SAFETY DATA SHEET

Aka-Lube Blue Concentrate

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Aka-Lube Blue Concentrate

Product no.

49605013, 49605017

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

Relevant identified uses of the substance or mixture

Lubricant for metallographic polishing

▼Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Akasel A/S
Svogerslev Hovedgade 48
4000 Roskilde
Denmark
+45 57 84 05 01
www.akasel.com

E-mail

safety@akasel.com

Revision

08/01/2023

SDS Version

3.0

Date of previous version

27/09/2021 (2.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).
See section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.2. Label elements

▼Hazard pictogram(s)

Not applicable.

▼Signal word

Not applicable.

▼Hazard statement(s)

Not applicable.

Safety statement(s)

General

-

Prevention

-

Response

-

Storage

-

Disposal

-

▼Hazardous substances

None known.

▼Additional labelling

EUH210, Safety data sheet available on request.

2.3. Other hazards

▼Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼Substances

Not applicable. This product is a mixture.

3.2. ▼Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Propane-1,2-diol	CAS No.: 57-55-6 EC No.: 200-338-0 UK-REACH: Index No.:	60-80%		
Polyethylene glycol	CAS No.: 25322-68-3 EC No.: 500-038-2 UK-REACH: Index No.:	15-25%		

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

▼Other information

[1] European occupational exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30 °C) and continue until irritation stops.

▼Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

▼Burns

Not applicable.

4.2. ▼Most important symptoms and effects, both acute and delayed

None known.

4.3. ▼Indication of any immediate medical attention and special treatment needed

None known.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. ▼Extinguishing media

None known.

5.2. ▼Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Fire fighters should wear appropriate personal protective equipment.

SECTION 6: Accidental release measures

6.1. ▼Personal precautions, protective equipment and emergency procedures

No specific requirements.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. ▼Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. ▼Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. ▼Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

No special conditions required.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

No specific requirements

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. ▼Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. ▼Control parameters

Propane-1,2-diol
Long term exposure limit (8 hours) (ppm): 150(total)
Long term exposure limit (8 hours) (mg/m³): 474(total)/10(particulates)

ethanediol ethylene glycol
Long term exposure limit (8 hours) (ppm): 20(vapour)

Long term exposure limit (8 hours) (mg/m³): 10(particulate)/52(vapour)
Short term exposure limit (15 minutes) (ppm): 40 (vapour)
Short term exposure limit (15 minutes) (mg/m³): 104 (vapour)
Annotations:
Sk = Can be absorbed through the skin and lead to systemic toxicity.

Ethanol, ethyl alcohol
Long term exposure limit (8 hours) (ppm): 1000
Long term exposure limit (8 hours) (mg/m³): 1920

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

Propane-1,2-diol

Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Dermal	213mg/kg bw/dg
Long term – Local effects - General population	Inhalation	10mg/m3
Long term – Local effects - Workers	Inhalation	10mg/m3
Long term – Systemic effects - General population	Inhalation	50mg/m3
Long term – Systemic effects - Workers	Inhalation	168mg/m3
Long term – Systemic effects - General population	Oral	85 mg/m3

▼PNEC

Propane-1,2-diol

Route of exposure	Duration of Exposure	PNEC
Activated Sludge Plant		2000mg/l
Freshwater		260 mg/l
Freshwater sediment		572 mg/kg d.w
Intermittent release		183mg/l
Marine water		26mg/l
Marine water sediment		57.2mg/kg d.w
Soil		50mg/kg d.w

8.2. ▼Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

▼Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Hygiene measures

Wash hands after use.

▼Measures to avoid environmental exposure

No specific requirements.

8.3. Individual protection measures, such as personal protective equipment

▼Generally

Use only UKCA marked protective equipment.

▼Respiratory Equipment

Type	Class	Colour	Standards
No special when used as intended.			

Skin protection

Recommended	Type/Category	Standards
No specific requirements.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
No specific requirements	-	-	-

Eye protection

Work situation	Type	Standards
At risk of splashing in the eyes	Wear safety glasses with side shields.	EN166

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Liquid

Colour
Blue

▼Odour / Odour threshold
None

▼pH
Testing not relevant or not possible due to the nature of the product.

▼Density (g/cm³)
Testing not relevant or not possible due to the nature of the product.

▼Kinematic viscosity
Testing not relevant or not possible due to the nature of the product.

▼Particle characteristics
Does not apply to liquids.

Phase changes

▼Melting point/Freezing point (°C)
Testing not relevant or not possible due to the nature of the product.

▼Softening point/range (waxes and pastes) (°C)
Does not apply to liquids.

▼Boiling point (°C)
100

▼Vapour pressure
Testing not relevant or not possible due to the nature of the product.

▼Relative vapour density
Testing not relevant or not possible due to the nature of the product.

▼Decomposition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

▼Flash point (°C)
Testing not relevant or not possible due to the nature of the product.

▼Auto-Ignition (°C)
Testing not relevant or not possible due to the nature of the product.

▼Flammability (°C)
Testing not relevant or not possible due to the nature of the product.

▼Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

▼Solubility in water
Completely soluble

▼n-octanol/water coefficient
Testing not relevant or not possible due to the nature of the product.

▼Solubility in fat (g/L)
Testing not relevant or not possible due to the nature of the product.

9.2. Other information

▼Other physical and chemical parameters
No data available.

SECTION 10: Stability and reactivity

10.1. ▼Reactivity
No data available.

10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. ▼Possibility of hazardous reactions
None known.

10.4. ▼Conditions to avoid
None known.

10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products
The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

▼Acute toxicity

Product/substance	Propane-1,2-diol
Test method	
Species	Guinea pig
Route of exposure	Intraperitoneal
Test	LD50
Result	9718 mg/kg
Other information	

Product/substance	Propane-1,2-diol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	6423 mg/kg
Other information	

Product/substance	Propane-1,2-diol
Test method	
Species	Rabbit
Route of exposure	Oral
Test	LD50
Result	18500 mg/kg
Other information	

Product/substance	Propane-1,2-diol
Test method	
Species	Rabbit
Route of exposure	Inhalation
Test	LC50 (2 hours)
Result	>317 mg/L

Other information

Product/substance	Propane-1,2-diol
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>2000 mg/kg
Other information	

Product/substance	ethanediol ethylene glycol
Test method	
Species	Rat
Route of exposure	Intravenous
Test	LD50
Result	3260 mg/kg
Other information	

Product/substance	ethanediol ethylene glycol
Test method	
Species	Guinea pig
Route of exposure	Oral
Test	LD50
Result	5500 mg/kg
Other information	

Product/substance	ethanediol ethylene glycol
Test method	
Species	Guinea pig
Route of exposure	Intraperitoneal
Test	LD50
Result	5614 mg/kg
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	10470 mg/L
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>17100 mg/L
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Guinea pig
Route of exposure	Intraperitoneal
Test	LD50
Result	528 mg/kg
Other information	

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation
Based on available data, the classification criteria are not met.

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.

11.2. Information on other hazards

▼Long term effects
None known.

▼Endocrine disrupting properties
None known.

▼Other information
Ethanol, ethyl alcohol has been classified by IARC as a group 1 carcinogen.

SECTION 12: Ecological information

12.1. ▼Toxicity

Product/substance	Propane-1,2-diol
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	110 mg/L
Other information	

Product/substance	Propane-1,2-diol
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	710 mg/L
Other information	

Product/substance	Propane-1,2-diol
Test method	
Species	Algae
Compartment	
Duration	96 hours
Test	ErC50
Result	19000 mg/L
Other information	

Product/substance	ethanediol ethylene glycol
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	13140 mg/L
Other information	

Product/substance	ethanediol ethylene glycol
Test method	

Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	18500 mg/L
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	9268-14221 mg/L
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	1100 mg/L
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Fish
Compartment	
Duration	48 hours
Test	LC50
Result	8150 mg/L
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Algae
Compartment	
Duration	7 days
Test	EC0
Result	5000 mg/L
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Crustacean
Compartment	
Duration	16 h
Test	EC0
Result	6500 mg/L
Other information	

12.2. Persistence and degradability

Product/substance	Propane-1,2-diol
Biodegradable	Yes
Test method	OECD 301 F
Result	81,7 %

Product/substance	ethanediol ethylene glycol
Biodegradable	Yes
Test method	OECD 301 A
Result	90-100

Product/substance	Ethanol, ethyl alcohol
Biodegradable	Yes
Test method	

Result

12.3. ▼Bioaccumulative potential

Product/substance	Propane-1,2-diol
Test method	
Potential bioaccumulation	No
LogPow	-0,7800
BCF	0.09
Other information	

Product/substance	ethanediol ethylene glycol
Test method	
Potential bioaccumulation	No
LogPow	-1,3600
BCF	No data available.
Other information	

Product/substance	Ethanol, ethyl alcohol
Test method	
Potential bioaccumulation	No
LogPow	-0,3100
BCF	No data available.
Other information	

12.4. ▼Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. ▼Endocrine disrupting properties

None known.

12.7. ▼Other adverse effects

None known.

SECTION 13: Disposal considerations

▼Waste treatment methods

Product is not covered by regulations on dangerous waste.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

▼EWC code

Not applicable.

▼Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group
** Environmental hazards

▼Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. ▼Special precautions for user

Not applicable.

14.7. ▼Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

▼Restrictions for application

None known.

▼Demands for specific education

No specific requirements.

▼SEVESO - Categories / dangerous substances

Not applicable.

▼Additional information

Not applicable.

▼Sources

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
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)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

▼Additional information

Not applicable.

▼The safety data sheet is validated by

iro@akasel.com

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en