Safety Data Sheet
according SS 586 : Part 3

Printing date 29.11.2019 Version number 6 Revision: 29.11.2019

1 Identification

Product identifier

Trade name: Synergy DWS 320

Article number: 17320-01
Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
Application of the substance / the preparation:
For industrial use only
Metalworking fluid concentrate

Details of the supplier of the safety data sheet
Manufacturer / Supplier:
BLASER SWISSLUBE AG
Winterseistrasse 22
CH-3415 Hasle-Rüegsau
Switzerland
Tel.: +41 (0)34 460 01 01
Fax: +41 (0)34 460 01 00
E-mail: blaser@blaser.com

Blaser Swisslube (S) Pte. Ltd.
No. 1 Yishun Industrial Street 1
A'Posh Bizhub 05-08
Singapore 768 160
Phone: +65 (0) 6339 6881
Fax: +65 (0) 6339 6151
E-mail: singapore@blaser.com

Further information obtainable from:
Product Safety Department
E-mail: sds@blaser.com

Emergency telephone number:
For advice on chemical emergencies, spillages, fires or exposures: +65 3158 1074 (24h/7d)

2 Hazards identification

Classification of the substance or mixture:
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

Label elements
GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
Hazard pictograms

GHS07

Signal word Warning

Hazard-determining components of labelling:
diethylene glycol
Benzotriazole, sodium salt*
Benzotriazole*
Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
Precautionary statements
P264 Wash thoroughly after handling.

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P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.

Other hazards None
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterisation: Mixtures
Description:
Mixture of substances listed below with nonhazardous additions.
Mixture of nitrogen-containing organic acids (salts) and inhibitors.

Declarable, or hazardous components: **CAS-no.**		
CAS: 102-71-6 EINECS: 203-049-8	Triethanolamine	>20-<30%
CAS: 111-46-6 EINECS: 203-872-2	diethylene glycol STOT RE 2, H373; Acute Tox. 4, H302	>5-<15%
	Benzotriazole, sodium salt* Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	>5-9.9%
	Benzotriazole* Aquatic Chronic 2, H411; Acute Tox. 4, H302; Eye Irrit. 2, H319	>5-9.9%
	Carboxylic acids, neutralized with alkanolamines* Skin Irrit. 2, H315; Eye Irrit. 2, H319	>1-4.9%
CAS: 3811-73-2 EINECS: 223-296-5	Sodium omadine Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	<0.25%
CAS: 31075-24-8 Polymer	Poly quaternary ammonium chloride Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302; Acute Tox. 4, H332	<0.25%

Additional information:
* Neutralisation product: Equilibrium of Ionic Pairs according to REACH Annex V, 4.
For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

Description of first aid measures
General information: Immediately remove any clothing soiled by the product.
After inhalation:
In case of unconsciousness place patient stably in side position for transportation.
Not applicable, as the concentrate is not volatile.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: If symptoms persist consult doctor.
Information for doctor:
Most important symptoms and effects, both acute and delayed No further relevant information available.

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Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents: CO_2, powder or water spray. Fight larger fires with water spray.
For safety reasons unsuitable extinguishing agents: Water with full jet
Special hazards arising from the substance or mixture No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.
Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions:
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Handling:
Precautions for safe handling
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
Observe the general safety regulations when handling chemicals.
Information about fire - and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
Information about storage in one common storage facility:
Do not store together with oxidising and acidic materials.
Further information about storage conditions:
Protect from heat and direct sunlight.
Optimal storage temperature between 0°C and 40°C.
Minimum shelf life: In closed original container, at least 24 months.
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters
Ingredients with limit values at the workplace:
General indication value for metalworking fluids (without obligation): 10 mg/m³.

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102-71-6 Triethanolamine	
WSH (Singapore)	Long-term value: 5 mg/m³

Additional information: The lists valid during the making were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Respiratory protection: Not required.
Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the resultant standard EN 374.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
The break through, among others, depending on material density and the type of glove and therefore must be determined in each individual case.
Gloves must be inspected prior to use. Replace when worn!
Impervious gloves: nitrile rubber, minimum thickness of 0.3 mm.
Penetration time of glove material
The exact breaktrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Eye protector with side protection (framed eyeglasses) EN 166.
Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Fluid
Colour:	Yellow
Odour:	Amine-like
Odour threshold:	Not determined.
pH-value:	8.7 - 9.2 @ 50 g/l H_2O (DIN 51369 / ASTM D1287)
Change in condition:	
Melting point/freezing point:	Not applicable
Initial boiling point and boiling range:	>100 °C (DIN 51751 / ASTM D86)
Drip point:	Not applicable
Pour point:	< 0 °C (ISO 3016 / ASTM D97)
Flash point:	>130 °C (ISO 2592 / ASTM D92) Not applicable (contains water).
Flammability (solid, gas):	Not applicable.

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Ignition temperature:	Not applicable not determined
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits (@1013 mbar):	
Lower:	Not determined.
Upper:	Not determined.
Oxidising properties	Not applicable.
Refractive index:	1.462 (@ 20 °C)
Density at 20 °C:	1.14 g/cm³ (DIN 51757 / ASTM D1217)
Vapour density	Not applicable. Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Soluble.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Kinematic at 40 °C:	17.3 mm²/s (ISO 3104 / ASTM D445)
Other information:	safety relevant data, which has to be considered as product specifications.

10 Stability and reactivity

Reactivity None known if used as directed.
Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Reacts with strong acids and oxidising agents.
Conditions to avoid No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

11 Toxicological information

Information on toxicological effects
Acute toxicity
LD/LC50 values relevant for classification:
* pure substance

ATE (Acute Toxicity Estimates)		
Oral	LD50	2,196 mg/kg
Dermal	LD50	>6,698 mg/kg (rabbit)

111-46-6 diethylene glycol		
Oral	LD50	1,120 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
3811-73-2 Sodium omadine		
Oral	LD50	750 mg/kg (rat) Calculated from 40% solution.

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Dermal	LD50	700 mg/kg (rabbit) Calculated from 40% solution.
Inhalative	LD50	2.7 mg/L (rat)
31075-24-8 Poly quaternary ammonium chloride		
Oral	LD50	1,951 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LD50	2.9 mg/L (rat)

Primary irritant effect:
Skin corrosion/irritation Causes skin irritation.
Serious eye damage/irritation Irritating effect.
Respiratory or skin sensitisation No sensitising effects known.
Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.

*
12 Ecological information

Toxicity
Aquatic toxicity:
* pure substance

3811-73-2 Sodium omadine	
EC50/96h	0.00264 mg/L (Oncorhynchus mykiss) (OECD 203)
EC50/48h	0.0088 mg/L (Daphnia magna) (OECD 202)
EC50/72h	0.0012 mg/L (Algae) (OECD 201)
31075-24-8 Poly quaternary ammonium chloride	
LC50/96h	0.047 mg/l (Oncorhynchus mykiss) (OECD 203)
EC50/48h	0.37 mg/L (Daphnia magna) (OECD 202)
EC50/72h	0.0019 mg/L (Algae) (OECD 201)

Persistence and degradability No further relevant information available.
Behaviour in environmental systems:
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Additional ecological information:
General notes: Do not allow product to reach ground water, water course or sewage system.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

UN-Number **ADR, ADN, IMDG, IATA**	Not regulated
UN proper shipping name **ADR, ADN, IMDG, IATA**	Not regulated
Transport hazard class(es) **ADR, ADN, IMDG, IATA** **Class**	Not regulated
Packing group **ADR, IMDG, IATA**	Not regulated
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
IATA	IATA Dangerous Goods Regulation (DGR): latest edition
UN "Model Regulation":	Not regulated

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Poisons Act - Schedule 1
None of the ingredients are listed.

Poisons Act - Schedule 2, Group II
None of the ingredients are listed.

Health Products Act - First Schedule - Psychotropic Substances
None of the ingredients are listed.

GHS label elements CLP/GHS label elements are issued under section 2.

National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

Other regulations, limitations and prohibitive regulations
Substances of very high concern (SVHC) according to REACH, Article 57
This preparation does not contain any SVHC ("Substances of Very High Concern")

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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Regulations / approvals / listings:

Information on REACH registration numbers in section 3:
If no REACH registration numbers on substances in section 3 are mentioned, then they are exempt from the REACH registration requirements (e.g. polymers).

RoHS:
The product is compliant with European Directives 2015/863/EC, 2011/65/EC, 2002/95/EC, WEEE 2002/96/EC, 2003/11/EC, 2005/53/EC and RoHS.
The following substances ARE NOT contained:
Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PBDE) and / or polybrominated biphenyls (PBB), Bis(2-ethylhexyl)phthalate (DEHP), Benzylbutylphthalate (BBP), Dibutylphthalate (DBP), Diisobutylphthalate (DIBP);
lead or it's compounds, cadmium or it's compounds, mercury or it's compounds, chromium Cr^{6}+-compounds.

TSE/BSE:
Materials and/or synthetically modified materials which are of animal origin from bovine, ovine, goats, cats, dogs, deer, elk and/or mink, are NOT included in this product.

Relevant phrases
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Department issuing SDS: Product Stewardship
Contact: Mrs. Wilson + Mr. Feller

Editor's notice:
The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

Abbreviations and acronyms:
RoHS: Restriction of Hazardous Substances
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
ISO: International Organisation for Standardisation
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
ATE: Acute Toxicity Estimate
Acute Tox. 4: Acute toxicity - oral – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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*** Data compared to the previous version altered.**
The asterisk (*) on the left side indicate the respective changes from the previous version.