

SAFETY DATA SHEET

# Hydrophilic Polymer Elastomer Ball

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

### Product identifier

#### Trade name

Hydrophilic Polymer Elastomer Ball

#### Other names / Synonyms

H-1000-0315-01-A

### Relevant identified uses of the substance or mixture and uses advised against

#### Relevant identified uses of the substance or mixture

Industrial professional use for Renishaw REVO Ultrasonic Probe 1 (RUP1)  
Restricted to professional users.

#### Uses advised against

None known.

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

#### Company and address

##### Renishaw plc

New Mills  
Wotton-under-Edge,  
GL12 8JR, Gloucestershire,  
United Kingdom  
+44 (0) 1453 524524  
www.renishaw.com

#### E-mail

msds@renishaw.com

#### SDS date

8/4/2024

#### SDS Version

1.0

### Emergency telephone number

In an emergency call 995

In less severe situations call the Drugs & Poison Hotline: 6423 9119

See section 4 "First aid measures".

Emergency contact from supplier: +44 (0) 1453 524524 (UK office hours 08:00 to 17:00 UTC Monday to Thursday, 08:00 to 13:00 Friday)

## SECTION 2: Hazards identification

Classified according to SS 586-2:2022.

### Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.

STOT SE 3; H336, May cause drowsiness or dizziness.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

### Label elements

#### Hazard pictogram(s)



#### Signal word

Warning

#### Hazard statement(s)

Harmful if swallowed. (H302)

May cause drowsiness or dizziness. (H336)

May cause damage to organs through prolonged or repeated exposure. (H373)

#### Precautionary statement(s)

**General**

-

**Prevention**

Do not breathe dust/fume/vapour. (P260)

Wash hands and exposed skin thoroughly after handling. (P264)

**Response**

Call a POISON CENTER/doctor if you feel unwell. (P312)

Get medical advice/attention if you feel unwell. (P314)

**Storage**

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

Store locked up. (P405)

**Disposal**

Dispose of contents/container in accordance with local regulation (P501)

**Hazardous substances**

ethanediol;ethylene glycol

**Additional labelling**

Not applicable.

**Other hazards****Additional warnings**

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

**SECTION 3: Composition/information on ingredients****Substances**

Not applicable. This product is a mixture.

**Mixtures**

Product/substance	Identifiers	% w/w	Classification	Note
ethanediol;ethylene glycol	CAS No.: 107-21-1 EC No.: 203-473-3	60-80%	Acute Tox. 4, H302 STOT SE 3, H336 STOT RE 2, H373	
2-Propenoic acid, homopolymer, sodium salt	CAS No.: 9003-04-7 EC No.: 618-349-8	1-3%	Eye Irrit. 2, H319	

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****Description of first aid measures****General information**

In the case of accident: Contact a doctor or casualty department – bring 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**

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.

If skin irritation occurs: Get medical advice/attention.

**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 SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

### Burns

Not applicable.

### Most important symptoms and effects, both acute and delayed

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

Call a POISON CENTER/doctor if you feel unwell.

### Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: Firefighting measures

### 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.

### 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>)

### Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact Drugs & Poison Hotline (tel: 6423 9119) in order to obtain further advice.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

### Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

### Methods and material for containment and cleaning up

Limit spillage, sweep up and shovel into appropriate containers for disposal. Store in suitable, closed containers for disposal.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 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

### Precautions for safe handling

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

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.

### Conditions for safe storage, including any incompatibilities

No special conditions required.

### Recommended storage material

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

### Storage temperature

No specific requirements

### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### Control parameters

ethanediol;ethylene glycol  
 Short term PEL (15 minutes) (ppm): 50  
 Short term PEL (15 minutes) (mg/m<sup>3</sup>): 127

Workplace Safety and Health Act (Chapter 354a, Section 65), Workplace Safety and Health (General Provisions) Regulations (G.N. No. S 134/2006) (Latest revision: January 2023)

### 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

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.  
 Airborne gas and dust concentrations 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. Pay special attention to hands, forearms and face.

#### Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

### Individual protection measures, such as personal protective equipment

#### Generally

Use only protective equipment with a recognized certification mark, e.g. the S-Mark.

#### Respiratory Equipment

Type	Class	Colour	Standards
No special when used as intended.			

#### Skin protection

Recommended	Type/Category	Standards
No special when used as intended.	-	-

#### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388



#### Eye protection

Type	Standards
Wear safety goggles with protective side shields in accordance with standard EN166.	EN 166



## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Form  
 Solid  
 Colour

Red

Odour

None

Odour threshold (ppm)

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

pH

Not applicable - product is a solid

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

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

Kinematic viscosity

Not applicable - product is a solid

Phase changes

Melting point (°C)

70

Boiling point (°C)

Not applicable - product is a solid

Vapour pressure

Not applicable - product is a solid

Relative vapour density

Not applicable - product is a solid

Decomposition temperature (°C)

Not applicable - product is a solid

Evaporation rate (n-butylacetate = 100)

Not applicable - product is a solid

Data on fire and explosion hazards

Flash point (°C)

Not applicable - product is a solid

Flammability (°C)

The material is not combustible.

Auto-ignition temperature (°C)

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

Explosion limits (% v/v)

Does not apply to solids.

Explosive properties

Not applicable - product is a solid

Oxidizing properties

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

Solubility

Solubility in water

Insoluble

n-octanol/water coefficient (LogKow)

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.

Other information

Evaporation rate (n-butylacetate = 100)

Not applicable - product is a solid

Other physical and chemical parameters

No data available.

Oxidizing properties

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

## SECTION 10: Stability and reactivity

Reactivity

No data available.

Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

Possibility of hazardous reactions

None known.

Conditions to avoid

None known.

**Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

**SECTION 11: Toxicological information**

**Information on toxicological effects**

**Acute toxicity**

Product/substance      ethanediol;ethylene glycol  
 Species:                      Rat  
 Route of exposure:        Oral  
 Test:                            LD50  
 Result:                        7712 mg/kg

Product/substance      ethanediol;ethylene glycol  
 Species:                      Mouse  
 Route of exposure:        Dermal  
 Test:                            LD50  
 Result:                        >3500 mg/kg

Product/substance      ethanediol;ethylene glycol  
 Species:                      Rat  
 Route of exposure:        Inhalation  
 Test:                            LD50  
 Result:                        >2.5 mg/L

Product/substance      2-Propenoic acid, homopolymer, sodium salt  
 Species:                      Rat  
 Route of exposure:        Oral  
 Test:                            LD50  
 Result:                        >5000 mg/kg

Harmful if swallowed.

**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**

Product/substance      ethanediol;ethylene glycol  
 Target organ:                Central nervous system

May cause drowsiness or dizziness.

**STOT-repeated exposure**

Product/substance      ethanediol;ethylene glycol  
 Target organ:                Kidney

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

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

**Long term effects**

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

## SECTION 12: Ecological information

### Toxicity

Product/substance ethanediol;ethylene glycol  
 Species: Fish, Oncorhynchus mykiss  
 Duration: 96 hours  
 Test: LC50  
 Result: 41000 mg/L

Product/substance ethanediol;ethylene glycol  
 Species: Daphnia, Daphnia magna  
 Duration: 48 hours  
 Test: EC50  
 Result: 46300 mg/L

Product/substance ethanediol;ethylene glycol  
 Species: Algae, Pseudokirchneriella subcapitata  
 Duration: 96 hours  
 Test: EC50  
 Result: 6500 mg/L

### Persistence and degradability

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

### Bioaccumulative potential

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

### Mobility in soil

No data available.

### Results of PBT and vPvB assessment

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

### Other adverse effects

None known.

## SECTION 13: Disposal considerations

### Waste treatment methods

Dispose of contents/container to an approved waste disposal plant.  
 Environmental Protection and Management Act 1999 (2020 Rev. Ed.)

### 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.

### Special precautions for user

Not applicable.

### Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

## SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

#### Demands for specific education

No specific requirements.

#### Major hazard installation

Not applicable.

#### Additional information

Not applicable.

#### Sources

Employment Act 1968 (2020 Rev. Ed.)

Environmental Protection and Management Act 1999 (2020 Rev. Ed.)

Environmental Protection and Management Act (Chapter 94a, Section 77), Environmental Protection and Management (Hazardous Substances) Regulations (No. S 159/1999)

Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 8, 2019) as specified by SS 586-2 and SS 586-3:2022.

#### Chemical safety assessment

No

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.

H319, Causes serious eye irritation.

H336, May cause drowsiness or dizziness.

H373, May cause damage to organs through prolonged or repeated exposure.

#### The full text of identified uses as mentioned in section 1

None known.

#### Abbreviations and acronyms

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

EINECS = European Inventory of Existing Commercial chemical Substances

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

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)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PEL = Permissible Exposure Level

RCM = Regulatory Mark of Conformity

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

SCL = A specific concentration limit

SS = Singapore Standard

STEL = Short-term exposure limits

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

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by SS 586-2:2022.

#### The safety data sheet is validated by

EcoOnline

#### 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: SG-en