

## SAFETY DATA SHEET

## DiaDoublo Mono &amp; Poly

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

## 1.1. Product identifier

## Trade name

DiaDoublo Mono &amp; 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

No special

## 1.3. Details of the supplier of the safety data sheet

## Company and address

**Akasel A/S**

Svogerslev Hovedgade 48

4000 Roskilde

Denmark

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www.akasel.com

## E-mail

safety@akasel.com

## SDS date

27-09-2021

## SDS Version

3.0

## Date of previous version

2021-06-11 (2.0)

## 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)

## 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

-

Disposal

-

Hazardous substances

No special

2.3. Other hazards

Additional labelling

EUH210, Safety data sheet available on request.

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

▼ 3.2 Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Propane-1,2-diol	CAS No.: 57-55-6 EC No.: 200-338-0 REACH: 01-2119456809-23-xxxx Index No.:	5-10%		
2-phenoxyethanol	CAS No.: 122-99-6 EC No.: 204-589-7 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 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 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 REACH: 01-2119452449-31-xxxx Index No.: 607-061-00-8	<0.0015%	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1A, H314 Aquatic Acute 1, H400 (M=1) STOT SE 3, H335 (SCL: 1.00 %)	[1]

Cyclohexane	CAS No.: 110-82-7	<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]
	EC No.: 203-806-2			
	REACH:			
	Index No.: 601-017-00-1			

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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] The chemical substance is subject to REACH restrictions, REACH annex XVII.

### 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 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

No special

#### 4.3. Indication of any immediate medical attention and special treatment needed

No special

##### 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

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.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of 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/m<sup>3</sup>): 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/m<sup>3</sup>): 29

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

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 59 (1 min.)

—  
Cyclohexane

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

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 350

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

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

Product/substance	Propane-1,2-diol
DNEL	168mg/m <sup>3</sup>
Route of exposure	Inhalation
Duration	Long term – Systemic effects - Workers

Product/substance	Propane-1,2-diol
DNEL	10mg/m <sup>3</sup>
Route of exposure	Inhalation
Duration	Long term – Local effects - Workers

Product/substance	Propane-1,2-diol
DNEL	213mg/kg bw/dg
Route of exposure	Dermal
Duration	Long term – Systemic effects - General population

Product/substance	Propane-1,2-diol
DNEL	50mg/m <sup>3</sup>
Route of exposure	Inhalation
Duration	Long term – Systemic effects - General population

Product/substance	Propane-1,2-diol
DNEL	85 mg/m <sup>3</sup>
Route of exposure	Oral
Duration	Long term – Systemic effects - General population

Product/substance	Propane-1,2-diol
DNEL	10mg/m <sup>3</sup>
Route of exposure	Inhalation
Duration	Long term – Local effects - General population

**▼ PNEC**

Product/substance	Propane-1,2-diol
PNEC	260 mg/l
Route of exposure	Freshwater
Duration of Exposure	

Product/substance	Propane-1,2-diol
PNEC	26mg/l
Route of exposure	Marine water
Duration of Exposure	

Product/substance	Propane-1,2-diol
PNEC	183mg/l
Route of exposure	Intermittent release
Duration of Exposure	

Product/substance	Propane-1,2-diol
PNEC	572 mg/kg d.w
Route of exposure	Freshwater sediment

Duration of Exposure

Product/substance	Propane-1,2-diol
PNEC	50mg/kg d.w
Route of exposure	Soil
Duration of Exposure	

Product/substance	Propane-1,2-diol
PNEC	2000mg/l
Route of exposure	Activated Sludge Plant
Duration of Exposure	

Product/substance	Propane-1,2-diol
PNEC	57.2mg/kg d.w
Route of exposure	Marine water sediment
Duration of Exposure	

▼ 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

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

Individual protection measures, such as personal protective equipment

Generally

Use only CE 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

#### Form

Liquid

#### Colour

Muddy

#### Odour

Gasoline-like

#### Odour threshold (ppm)

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

#### pH

8-9

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

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

#### Viscosity

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

#### Phase changes

##### Melting point (°C)

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

##### Boiling point (°C)

100.00 °C

##### Vapour pressure

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

##### Vapour density

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

##### Decomposition temperature (°C)

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

##### Evaporation rate (n-butylacetate = 100)

#### Data on fire and explosion hazards

##### Flash point (°C)

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

##### Ignition (°C)

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

##### Auto flammability (°C)

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

##### Explosion limits (% v/v)

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

##### Explosive properties

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

##### Oxidizing properties

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

#### Solubility

##### Solubility in water

Soluble

##### n-octanol/water coefficient

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

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

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

## 9.2. Other information

### 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

No special

#### 10.4. Conditions to avoid

No special

#### 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	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>2000 mg/kg
Other information	

Product/substance	Propane-1,2-diol
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 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 Alkohol ethoxylates  
 Test method  
 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 Dermal  
 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	Oral
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.

#### Long term effects

No special

#### 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	2-phenoxyethanol
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	EC50
Result	443 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	Trisodium orthophosphate
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	>100 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	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. Other adverse effects

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

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### 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 - 14.4

Not dangerous goods according to ADR, IATA and IMDG.

##### ADR/RID

Not applicable

##### IMDG

Not applicable

"MARINE POLLUTANT"

No

##### IATA

Not applicable

#### 14.5. Environmental hazards

Not applicable

#### 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

##### 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.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

#### 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

UVCB = Complex hydrocarbon substance  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

**Additional information**

Not applicable

**The safety data sheet is validated by**

iro@akasel.com

In accordance with Article 31 of REACH a safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis.

**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