59   | -   | Low       |

**Mobility in soil** 

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Date of issue/Date of revision : 24. Aug. 2023 Date of previous issue : No previous validation Version : 1 8/10 SG



# Section 13. Disposal considerations

### **Disposal methods**

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

# **Section 14. Transport information**

|                                   | UN             | IMDG           | IATA           | ADR/RID        | ADN  |
|-----------------------------------|----------------|----------------|----------------|----------------|--|
| UN number                         | Not regulated. | Not regulated. | Not regulated. | Not regulated. | 9006   |
| UN proper shipping name           | -              | -              | -              | -              | ENVIRONMENTALLY<br>HAZARDOUS<br>SUBSTANCE,<br>LIQUID, N.O.S. |
| Transport<br>hazard class<br>(es) | -              | -              | -              | -              | 9  |
| Packing group                     | -              | -              | -              | -              | -  |
| Environmental hazards             | No.            | No.            | No.            | No.            | Yes.   |

### **Additional information**

**ADN** 

: The product is only regulated as a dangerous good when transported in tank vessels.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

# Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

**Montreal Protocol** 

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Date of issue/Date of revision 9/10 SG Version: 1 : 24. Aug. 2023 Date of previous issue : No previous validation



# Section 15. Regulatory information

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

Not listed.

### Section 16. Other information

**History** 

Date of printing : 24. Aug. 2023

Date of issue/Date of : 24. Aug. 2023

revision

Date of previous issue : No previous validation

Version : 1

Product Stewardship Blaser Swisslube AG

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

### Procedure used to derive the classification

| Classification   | Justification                                      |
|--|--|
| SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 | Expert judgment Expert judgment Calculation method |

References : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue/Date of revision : 24. Aug. 2023 Date of previous issue : No previous validation Version : 1 10/10 SG