

SAFETY DATA SHEET

Aka-Lube, Blue

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

1.1. Product identifier

Trade name

Aka-Lube, Blue

Product no.

49601015 (3500-3520)

▼ Unique formula identifier (UFI)

WQ7R-M9Q3-DHKH-2PC7

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

No special

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

SDS date

23-09-2021

SDS Version

2.0

Date of previous version

2020-10-16 (1.0)

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

Flam. Liq. 2; H225, Highly flammable liquid and vapour.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

▼ **Hazard statement(s)**

Highly flammable liquid and vapour. (H225)

Causes serious eye irritation. (H319)

May cause damage to organs through prolonged or repeated exposure. (H373)

Safety statement(s)

General

-

▼ **Prevention**

Do not breathe vapour / mist. (P260)

Wear eye protection / protective gloves / protective clothing. (P280)

▼ **Response**

Get medical advice/attention if you feel unwell. (P314)

If eye irritation persists: Get medical advice/attention. (P337+P313)

▼ **Storage**

Store in a well-ventilated place. Keep cool. (P403+P235)

▼ **Disposal**

Dispose of contents/container to an approved waste disposal plant. (P501)

Hazardous substances

ethanediol ethylene glycol

2.3. Other hazards

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Please note that peroxides can be formed in the mixture. The peroxide content must be checked regularly after broaching / opening for example every 6 months.

SECTION 3: Composition/information on ingredients

▼ **3.2 Mixtures**

Product/substance	Identifiers	% w/w	Classification	Note
Ethanol, ethyl alcohol	CAS No.: 64-17-5 EC No.: 200-578-6 REACH: Index No.: 603-002-00-5	60-80%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 (SCL: 50.00 %)	
ethanediol ethylene glycol	CAS No.: 107-21-1 EC No.: 203-473-3 REACH: Index No.: 603-027-00-1	10-15%	Acute Tox. 4, H302 STOT RE 2, H373	[1]
propan-2-ol isopropyl alcohol isopropanol	CAS No.: 67-63-0 EC No.: 200-661-7 REACH: Index No.: 603-117-00-0	5-10%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	

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

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

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 victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics

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

SECTION 5: Firefighting measures

▼ 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

▼ 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

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

▼ 6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

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.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

▼ 6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

▼ 7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof [electrical / lighting / ventilating]equipment.

Use non-sparking tools.

Take action to prevent static discharges.

Avoid direct contact with the product.

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

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

▼ 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

— Ethanol, ethyl alcohol

Long term exposure limit (8 hours) (ppm): 1000

Long term exposure limit (8 hours) (mg/m³): 1920

— 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.

-
- propan-2-ol isopropyl alcohol isopropanol
- Long term exposure limit (8 hours) (ppm): 400
- Long term exposure limit (8 hours) (mg/m³): 999
- Short term exposure limit (15 minutes) (ppm): 500
- Short term exposure limit (15 minutes) (mg/m³): 1250

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

No data available

PNEC

No data available

▼ 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 emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.


Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.


▼ Respiratory Equipment

Type	Class	Colour	Standards
S/SL	P2	White	EN149



Skin protection

Recommended	Type/Category	Standards
Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester.	-	-



▼ Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	-	-	EN374-2



▼ 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

Form

Liquid

Colour

Blue

Odour

Alcohol odor

Odour threshold (ppm)

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

pH

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

Density (g/cm³)

0.82

Viscosity

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

Phase changes

Melting point (°C)

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

Boiling point (°C)

78.00 °C

Vapour pressure

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

Vapour density

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

Decomposition temperature (°C)

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

▼ Evaporation rate (n-butylacetate = 100)

Data on fire and explosion hazards

Flash point (°C)

12.00 °C

Ignition (°C)

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

Auto flammability (°C)

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

Explosion limits (% v/v)

2.00 - 15.00 v/v%

Explosive properties

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

Oxidizing properties

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

Solubility

Solubility in water

Soluble

n-octanol/water coefficient

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

Solubility in fat (g/L)

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

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Please note that peroxides can be formed in the mixture. The peroxide content must be checked regularly after broaching / opening for example every 6 months.

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

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 toxicological effects

▼ Acute toxicity

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

Product/substance ethanediol ethylene glycol
 Test method
 Species Guinea pig
 Route of exposure Intraperitoneal
 Test LD50
 Result 5614 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 Rat
 Route of exposure Intravenous
 Test LD50
 Result 3260 mg/kg
 Other information

Product/substance propan-2-ol isopropyl alcohol isopropanol
 Test method
 Species Rat
 Route of exposure Inhalation
 Test LC50 (4 hours)
 Result 66.1 mg/L
 Other information

Product/substance propan-2-ol isopropyl alcohol isopropanol
 Test method
 Species Rabbit
 Route of exposure Dermal
 Test LD50
 Result >2000 mg/kg
 Other information

Product/substance propan-2-ol isopropyl alcohol isopropanol
 Test method
 Species Rat
 Route of exposure Oral
 Test LD50
 Result 5840 mg/kg
 Other information

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

▼ **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**

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Other information

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

propan-2-ol isopropyl alcohol isopropanol has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

▼ **12.1. Toxicity**

Product/substance	Ethanol, ethyl alcohol
Test method	
Species	Crustacean
Compartment	
Duration	16 h
Test	EC0
Result	6500 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 Algae
 Compartment
 Duration 7 days
 Test EC0
 Result 5000 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 48 hours
 Test LC50
 Result 8150 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 propan-2-ol isopropyl alcohol isopropanol
 Test method
 Species Fish
 Compartment
 Duration 96 hours
 Test LC50
 Result 8970-9280 mg/L
 Other information

Product/substance	propan-2-ol isopropyl alcohol isopropanol
Test method	
Species	Daphnia
Compartment	
Duration	24 hours
Test	EC50
Result	9714 mg/L
Other information	

Product/substance	propan-2-ol isopropyl alcohol isopropanol
Test method	
Species	Algae
Compartment	
Duration	7 days
Test	NOEC
Result	1800 mg/L
Other information	

▼ 12.2. Persistence and degradability

Product/substance	Ethanol, ethyl alcohol
Biodegradable	Yes
Test method	
Result	

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

Product/substance	propan-2-ol isopropyl alcohol isopropanol
Biodegradable	Yes
Test method	OECD 301 E
Result	95

▼ 12.3. Bioaccumulative potential

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

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

Product/substance	propan-2-ol isopropyl alcohol isopropanol
Test method	
Potential bioaccumulation	No
LogPow	No data available
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. Other adverse effects

No special

SECTION 13: Disposal considerations

▼ 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Avoid discharge to lakes, streams, sewers, etc.

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

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 - 14.4

This product is within scope of the regulations of transport of dangerous goods.

▼ ADR/RID

UN- or ID number	UN proper shipping name	Labels	Packing group	Tunnel restriction code
1987	ALCOHOLS, N.O.S. (vapour pressure at 50 °C not more than 110 kPa)	3	II	2 (D/E)

▼ IMDG

UN- or ID number	UN proper shipping name	Labels	Packing group	EmS
1987	ALCOHOLS, N.O.S. (vapour pressure at 50 °C not more than 110 kPa)	3	II	F-E, S-D

"MARINE POLLUTANT"

No

▼ IATA

UN- or ID number	UN proper shipping name	Labels	Packing group
1987	ALCOHOLS, N.O.S. (vapour pressure at 50 °C more than 110 kPa)	3	II

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements

▼ SEVESO - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

Additional information

Not applicable

Sources

The Management of Health and Safety at Work Regulations 1999

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.

H302, Harmful if swallowed.

H319, Causes serious eye irritation.

H336, May cause drowsiness or dizziness.

H373, May cause damage to organs through prolonged or repeated exposure.

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
UVCB = Complex hydrocarbon substance
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the substance/mixture in regard of physical hazards has been based on experimental data.

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