

SAFETY DATA SHEET

Blaser TP 331

Section 1. Identification

GHS product identifier : Blaser TP 331
Product code : 40331-01

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

Identified uses
Industrial use only. Metal working fluids Experiment
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 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION - Category 2
AQUATIC TOXICITY (CHRONIC) - Category 3

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H303 - May be harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H361 - Suspected of damaging fertility or the unborn child.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Section 2. Hazards identification

- : P203 - Obtain, read and follow all safety instructions before use.
- P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
- P273 - Avoid release to the environment.
- P264 - Wash thoroughly after handling.
- : P318 - IF exposed or concerned, get medical advice.
- P301 + P317 - IF SWALLOWED: Get medical help.
- P302 + P352 - IF ON SKIN: Wash with plenty of water.
- P332 + P317 - If skin irritation occurs: Get medical help.
- P362 + P364 - Take off contaminated clothing and wash it before reuse.
- 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.
- : P405 - Store locked up.
- : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

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
Distillates (petroleum), hydrotreated light paraffinic	>10 - <25	CAS: 64742-55-8	[1] [2]
Alcohols, C16-18, ethoxylated propoxylated	>10 - <25	CAS: 68002-96-0	[1]
1-aminopropan-2-ol	>5 - <10	CAS: 78-96-6	[1]
Fatty acids, castor-oil, polymd.	>5 - <10	CAS: 68604-47-7	[1]
neodecanoic acid	>5 - <10	CAS: 26896-20-8	[1]
benzotriazole	>1 - <3	CAS: 95-14-7	[1]
2,2',2''-nitrilotriethanol	>1 - <3	CAS: 102-71-6	[1]
dicyclohexylamine	>0.3 - <1	CAS: 101-83-7	[1]

Additional information :

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

There are no 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

[2] Substance with a workplace exposure limit

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.

Section 4. First aid measures

- 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 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. Continue to rinse for at least 10 minutes. Get medical attention. 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 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 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** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

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. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

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 : 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). Water polluting material. May be harmful to the environment if released in large quantities.

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). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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.

Section 7. Handling and storage

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: 12 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. Store locked up. 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
Distillates (petroleum), hydrotreated light paraffinic	TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018) [Oil mist] STEL 15 minutes: 10 mg/m ³ . Form: Mist. TWA 8 hours: 5 mg/m ³ . Form: Mist.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.

Section 8. Exposure controls/personal protection

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	: Yellowish.
Odor	: Amine-like.
Odor threshold	: Not available.
pH	: 8.8 to 9.2 [Conc. (% w/w): 5%]
Melting point/freezing point	: Not available.
Pour point	: -21°C (-5.8°F)
Boiling point or initial boiling point and boiling range	: Not available.
Flash point	: Open cup: Not applicable.
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	: 0.972 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)): 73 mm ² /s (73 cSt)

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Chemical stability : Shelf life: 12 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.

Section 10. Stability and reactivity

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

Distillates (petroleum), hydrotreated light paraffinic

-

Alcohols, C16-18, ethoxylated propoxylated

1-aminopropan-2-ol

-

Fatty acids, castor-oil, polymd.

neodecanoic acid

-

benzotriazole

-

2,2',2''-nitrilotriethanol

-

dicyclohexylamine

-

Result

Rat - Oral - LD50

>5000 mg/kg

Rabbit - Dermal - LD50

>3000 mg/kg

Rat - Oral - LD50

>2000 mg/kg

Rat - Oral - LD50

2098 mg/kg

Rabbit - Dermal - LD50

1851 mg/kg

Rat - Oral - LD50

>2000 mg/kg

Rat - Dermal - LD50

3640 mg/kg

Rat - Oral - LD50

>2000 mg/kg

Rat - Oral - LD50

500 mg/kg

Rabbit - Dermal - LD50

>2000 mg/kg

Rabbit - Dermal - LD50

>2000 mg/kg

Rat - Oral - LD50

6400 mg/kg

Rat - Oral - LD50

200 mg/kg

Rabbit - Dermal - LD50

200 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] : pH value - Used for classification

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Section 11. Toxicological information

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.

Reproductive toxicity

Product/ingredient name

1-aminopropan-2-ol

Result

Mammal - species unspecified - Unreported

Fertility effects: Equivocal

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name

Distillates (petroleum), hydrotreated light
paraffinic

Result

ASPIRATION HAZARD - Category 1

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 skin irritation.

Ingestion : May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
- Inhalation** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Delayed and immediate effects and also 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.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : Suspected of damaging fertility or the unborn child.

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)
Blaser TP 331	2979.2	>5000	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light paraffinic	N/A	2500	N/A	N/A	N/A
Alcohols, C16-18, ethoxylated propoxylated	2500	N/A	N/A	N/A	N/A
1-aminopropan-2-ol	2098	1851	N/A	N/A	N/A
Fatty acids, castor-oil, polymd.	2500	N/A	N/A	N/A	N/A
neodecanoic acid	500	3640	N/A	N/A	N/A
benzotriazole	500	2500	N/A	N/A	N/A
2,2',2''-nitrilotriethanol	6400	2500	N/A	N/A	N/A
dicyclohexylamine	200	300	N/A	N/A	N/A

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Alcohols, C16-18, ethoxylated propoxylated	LC50 OECD 203 Fish >100 mg/l [96 hours]
1-aminopropan-2-ol	Acute - LC50 - Fresh water Fish - Goldfish - <i>Carassius auratus</i> <u>Size</u> : 6.2 cm; <u>Weight</u> : 3.3 g 210 mg/l [96 hours] <u>Effect</u> : Mortality
neodecanoic acid	Acute - LC50 Fish >100 mg/l [96 hours]
-	Acute - EC50 Daphnia >100 mg/l [48 hours]
benzotriazole	Acute - EC50 OECD Daphnia - Water flea - <i>Daphnia galeata</i> <u>Age</u> : <24 hours 15.8 mg/l [48 hours] <u>Effect</u> : Intoxication
-	LC50 Fish 180 mg/l [96 hours]
-	EC50 Algae 75 mg/l [72 hours]
2,2',2''-nitrilotriethanol	Chronic - NOEC - Fresh water Daphnia - Water flea - <i>Daphnia magna</i> 16 mg/l [21 days] <u>Effect</u> : Behavior
dicyclohexylamine	Acute - LC50 Fish 12 mg/l [96 hours]
-	Acute - EC50 Daphnia 8 mg/l [48 hours]
-	Acute - NOEC Daphnia 0.016 mg/l [21 days]
-	LC50 Algae 0.38 mg/l [72 hours]
-	NOEC Algae 0.013 mg/l [72 hours]

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Section 12. Ecological information

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
1-aminopropan-2-ol	-0.96	-	Low
neodecanoic acid	2.1	<225	Low
benzotriazole	1.44	-	Low
2,2',2''-nitrilotriethanol	-1	<3.9	Low
dicyclohexylamine	2.724	-	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.

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 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',2"-nitrilotriethanol	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 16. Other information

Procedure used to derive the classification

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

Organization that prepared the SDS : Product Stewardship Blaser Swisslube AG

Section 16. Other information

History

Date of printing	: 2026年02月13日
Date of previous issue	: 2025年11月19日
Version	: 1.04
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.

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