

SAFETY DATA SHEET

Vasco 5000

Section 1. Identification

GHS product identifier : Vasco 5000

Product code : 02850-53

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.

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Section 2. Hazards identification

Classification of the substance or mixture : ACUTE TOXICITY (oral) - Category 5
SKIN CORROSION/IRRITATION - Category 3
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H303 - May be harmful if swallowed.
H316 - Causes mild skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements

: P280 - Wear eye or face protection.
P264 - Wash thoroughly after handling.

Section 2. Hazards identification

- : P301 + P317 - IF SWALLOWED: Get medical help.
- P332 + P317 - If skin irritation occurs: Get medical help.
- 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 + P317 - If eye irritation persists: Get medical help.
- : Not applicable.
- : Not applicable.

Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number	Type
Castor oil, ethoxylated, dioleate	>25 - <30	CAS: 110531-96-9	[1]
2-Butenedioic acid (2Z)-, dibutyl ester, polymer with 1-hexadecene and 1-tetradecene	>5 - <10	CAS: 128218-63-3	[1]
2,2'-(cyclohexylimino)bisethanol	>5 - <10	CAS: 4500-29-2	[1]
zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	>1 - <3	CAS: 4259-15-8	[1]
2,2'-(methylimino)diethanol	>1 - <3	CAS: 105-59-9	[1]
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	>0.3 - <1	CAS: 110-25-8	[1]
pyridine-2-thiol 1-oxide, sodium salt	≤0.1	CAS: 3811-73-2	[1]
3(2H)-Isothiazolone, 2-methyl-	≤0.1	CAS: 2682-20-4	[1]
2-n-butyl-benzo[d]isothiazol-3-one	≤0.1	CAS: 4299-07-4	[1]

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.

Type

[1] Substance classified with a health or environmental hazard

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

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. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Get medical attention.

Inhalation

- : Avoid breathing vapor 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Remove victim to fresh air and keep at rest in a position comfortable

Section 4. First aid measures

- for breathing.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been 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. If necessary, call a poison center or physician. 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 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 mild skin irritation.
- Ingestion** : May be harmful if swallowed.

Over-exposure signs/symptoms

- 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.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 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.

See toxicological information (Section 11)

Section 5. Fire-fighting 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.

Section 5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides
 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.

Section 6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures** : 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- Environmental precautions** : Avoid dispersal of spilled 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 materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert 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 release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor 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: (minimum) 24 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 unlabeled 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

Ingredient name	Exposure limits
ATE value	

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

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.

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) .

Eye 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.

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.

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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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.

Color : Brown.

Odor : Characteristic.

Odor threshold : Not available.

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

Melting point/freezing point : Not available.

Pour point : <-20°C (<-4°F)

Boiling point or initial boiling point and boiling range : Not available.

Section 9. Physical and chemical properties and safety characteristics

Flash point	: Open cup: 205°C (401°F)
Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.
Vapor pressure	: Not available.
Relative vapor density	: Not available.
Relative density	: Not available.
Density	: 0.954 g/cm ³ [20°C (68°F)]
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): 104.1 mm ² /s (104.1 cSt)

Particle characteristics

Median particle size	: Not applicable.
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Section 10. Stability and reactivity

Chemical stability	: Shelf life: (minimum) 24 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.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name

Castor oil, ethoxylated, dioleate

-

2-Butenedioic acid (2Z)-, dibutyl ester, polymer with 1-hexadecene and 1-tetradecene
2,2'-(cyclohexylimino)bisethanol

zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)

-

Result

Rat - Oral - LD50

>2000 mg/kg

Rat - Dermal - LD50

>2000 mg/kg

Rat - Oral - LD50

>2000 mg/kg

Rat - Oral - LD50

>2000 mg/kg

Rabbit - Dermal - LD50

>5 g/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Skin After topical exposure - Primary irritation

Rat - Oral - LD50

3.1 g/kg

Section 11. Toxicological information

	<u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Behavioral - Food intake (animal) Gastrointestinal - Hypermotility, diarrhea
2,2'-(methylimino)diethanol	Rat - Oral - LD50 4780 mg/kg
-	Rabbit - Dermal - LD50 >2000 mg/kg
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	Rat - Oral - LD50 >5000 mg/kg
pyridine-2-thiol 1-oxide, sodium salt	Rabbit - Dermal - LD50 1800 mg/kg
-	Rat - Female - Oral - LD50 1208 mg/kg
3(2H)-Isothiazolone, 2-methyl-	Rat - Dermal - LD50 242 mg/kg
-	Rat - Oral - LD50 120 mg/kg
-	Rat - Inhalation - LC50 Vapor 0.11 mg/l [4 hours]
2-n-butyl-benzo[d]isothiazol-3-one	Rat - Dermal - LD50 >2000 mg/kg
-	Rat - Oral - LD50 4267 to 4732 mg/kg

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary [Product] : pH value - Used for classification

Serious eye damage/eye irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Section 11. Toxicological information

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name

2,2'-(cyclohexylimino)bisethanol

pyridine-2-thiol 1-oxide, sodium salt

Result

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (gastrointestinal tract) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (nervous system) - Category 1

Aspiration hazard

Not available.

Information on the likely routes of exposure

Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes mild skin irritation.
Ingestion : May be harmful if swallowed.

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 and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.

Section 11. Toxicological information

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

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/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Vasco 5000	3542.4	>5000	N/A	N/A	N/A
Castor oil, ethoxylated, dioleate	2500	2500	N/A	N/A	N/A
2-Butenedioic acid (2Z)-, dibutyl ester, polymer with 1-hexadecene and 1-tetradecene	2500	N/A	N/A	N/A	N/A
2,2'-(cyclohexylimino)bisethanol	500	N/A	N/A	N/A	N/A
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	3100	N/A	N/A	N/A	N/A
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	N/A	N/A	N/A	N/A	1.5
pyridine-2-thiol 1-oxide, sodium salt	500	790	N/A	N/A	0.5
3(2H)-Isothiazolone, 2-methyl-	120	242	N/A	0.11	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name

Result

2-Butenedioic acid (2Z)-, dibutyl ester, polymer with 1-hexadecene and 1-tetradecene

EC50

Fish
>100 mg/l [96 hours]

2,2'-(cyclohexylimino)bisethanol

EC50

Fish
>100 mg/l [96 hours]

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine

LC50

Fish
1 to 10 mg/l [96 hours]

pyridine-2-thiol 1-oxide, sodium salt

EC50

Daphnia
0.0088 mg/l [48 hours]

-

EC50

Algae
0.0012 mg/l [72 hours]

3(2H)-Isothiazolone, 2-methyl-

EC50

Section 12. Ecological information

2-n-butyl-benzo[d]isothiazol-3-one	OECD 203
	Fish
	0.07 mg/l [96 hours]
-	EC50
	Daphnia
	0.093 mg/l [48 hours]
-	EC50
	Algae
	0.45 mg/l [72 hours]
-	LC50
	Fish
	0.15 mg/l [96 hours]

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	-	85%; <28 day(s)	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	3.59	-	Low
2,2'-(methylimino)diethanol	-1.08	-	Low
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	3.5 to 4.2	-	Low

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

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 to IMO instruments : Not available.

Section 15. Regulatory information

TCCSCA List of toxic chemicals

Not applicable.

TCCSCA List of concerned chemicals

Not applicable.

OSHA Article 29 : None of the components are listed.

OSHA Article 30 : None of the components are listed.

Regulation Governing Designation and Handling Permission of Controlled Chemicals : Not applicable

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

List name	Ingredient name	Status
 Schedule III	2,2'-(methylimino)diethanol	Listed

Montreal Protocol

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Taiwan : All components are listed or exempted.

Section 15. Regulatory information

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 5 SKIN CORROSION/IRRITATION - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method Expert judgment Expert judgment

Organization that prepared the SDS : Product Stewardship Blaser Swisslube AG

IP346:

The contained refined mineral oils are exempt of labelling. The content of polycyclic aromatic hydrocarbons (PCA) according to IP346 is < 3% (DMSO-extract).

History

Date of printing : 2026年02月13日
Date of previous issue : 2025年11月19日
Version : 1.06
Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
EC50 = Half maximal effective concentration
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LC50 = Median lethal concentration
LD50 = Median lethal dose
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

Indicates information that has changed from previously issued version.

Notice to reader

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