

SAFETY DATA SHEET

DiaMaxx Mono / DiaMaxx Poly

SECTION 1: Identification

1.1. Product identifier

Trade name

DiaMaxx Mono / DiaMaxx Poly

Product no.

43114013-43118017 (Mono)/43122513-43128017 (Poly)

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

Restricted to professional and industrial use.

▼ 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

12/7/2025

SDS Version

4.0

Date of previous version

9/27/2021 (3.0)

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

2.1. 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)

Precautionary statement(s)

- ▼ General
Not applicable.
- ▼ Prevention
Not applicable.
- ▼ Response
Not applicable.
- ▼ Storage
Not applicable.
- ▼ Disposal
Not applicable.

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	15-25%		
Polyethylene glycol	CAS No.: 25322-68-3	15-25%		
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	

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

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

▼ Other information

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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

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.

▼ **Eye contact**

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

▼ **Ingestion**

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

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**

Treat symptomatically.

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**

No specific requirements.

SECTION 6: Accidental release measures

6.1. ▼ **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. **Environmental precautions**

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth 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

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

Recommended storage material

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

Liquid class

Combustible Liquid / Class IIIB (NFPA 30)

Storage conditions

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

Sodium hydroxide (caustic soda)

Long term exposure limit (OSHA Table Z-1) (mg/m³): 2

Long term exposure limit (ACGIH TLV) (mg/m³): (Ceiling) 2

Ceiling value (NIOSH REL) (mg/m³): 2

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 eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

▼ 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. Pay special attention to hands, forearms and face.

▼ Measures to avoid environmental exposure

No specific requirements.

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
Respiratory protection is not needed in the event of adequate ventilation	-	-	-

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

Color

Various colours

Odor

Sweet

▼ Odor threshold (ppm)

No data available.

pH

6-6.5

▼ Density (g/cm³)

No data available.

▼ Kinematic viscosity

No data available.

Particle characteristics

Does not apply to liquids.

Phase changes

▼ Melting point/freezing point (°F)

No data available.

▼ Softening point/range (°F)

Does not apply to liquids.

▼ Boiling point (°F)

-

▼ Boiling point (°C)

100

▼ Vapor pressure

No data available.

▼ Relative vapor density

No data available.

▼ Decomposition temperature (°F)

No data available.

Data on fire and explosion hazards

▼ Flash point (°F)

-

Flash point (°C)

110

▼ Flammability (°F)

No data available.

▼ Auto-ignition temperature (°F)

No data available.

▼ Explosion limits (% v/v)

No data available.

Solubility

▼ Solubility in water

Completely soluble

▼ n-octanol/water coefficient (LogKow)

No data available.

▼ Solubility in fat (g/L)

No data available.

9.2. Other information

▼ Other physical and chemical parameters

No data available.

▼ Oxidizing properties

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, including those associated with foreseeable emergencies

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

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

▼ Acute toxicity

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

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

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

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

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

Product/substance	Trisodium orthophosphate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>2.000 mg/kg

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

Product/substance	Trisodium orthophosphate
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2.000 mg/kg

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

▼ **Skin corrosion/irritation**

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

▼ **Serious eye damage/irritation**

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

▼ **Respiratory sensitisation**

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

▼ **Skin sensitisation**

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

▼ **Germ cell mutagenicity**

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

▼ **Carcinogenicity**

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

▼ **Reproductive toxicity**

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

▼ **STOT-single exposure**

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

▼ **STOT-repeated exposure**

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

▼ **Aspiration hazard**

Based on available data for the mixture, 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
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	110 mg/L

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

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

Product/substance	Trisodium orthophosphate
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	>100 mg/L

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

Product/substance	Trisodium orthophosphate
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	>100 mg/L

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

12.2. ▼ Persistence and degradability

Product/substance	Propane-1,2-diol
Result:	81,7 %
Conclusion:	Readily biodegradable

Test: OECD 301 F

12.3. ▼ Bioaccumulative potential

Product/substance Propane-1,2-diol
BCF: 0.09
LogKow: -0,7800
Conclusion: No potential for bioaccumulation

12.4. ▼ Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

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

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 informatio n:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

▼ Additional information

Not dangerous goods according to ADR/ADN/RID, IATA and IMDG.

14.6. ▼ Special precautions for user

Not applicable.

14.7. ▼ 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

15.2. ▼ U.S. Federal regulations

▼ TSCA (the non-confidential portion)

Propane-1,2-diol is listed

Sodium hydroxide (caustic soda) is listed

Acrylic acid, prop-2-enoic acid is listed

Cyclohexane is listed

Trisodium orthophosphate is listed

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](#)

Sodium hydroxide (caustic soda) is regulated with a Reportable Quantity (RQ) of: 1000 pounds

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

▼ [Hazardous chemical inventory reporting](#)

This product is not subject to Tier II reporting.

▼ [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

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Sodium hydroxide (caustic soda) / Substance number: 1706

Sodium hydroxide (caustic soda) is on the Special Health Hazard Substance List

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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

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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

—

Sodium hydroxide (caustic soda) is listed

Sodium hydroxide (caustic soda) is hazardous to the environment (E)

—

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 and industrial use.

15.5. ▼ [Demands for specific education](#)

No specific requirements.

▼ 15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

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

DOT = Department of Transportation

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

HNOC = Hazards Not Otherwise Classified

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

safety@akasel.com

▼ **Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a 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