

SAFETY DATA SHEET

DiaDoublo Mono & Poly

SECTION 1: Identification

1.1. Product identifier

Trade name

DiaDoublo Mono & Poly

Product no.

Mono: 43314013 - 43318017, Poly: 43322513-43328017

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 users.

▼ 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

9/10/2023

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® (trriage.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)

Not applicable.

Precautionary 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%		
2-phenoxyethanol	CAS No.: 122-99-6	1-3%	Acute Tox. 4, H302 Eye Irrit. 2, H319	
Alkyl polyglycol ether carbonic acid, 2 EO	CAS No.: 57635-48-0	<0.25%	Eye Dam. 1, H318	
Acrylic acid, prop-2-enoic acid	CAS No.: 79-10-7	<0.0015%	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	<0.0015%	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

-

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

In case of discomfort: bring the person into fresh air.

Skin contact

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

▼ Eye contact

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

▼ **Ingestion**

Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

▼ **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**

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 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**

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**

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.

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

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 eyewash and emergency showers are clearly marked.

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

Hygiene measures

Wash hands after use.

▼ 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
No special when used as intended.			

▼ Skin protection

No specific requirements.

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
At risk of skin contact	Nitrile	0,5	> 480	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
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

Muddy

Odour

Gasoline-like

▼ Odour threshold (ppm)

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

pH

8-9

▼ 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.

Phase changes

▼ Melting point (°F)

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

▼ Softening point/range (waxes and pastes) (°F)

Does not apply to liquids.

▼ Boiling point (°F)

-

▼ Boiling point (°C)

100

▼ 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.

▼ Flammability (°F)

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

▼ Auto-ignition temperature (°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.

▼ 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.

▼ Oxidizing properties

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.

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

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
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	2-phenoxyethanol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1260-4000 mg/kg

Product/substance	2-phenoxyethanol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	2000 mg/kg

Product/substance	2-phenoxyethanol
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	>5 mg/L

Product/substance	Trisodium orthophosphate
Species:	Rat
Route of exposure:	Oral
Test:	LD50

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

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

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.

▼ 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	2-phenoxyethanol
Species:	Daphnia

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

Duration: 48 hours
Test: EC50
Result: 460 mg/L

Product/substance 2-phenoxyethanol
Species: Daphnia
Duration: 24 hours
Test: EC50
Result: 517 mg/L

Product/substance 2-phenoxyethanol
Species: Algae
Duration: 72 hours
Test: EC50
Result: 443 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

12.2. ▼ Persistence and degradability

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

Product/substance 2-phenoxyethanol
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 2-phenoxyethanol
Test method:
Potential bioaccumulation: No data available.
LogPow: 1,1600
BCF: No data available.
Other information:

12.4. Mobility in soil

2-phenoxyethanol
LogKoc = 0.997004, High mobility potential.

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

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

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

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

2-phenoxyethanol 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:

—
Acrylic acid, prop-2-enoic acid / Substance number:

Acrylic acid, prop-2-enoic acid is on the Special Health Hazard Substance List

—
Cyclohexane / Substance number:

Cyclohexane is on the Special Health Hazard Substance List

—
Trisodium orthophosphate / Substance number:

▼ **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**

No

15.8. **Sources**

1993 Hazardous Substances Law

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.

H318, Causes serious eye damage.

H319, Causes serious eye 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**

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: US-en