

## SAFETY DATA SHEET

# Aka-Spray (Mono & Poly)

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

#### 1.1. Product identifier

##### Trade name

Aka-Spray (Mono & Poly)

##### Product no.

45014011-45027011 (2400-2560)

##### Unique formula identifier (UFI)

Y6JY-HXCQ-SHNW-K2S9

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

##### Relevant identified uses of the substance or mixture

Polishing of metallographic samples

##### ▼ 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

2.0

##### Date of previous version

29/09/2021 (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.

Aerosol 3; H229, Pressurised container: May burst if heated.

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

#### 2.2. Label elements

##### Hazard pictogram(s)



##### Signal word

Danger

##### Hazard statement(s)

Highly flammable liquid and vapour. (H225)

Pressurised container: May burst if heated. (H229)

Causes serious eye irritation. (H319)

## Safety statement(s)

### General

-

### Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)  
Do not pierce or burn, even after use. (P251)

### Response

If eye irritation persists: Get medical advice/attention. (P337+P313)  
In case of fire: Use water mist/carbon dioxide/alcohol-resistant foam to extinguish. (P370+P378)

### Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. (P410+P412)

### ▼ Disposal

Dispose of contents/container in accordance with local regulation. (P501)

## Hazardous substances

Ethanol, ethyl alcohol

### ▼ Additional labelling

UFI: Y6JY-HXCQ-SHNW-K2S9

## 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
Ethanol, ethyl alcohol	CAS No.: 64-17-5 EC No.: 200-578-6 UK-REACH: Index No.: 603-002-00-5	>95%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 (SCL: 50.00 %)	
Carbon dioxide	CAS No.: 124-38-9 EC No.: 204-696-9 UK-REACH: Index No.:	<4%	Press. Gas (Comp.) H280	[1]

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 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 person 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 / CO<sub>2</sub>)

#### 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.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

#### 6.3. ▼ Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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

Avoid static electricity.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools. 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**

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/m<sup>3</sup>): 1920

Carbon dioxide

Long term exposure limit (8 hours) (ppm): 5000

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 9150

Short term exposure limit (15 minutes) (ppm): 15000

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 27400

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**

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

**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**

No specific requirements.

**8.3. Individual protection measures, such as personal protective equipment**


**▼ Generally**

Use only UKCA marked protective equipment.

**Respiratory Equipment**

Work situation	Type	Class	Colour	Standards
When grinding or application by spray	Respiratory protection is not needed in the	-	-	-

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Work situation	Type	Class	Colour	Standards
	event of adequate ventilation			
<ul style="list-style-type: none"> <li>▼ Skin protection No specific requirements.</li> <li>▼ Hand protection No specific requirements.</li> </ul>				
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

Aerosol

#### Colour

Various colours

#### ▼ Odour / Odour threshold

Alcohol odor

#### pH

Not applicable - product is an aerosol

#### Density (g/cm<sup>3</sup>)

Not applicable - product is an aerosol

#### ▼ Relative density

Not applicable - product is an aerosol

#### ▼ Kinematic viscosity

Not applicable - product is an aerosol

#### ▼ Particle characteristics

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

#### 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 aerosols.

#### ▼ Boiling point (°C)

80

#### ▼ 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)

13

#### ▼ 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)

3.3 - 19

#### Solubility

#### Solubility in water

Not applicable - product is an aerosol

**n-octanol/water coefficient**

Not applicable - product is an aerosol

**Solubility in fat (g/L)**

Not applicable - product is an aerosol

**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**

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 hazard classes as defined in Regulation (EC) No 1272/2008**

**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	

**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**

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**

**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.

▼ **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	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

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

#### 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	Ethanol, ethyl alcohol
Biodegradable	Yes
Test method	
Result	

#### 12.3. ▼ Bioaccumulative potential

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 covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

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

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

#### EWC code

16 05 08\* Discarded organic chemicals consisting of or containing dangerous substances

#### ▼ 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	1950	AEROSOLS, flammable	Class: 2 Labels: 2.1 Classification code: 5F	-	No	Limited quantities: 1 L Tunnel restriction code: 2 (D) See below for additional

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	<b>14.1 UN / ID</b>	<b>14.2 UN proper shipping name</b>	<b>14.3 Hazard class(es)</b>	<b>14.4 PG*</b>	<b>14.5 Env**</b>	<b>Other information</b>
						information.
IMDG	1950	AEROSOLS, flammable	Class: 2 Labels: 2.1 Classification code: 5F	-	No	Limited quantities: 1 L EmS: F-D S-U See below for additional information.
IATA	1950	AEROSOLS, flammable	Class: 2 Labels: 2.1 Classification code: 5F	-	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

▼ **Additional information**

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

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

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**

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

The Aerosol Dispensers Regulations 2009 No. 2824, amended in 2014 (No. 1130) and in 2018 (No. 29).

Control of Major Accident Hazards (COMAH) Regulations 2015.

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

**Full text of H-phrases as mentioned in section 3**

- H225, Highly flammable liquid and vapour.
- H280, Contains gas under pressure; may explode if heated.
- H319, Causes serious eye irritation.

**▼ 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**

- 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) as retained and amended in UK law.
- The classification of the mixture in regard to 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