SAFETY DATA SHEET

B-Cool Skytec 500

Section 1. Identification

Product identifier : B-Cool Skytec 500

Article No. : 11500-01

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
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Section 2. Hazards identification

Classification of the substance or mixture : SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

GHS label elements, including precautionary statements

Hazard pictograms :

Signal word : Warning

Hazard statements : H319 - Causes serious eye irritation.

Precautionary statements

Prevention : P280 - Wear eye or face protection.

Response : 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

Disposal

Section 2. Hazards identification

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

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%wt	CAS-No.
2,2'-(methylimino)diethanol	<10	105-59-9
2-amino-2-methylpropanol	<5	CAS: 124-68-5
5(or 6)-Carboxy-4-hexylcyclohex-2-ene-1-octanoic acid	<3	CAS: 53980-88-4
Phosphoric acid, isotridecyl ester	<3	CAS: 52933-07-0
2-amino-2-ethylpropanediol	<3	CAS: 115-70-8
N-cyclohexyl-N-methylcyclohexylamine	<3	CAS: 7560-83-0
Poly(oxy-1,2-ethanediyl), α-(carboxymethyl)-ω-[(9Z)-9-octadecen-1-yloxy]-	<3	CAS: 57635-48-0
benzotriazole	<3	CAS: 95-14-7
pyridine-2-thiol 1-oxide, sodium salt	<0.1	CAS: 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. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. 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. 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 for breathing.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

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. 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 : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : No specific data.

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. 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
nitrogen 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

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. 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 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt 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 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: 0 to 40°C (32 to 104°F). Shelf life: 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 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.

Section 8. Exposure controls/personal protection

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

Environmental exposure controls : 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. 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 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 : Tan.

Odour : Characteristic.

Odour threshold : Not available.

pH : 9 to 9.6 [Conc. (% w/w): 5%]

Melting point/freezing point : No data available.

Pour point : -21°C (-5.8°F)

Boiling point or initial boiling point and boiling range : >200°C (>392°F)

Flash point : Open cup: 144°C (291.2°F

Evaporation rate): No data available.

Flammability : Not available.

Section 9. Physical and chemical properties and safety characteristics

Lower and upper explosion limit/flammability limit : Not available.

Vapour pressure : No data available.

Relative vapour density : No data available.

Relative density : No data available.

Density : 0.96 g/cm³ [20°C (68°F)]

Solubility in water : No data available.

Partition coefficient: n-octanol/water : No data applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : No data available.

Viscosity : Dynamic (room temperature): No data available.
Kinematic (room temperature): No data available.
Kinematic (40°C (104°F)): 146 mm^2/s (146 cSt)

Particle characteristics

Median particle size : No data 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: 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.

SADT : Not available.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
2,2'-(methylimino)diethanol	**Rat - Oral - LD50** 4780 mg/kg **Rabbit - Dermal - LD50** >2000 mg/kg
2-amino-2-methylpropanol	**Rabbit - Dermal - LD50** >2000 mg/kg
5(or 6)-Carboxy-4-hexylcyclohex-2-ene-1-octanoic acid	**Rat - Oral - LD50** 6176 mg/kg Toxic effects: Lung, Thorax, or Respiration - Dyspnea Gastrointestinal - Gastritis Gastrointestinal - Ulceration or bleeding from small intestine
Phosphoric acid, isotridecyl ester	**Rat - Oral - LD50** >2000 mg/kg **Rat - Dermal - LD50** >2000 mg/kg

Section 11. Toxicological information

2-amino-2-ethylpropanediol	**Rat - Dermal - LD50** >2000 mg/kg
N-cyclohexyl-N-methylcyclohexylamine	**Rat - Oral - LD50** 267 mg/kg **Rabbit - Dermal - LD50** 295 mg/kg
Poly(oxy-1,2-ethanediyl), α-(carboxymethyl)-ω-[(9Z)-9-octadecen-1-yloxy]-	**Rat - Oral - LD50** >2000 mg/kg **Rabbit - Dermal - LD50** >2000 mg/kg
benzotriazole	**Rat - Oral - LD50** 500 mg/kg **Rabbit - Dermal - LD50** >2000 mg/kg
pyridine-2-thiol 1-oxide, sodium salt	**Rabbit - Dermal - LD50** 1800 mg/kg **Rat - Female - Oral - LD50** 1208 mg/kg

Conclusion/Summary[Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary[Product] : Not available.

Serious eye damage/eye irritation

Not available.

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

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.

Conclusion/Summary[Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary[Product] : Not available.

Section 11. Toxicological information

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	Result
pyridine-2-thiol 1-oxide, sodium salt	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (nervous system) - Category 1

Aspiration hazard

Not available.

Information on 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 : No known significant effects or critical hazards.

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 : No specific data.

Ingestion : No specific data.

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

Short term exposure

Potential immediate effects : Not available.

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.

Section 11. Toxicological information

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 (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
B-Cool Skytec 500	>2000	>2000	N/A	N/A	N/A
2,2'-(methylimino)diethanol	4780	N/A	N/A	N/A	N/A
5(or 6)-Carboxy-4-hexylcyclohex-2-ene-1-octanoic acid	6176	N/A	N/A	N/A	N/A
N-cyclohexyl-N-methylcyclohexylamine	267	295	N/A	N/A	N/A
benzotriazole	500	N/A	N/A	N/A	N/A
pyridine-2-thiol 1-oxide, sodium salt	500	790	N/A	N/A	0.5

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
2-amino-2-methylpropanol	**LC50** Daphnia 193 mg/l [48 hours]
Phosphoric acid, isotridecyl ester	**EC50** Algae - Algae 150 mg/l [72 hours] **EC50** Daphnia - Daphnia 6.3 mg/l [48 hours] **LC50** Fish 24 mg/l [96 hours] **NOEC** Algae - Algae 110 mg/l
N-cyclohexyl-N-methylcyclohexylamine	**Chronic - LC50** Fish 28 mg/l [96 hours] **Chronic - EC50** Daphnia 75 mg/l [48 hours] **Chronic - EC50** Algae 2 mg/l [72 hours] **Chronic - NOEC** Algae 0.078 mg/l [72 hours]
benzotriazole	**Acute - EC50** OECD Daphnia - Water flea - *Daphnia galeata* Age: <24 hours 15.8 mg/l [48 hours] Effect: Intoxication **LC50**

Section 12. Ecological information

	Fish 180 mg/l [96 hours] **Chronic - NOEC** OECD Daphnia - Water flea - *Daphnia galeata* Age: <24 hours 1 mg/l [21 days] Effect: Reproduction
pyridine-2-thiol 1-oxide, sodium salt	**EC50** Daphnia 0.0088 mg/l [48 hours] **EC50** Algae 0.0012 mg/l [72 hours]

Conclusion/Summary[Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary[Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzotriazole	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
2,2'-(methylimino)diethanol	-1.08	-	Low
2-amino-2-methylpropanol	-0.63	-	Low
benzotriazole	1.44	-	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 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 HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class (es)	-	-	-	-	9
Packing group	-	-	-	-	-
Environmental hazards	unknown.	unknown.	unknown.	unknown.	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 to IMO instruments : Not available.

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

List name	Ingredient name	Status
Schedule III	Methyldiethanolamine Triethanolamine	Listed Listed

Montreal Protocol

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

History

Date of printing : 15. Apr. 2025

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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
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Expert judgment

Indicates information that has changed from previously issued version.

Notice to reader

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