SAFETY DATA SHEET



Grindex S 35

Section 1. Identification

GHS product identifier	: Grindex S 35
Article No.	: 01135-01
Product type	: Liquid.

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.

Manufactured/supplied	: BLASER SWISSLUBE AG Winterseistrasse 22 CH-3415 Hasle-Rüegsau Switzerland Tel:+41 (0)34 460 01 01 Mail: contact@blaser.com
	Blaser Swisslube Inc. 31 Hatfield Lane Goshen, NY 10924 Tel:+1 845 294 32 00 Mail: mailboxusa@blaser.com
e-mail address of person responsible for this SDS	: reach@blaser.com
Emergency telephone number (with hours of operation)	: +1 866 928 0789 (Toll free)

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
GHS label elements	
Hazard pictograms	
Signal word	: Warning
Hazard statements	: H373 - May cause damage to organs through prolonged or repeated exposure. (gastrointestinal tract)
Precautionary statements	
Prevention	: P260 - Do not breathe vapor.
Response	: P314 - Get medical advice or attention if you feel unwell.
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Section 2. Hazards identification

Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

Section 3. Composition/information on ingredients

: None known.

Substance/mixture

: Mixture

Ingredient name	%	CAS number
2,2'-(cyclohexylimino)bisethanol	≤3	4500-29-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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 and would require reporting in this section.

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. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
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 following exposure or if feeling unwell. 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.
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 following exposure or if feeling unwell. 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 following exposure or if feeling unwell. 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	<u>n effects</u>	
Eye contact	: No known significant effects or critical hazards.	
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	: No specific data.	

Date of issue/Date of revision

2/10



Section 4. First aid measures

Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Indication of immediate medical attention and special treatment needed, if necessaryNotes 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.
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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized 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 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



Section 6. Accidental release measures

: 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. 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	L
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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 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

NIOSH Recommended exposure limit for Metalworking fluids: 0.5 mg/m3 (particulate)

Ingredient name	Exposure limits
2,2'-(cyclohexylimino)bisethanol	None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	user operations generate dust, fumes, gas, vapor or mist, use proces cal exhaust ventilation or other engineering controls to keep worker e borne contaminants below any recommended or statutory limits.	
Environmental exposure controls Individual protection measure	nissions from ventilation or work process equipment should be check ey comply with the requirements of environmental protection legislation ses, fume scrubbers, filters or engineering modifications to the proce II be necessary to reduce emissions to acceptable levels.	on. In some
Hygiene measures	ash hands, forearms and face thoroughly after handling chemical pro	oducts, before
	ting, smoking and using the lavatory and at the end of the working perpendicular techniques should be used to remove potentially contaminates contaminated clothing before reusing. Ensure that eyewash state owers are close to the workstation location.	ated clothing.



Section 8. Exposure controls/personal protection

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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: safety glasses with side-shields.
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

Miscible with water	1	Yes.
Solubility in water	:	Not available.
cold water hot water		Dispersible Dispersible
Media		Result
Solubility(ies)	1	
Density	1	1.073 g/cm³ [68°F]
Relative density	:	Not available.
Relative vapor density	:	Not available.
Vapor pressure	:	Not available.
Lower and upper explosion limit/flammability limit	:	Not available.
Flammability	:	Not available.
Evaporation rate	1	Not available.
Flash point	:	Open cup: Not applicable.
Boiling point, initial boiling point, and boiling range	1	>212°F
Pour point	:	<32°F
Melting point/freezing point	:	Not available.
рН	:	7.8 to 8.5 [Conc. (% w/w): 5%]
Odor threshold	:	Not available.
Odor	:	Characteristic.
Color	1	Light tan.
Physical state	1	Liquid.

5/10



Partition coefficient: n-: Not applicable. octanol/water : Not available. **Auto-ignition temperature Decomposition temperature** : Not available. : Kinematic (104°F): 31 mm²/s (31 cSt) Viscosity **VOC content** : 16 g/l (ASTM E1868-10); Concentrate in the packaging as sold. 1.1 g/l (ASTM E1868-10); @ Maximum concentration **Particle characteristics** Median particle size : Not applicable. Section 10. Stability and reactivity : No specific test data related to reactivity available for this product or its ingredients. Reactivity **Chemical stability** : Shelf life: 24 months. **Possibility of hazardous** : Under normal conditions of storage and use, hazardous reactions will not occur. reactions

Section 9. Physical and chemical properties and safety characteristics

Incompatible materials : No spe

Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

: No specific data.

Information on toxicological effects

Acute toxicity

Conditions to avoid

Product/ingredient name	Result	Species	Dose	Exposure
2,2'-(cyclohexylimino) bisethanol	LD50 Oral	Rat	>2000 mg/kg	-

Irritation/Corrosion

Not available.

Conclusion/Summary

Skin

: pH value - Used for classification

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification IARC/OSHA/NTP

Not applicable.

Reproductive toxicity

Not available.

Teratogenicity

6/10



Section 11. Toxicological information

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name		Category	Route of exposure	Target organs
2,2'-(cyclohexylimino)bisethanol		Category 2	-	gastrointestinal trac
Aspiration hazard Not available.		I		
nformation on the likely outes of exposure	: Not available.			
Potential acute health effects	<u>S</u>			
Eye contact	: No known signif	icant effects or critical hazar	ds.	
Inhalation	: No known signifi	icant effects or critical hazar	ds.	
Skin contact	: No known signifi	icant effects or critical hazar	ds.	
Ingestion	: No known signifi	icant effects or critical hazar	ds.	
Symptoms related to the phy	vsical, chemical and	d toxicological characterist	<u>tics</u>	
Eye contact	: No specific data			
Inhalation	: No specific data			
Skin contact	: No specific data			
Ingestion	: No specific data			
Delayed and immediate effect	cts and also chronic	c effects from short and lo	ng term exposure	2
Short term exposure				
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
Long term exposure Potential immediate	: Not available.			
effects				
Potential delayed effects	: Not available.			
Potential chronic health eff	ects			
Not available.				
General	: May cause dama	age to organs through prolor	nged or repeated e	xposure.
Carcinogenicity	: No known signifi	icant effects or critical hazar	ds.	
Mutagenicity	: No known signifi	icant effects or critical hazar	ds.	
Reproductive toxicity	• No known signifi	icant effects or critical hazar	de	

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)		Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
Grindex S 35 2,2'-(cyclohexylimino)bisethanol	>2000 500	>2000 N/A	N/A N/A	N/A N/A	N/A N/A
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Section 12. Ecological information

ToxicityProduct/ingredient nameResultSpeciesExposure2,2'-(cyclohexylimino)EC50 >100 mg/lFish96 hoursbisethanolSpeciesSpeciesSpecies

SLUBE

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

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

Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
No.	No.	No.	No.	No.
	-		- -	Image: Constraint of the second sec



Section 14. Transport information

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

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Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed
SARA 302/304	

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Composition/information on ingredients

Name	%	Classification
2,2'-(cyclohexylimino)bisethanol	≤3	ACUTE TOXICITY (oral) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

California Prop. 65

This product contains one or more chemicals listed under California Proposition 65. Such chemicals are not used as raw materials in the product formulation but rather are typical impurities.

California SCAQMD Rule 1144:

Category: Metalworking Fluid – Metal Removal – General. Recordkeeping requirement: Super Compliant. (< 50 g/L VOC @ max. use concentration)

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

List name	Ingredient name	Status
Schedule III	Triethanolamine	Listed

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals



Section 15. Regulatory information

Not listed.

Inventory list

- Canada
 - anada
- : At least one component is not listed in DSL but all such components are listed in NDSL.
- United States
- : All components are active or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Classification	Justification
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

<u>History</u>	
Date of printing	: 8/25/2023
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Prepared by	: 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 = Internediate 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
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 above-named 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.