

SAFETY DATA SHEET

Aka-Mono, Aka-Poly, Aka-Mono+ & Aka-Poly+

SECTION 1: Identification

1.1. Product identifier

Trade name

Aka-Mono, Aka-Poly, Aka-Mono+ & Aka-Poly+

Product no.

44114013 - 44148015 (2200-2385)

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

SDS date

12/14/2022

SDS Version

1.0

1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case

See also section 4 "First aid measures".

SECTION 2: Hazard(s) identification

OSHA/HCS status

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification of the substance or mixture

Not classified according to HCS (29 CFR 1910.1200)

2.2. Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Not applicable.

Safety statement(s)

General

-

Prevention

-

Response

-

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Storage

-

Disposal

-

Additional labelling

Not applicable.

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.

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	5-10%		
Acrylic acid, prop-2-enoic acid	CAS No.: 79-10-7	<0.0001%	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1A, H314 Acute Tox. 4, H332 STOT SE 3, H335 (SCL: 1.00 %)	
Cyclohexane	CAS No.: 110-82-7	<0.0001%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 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

None known.

SECTION 4: First-aid measures

4.1. Description of first aid measures

General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

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 victim 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: Fire-fighting measures

5.1. Extinguishing media

Not applicable.

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 Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

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

Recommended storage material

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

Storage temperature

Room temperature 18 to 23°C

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

Cyclohexane

Long term exposure limit (OSHA Table Z-1) (mg/m³): 1050

Long term exposure limit (OSHA Table Z-1) (ppm): 300

Long term exposure limit (ACGIH TLV) (ppm): 100

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

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

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 protective equipment with a recognized certification mark, e.g. the UL mark.

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 special when used as intended.	-	-	-

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

Various colours

Odour

Mild

Odour threshold (ppm)

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

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.

Viscosity

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

Phase changes

Melting point (°F)

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

Boiling point (°F)

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

Vapour pressure

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

Vapour density

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

Decomposition temperature (°F)

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

Data on fire and explosion hazards

Flash point (°F)

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

Ignition (°F)

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

Auto flammability (°F)

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

Explosion limits (% 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.

9.2. Other information

Solubility in fat (g/L)

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

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 toxicological effects

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	

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

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	Trisodium orthophosphate
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>2.000 mg/kg
Other information	

Product/substance	Trisodium orthophosphate
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50 (4 hours)
Result	>0.83 mg/L
Other information	

Product/substance	Trisodium orthophosphate
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	>2.000 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.

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

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.

Long term effects

None known.

Other information

Acrylic acid, prop-2-enoic acid has been classified by IARC as a group 3 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	Trisodium orthophosphate
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	>100 mg/L
Other information	

Product/substance	Trisodium orthophosphate
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	>100 mg/L

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Other information

Product/substance	Trisodium orthophosphate
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	EC50
Result	>100 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 %

12.3. Bioaccumulative potential

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

None known.

SECTION 13: Disposal considerations

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

Acrylic acid, prop-2-enoic acid is listed with EPA Hazardous Waste Number: U008

Cyclohexane is listed with EPA Hazardous Waste Number: U056

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
DOT -	-	-	-	-	-
IMDG -	-	-	-	-	-
IATA -	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to DOT, IATA and IMDG.

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

15.2. U.S. Federal regulations

TSCA

- Propane-1,2-diol is listed in the non-confidential portion
- Acrylic acid, prop-2-enoic acid is listed in the non-confidential portion
- Cyclohexane is listed in the non-confidential portion
- Trisodium orthophosphate is listed in the non-confidential portion

Clean Air Act

- Acrylic acid, prop-2-enoic acid is regulated as a hazardous air pollutant (HAPS)

EPCRA Section 302

- None of the components are listed

EPCRA Section 304

- None of the components are listed

EPCRA section 313

- Acrylic acid, prop-2-enoic acid is listed
- Cyclohexane is listed

CERCLA

- Acrylic acid, prop-2-enoic acid is regulated with a Reportable Quantity (RQ) of: 5000 pounds
- Cyclohexane is regulated with a Reportable Quantity (RQ) of: 1000 pounds
- Trisodium orthophosphate is regulated with a Reportable Quantity (RQ) of: 5000 pounds

State regulations

California / Prop. 65

- None of the components are listed

Massachusetts / Right To Know Act

- None of the components are listed

New Jersey / Right To Know Act

- Propane-1,2-diol / Substance number: 3595
-
- Acrylic acid, prop-2-enoic acid / Substance number: 0023
- Acrylic acid, prop-2-enoic acid is on the Special Health Hazard Substance List
-
- Cyclohexane / Substance number: 0565
- Cyclohexane is on the Special Health Hazard Substance List
-
- Trisodium orthophosphate / Substance number: 1724
-

New York / Right To Know Act

- None of the components are listed

Pennsylvania / Right To Know Act

- Propane-1,2-diol is listed
-
- Acrylic acid, prop-2-enoic acid is listed
- Acrylic acid, prop-2-enoic acid is hazardous to the environment (E)
-
- Cyclohexane is listed
- Cyclohexane is hazardous to the environment (E)
-
- Trisodium orthophosphate is listed
- Trisodium orthophosphate is hazardous to the environment (E)
-

15.4. Restrictions for application

- Restricted to professional users.

15.5. Demands for specific education

- No specific requirements.

15.6. Additional information

- Not applicable.

15.7. Chemical safety assessment

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.
H226, Flammable liquid and vapour.
H302, Harmful if swallowed.
H304, May be fatal if swallowed and enters airways.
H312, Harmful in contact with skin.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H332, Harmful if inhaled.
H335, May cause respiratory irritation.
H336, May cause drowsiness or dizziness.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists
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
CERCLA = Comprehensive Environmental Response Compensation and Liability Act
EINECS = European Inventory of Existing Commercial chemical Substances
EPCRA = Emergency Planning and Community Right-To-Know Act
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HCIS = Hazardous Chemical Information System
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
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)
NFPA = National Fire Protection Association
NIOSH = National Institute for Occupational Safety and Health
OECD = Organisation for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
PBT = Persistent, Bioaccumulative and Toxic
RCRA = Resource Conservation and Recovery Act
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SARA = Superfund Amendments and Reauthorization Act
SCL = A specific concentration limit.
STEL = Short-term exposure limits
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TSCA = The Toxic Substances Control Act
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

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

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: US-en