SAFETY DATA SHEET

Hydrophilic Polymer Elastomer Ball

SECTION 1: Identification

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1.1. Product identifier
  Trade name
     Hydrophilic Polymer Elastomer Ball
  Other names / Synonyms
     H-1000-0311-01-A
1.2. 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.
1.3. 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
     2024-04-02
  SDS Version
     10
1.4. Emergency telephone number
  In an emergency call 911
  Alberta / Northwestern Territories (PADIS): 1-800-332-1414
  British Columbia (DPIC): 1-800-567-8911
  Manitoba: 1-855-7POISON (1-855-776-4766)
  New Brunswick: 911
  Nova Scotia / Prince Edward Island (IWK): 1-800-565-8161
  Ontario (OPC): 1-800-268-9017
  Québec (CAPQ): 1-800-463-5060
  Saskatchewan (PADIS): 1-866-454-1212
  Yukon Territory: (867) 393-8700
  Transport emergenices: Call CANUTEC at 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone (24
  hours)
  See also 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)
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SECTION 2: Hazard(s) identification

Classified according to WHMIS 2022.

2.1. 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.

2.2. 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)
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.
2.3. Other hazards
Additional warnings This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
This mixture/product does not contain any substances known to fullif the criteria for PBT and VPVB classification.

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
ethanediol;ethylene glycol	CAS No.: 107-21-1	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	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

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. 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.

4.2. 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.

4.3. 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: 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 a poison centre in order to obtain further advice. See section 1 "Emergency telephone number".

SECTION 6: Accidental release measures

6.1. 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.

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

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.

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

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.

7.2. 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. 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 ALBERTA
ethanediol;ethylene glycol Short term exposure limit (15 minutes) (mg/m³): (c) 100
Annotations: 3 = Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Occupational Health and Safety Code 2009 Order, Alta Reg 87/2009 (revised in 2018)
BRITISH COLUMBIA
ethanediol;ethylene glycol Time-Weighted Average Limit (TWA): 10 mg/m³ (partic.)
Short-Term Exposure Limit (STEL) / Ceiling Limit (C): 20 mg/m ³ (partic.) ; C 100 mg/m ³ (aerosol / aérosol) ; C 50 mg/m ³
(vapour / vapeur)
OHS Regulation Part 5: Chemical Agents and Biological Agents.
ONTARIO ethanediol;ethylene glycol
Short-Term Exposure Limit (STEL) / Ceiling Limit (C): C 100 mg/m ³ (Aerosol only)
Regulation 833 (Control of Exposure to Biological or Chemical Agents) and Ontario Regulation 490/09 (Designated Substances)
QUEBEC
ethanediol;ethylene glycol Annotations:
RP = A substance which may not be recirculated in accordance with section 108.
Regulation respecting occupational health and safety (Chapter S-2.1, r. 13)
SASKATCHEWAN
ethanediol;ethylene glycol STEV/Ceiling (mg/m³): 100
The Occupational Health and Safety Regulations, 2020, Chapter S15.1 Reg 10. 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
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 UL mark.

Respiratory Equipment

Туре	Class	Colour	Standards	
No special wher as intended.	nused			
Skin protection				
Recommended	Type/Category	Standard	ds	
No special wher as intended.	n used -	-		
Hand protection				
Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	Mn

Eye protection

TypeStandardsWear safety goggles
with protective side
shields in accordance
with standard EN166.EN 166

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state Solid
Colour
Red
Odour None
Odour threshold (ppm)
Testing not relevant or not possible due to the nature of the product.
рН
Not applicable - product is a solid
Density (g/cm³)
Testing not relevant or not possible due to the nature of the product.
Kinematic viscosity
Not applicable - product is a solid
Particle characteristics
Testing not relevant or not possible due to the nature of the product.
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



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. 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.
9.2. 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
 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

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

tute toxicity Product/substance Species: Route of exposure: Test: Result:	ethanediol;ethylene glycol Rat Oral LD50 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.

Other information

None known.

SECTION 12: Ecological information

12.1 Toxicity

2.1. TOXICILY			
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		

12.2. Persistence and degradability

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

6500 mg/L

EC50

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

Test:

Result:

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

Waste treatment methods

None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 14.5 Other PG* Env** information:
TDG		-	
IMDG		-	
IATA		-	

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to TDG, 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. Canadian lists

DSL / NDSL

ethanediol;ethylene glycol is listed

2-Propenoic acid, homopolymer, sodium salt is listed

15.4. Restrictions for application

Restricted to professional users.

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.

15.5. Demands for specific education

No specific requirements.

Additional information

Not applicable.

15.7. Chemical safety assessment

No

Hazardous Products Regulations (SOR/2022-272)

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

ANSI = American National Standards Institute

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

DSL = Domestic Substances List

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HHNOC = Health 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)

NDSL = Non-domestic substances list

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PHNOC = Physical Hazards Not Otherwise Classified

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

SCL = A specific concentration limit.

SOR = Statutory Orders and Regulations

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TDG = Transportation of Dangerous Goods

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

WHIMS = Workplace Hazardous Materials Information System

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by WHMIS 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: CA-en