

SAFETY DATA SHEET

DiaDoublo Mono & Poly

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

1.1. Product identifier

Trade name

DiaDoublo Mono & Poly

Product no.

Mono: 43314013 - 43318017, Poly: 43322513-43328017 (3000-3190)

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

4.0

Date of previous version

27/09/2021 (3.0)

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

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.2. Label elements

▼ Hazard pictogram(s)

Not applicable.

▼ Signal word

Not applicable.

▼ Hazard statement(s)

Not applicable.

Safety statement(s)

General

-

Prevention

-

Response

-

Storage

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

-
Disposal
-

▼ Hazardous substances

None known.

▼ Additional labelling

EUH210, Safety data sheet available on request.

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
Propane-1,2-diol	CAS No.: 57-55-6 EC No.: 200-338-0 UK-REACH: Index No.:	5-10%		
2-phenoxyethanol	CAS No.: 122-99-6 EC No.: 204-589-7 UK-REACH: Index No.: 603-098-00-9	1-3%	Acute Tox. 4, H302 Eye Irrit. 2, H319	
Alcohol ethoxylates	CAS No.: 68920-66-1 EC No.: 500-236-9 UK-REACH: Index No.:	<1%	Skin Irrit. 2, H315 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412	
Alkyl polyglycol ether carbonic acid,2 EO	CAS No.: 57635-48-0 EC No.: 611-563-2 UK-REACH: Index No.:	<1%	Eye Dam. 1, H318 Aquatic Chronic 2, H411	
Acrylic acid, prop-2-enoic acid	CAS No.: 79-10-7 EC No.: 201-177-9 UK-REACH: Index No.: 607-061-00-8	<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 %) Aquatic Acute 1, H400 (M=1)	[1]
Cyclohexane	CAS No.: 110-82-7 EC No.: 203-806-2 UK-REACH: Index No.: 601-017-00-1	<0.0015%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1], [3]

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.

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

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 and open eyes widely. Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Seek medical assistance and 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

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: 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

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

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.

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

Propane-1,2-diol

Long term exposure limit (8 hours) (ppm): 150(total)

Long term exposure limit (8 hours) (mg/m³): 474(total)/10(particulates)

Acrylic acid, prop-2-enoic acid

Long term exposure limit (8 hours) (ppm): 10

Long term exposure limit (8 hours) (mg/m³): 29

Short term exposure limit (15 minutes) (ppm): 20 (1 min.)

Short term exposure limit (15 minutes) (mg/m³): 59 (1 min.)

Cyclohexane

Long term exposure limit (8 hours) (ppm): 100

Long term exposure limit (8 hours) (mg/m³): 350

Short term exposure limit (15 minutes) (ppm): 300

Short term exposure limit (15 minutes) (mg/m³): 1050

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

Propane-1,2-diol

Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Dermal	213mg/kg bw/dg
Long term – Local effects - General population	Inhalation	10mg/m ³
Long term – Local effects - Workers	Inhalation	10mg/m ³
Long term – Systemic effects - General population	Inhalation	50mg/m ³
Long term – Systemic effects - Workers	Inhalation	168mg/m ³
Long term – Systemic effects - General population	Oral	85 mg/m ³

▼ PNEC

Propane-1,2-diol

Route of exposure	Duration of Exposure	PNEC
Activated Sludge Plant		2000mg/l
Freshwater		260 mg/l
Freshwater sediment		572 mg/kg d.w
Intermittent release		183mg/l

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

Marine water	26mg/l
Marine water sediment	57.2mg/kg d.w
Soil	50mg/kg d.w

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.

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

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 / Odour threshold

Gasoline-like

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.

▼ Particle characteristics

Does not apply to liquids.

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 liquids.

▼ Boiling point (°C)

100

▼ 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)

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

▼ 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)

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.

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

▼ Acute toxicity

Product/substance	Propane-1,2-diol
-------------------	------------------

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

Test method	
Species	Guinea pig
Route of exposure	Intraperitoneal
Test	LD50
Result	9718 mg/kg
Other information	
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	2-phenoxyethanol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	1260-4000 mg/kg
Other information	
Product/substance	2-phenoxyethanol
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	2000 mg/kg
Other information	
Product/substance	2-phenoxyethanol
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50 (4 hours)
Result	>5 mg/L
Other information	
Product/substance	Alcohol ethoxylates
Test method	

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

Species	Rat
Route of exposure	Oral
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.

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

None known.

▼ Endocrine disrupting properties

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

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

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	2-phenoxyethanol
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	460 mg/L
Other information	
Product/substance	2-phenoxyethanol
Test method	
Species	Daphnia
Compartment	
Duration	24 hours
Test	EC50
Result	517 mg/L
Other information	
Product/substance	2-phenoxyethanol
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	EC50
Result	443 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	

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

Duration	48 hours
Test	EC50
Result	>100 mg/L
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 %

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 vPvB.

12.6. ▼ Endocrine disrupting properties

None known.

12.7. ▼ Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

SECTION 13: Disposal considerations

▼ Waste treatment methods

Product is not covered by regulations on dangerous waste.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

▼ 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 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

▼ Additional information

Not dangerous goods according to ADR, IATA and IMDG.

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.

▼ Demands for specific education

No specific requirements.

▼ SEVESO - Categories / dangerous substances

Not applicable.

▼ Additional information

Not applicable.

▼ Sources

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.

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.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

H411, Toxic to aquatic life with long lasting effects.

H412, Harmful to aquatic life with long lasting effects.

▼ **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**

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: GB-en