SAFETY DATA SHEET

Hydrophilic Polymer Elastomer Ball

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

1.1. Product identifier Trade name Hydrophilic Polymer Elastomer Ball Other names / Synonyms H-1000-0363-01-A Unique formula identifier (UFI) CGC3-155T-2104-UDT9 ^{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 **F-mail** msds@renishaw.com Revision 20/03/2024 SDS Version 1.0 1.4. Emergency telephone number The National Poisons Information Centre (NPIC) Public: +353 (0) 1 809 2166 (7 days a week, 8am- 10pm) Healthcare professionals: +353 (0) 1 809 2566 (24 h service) 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) SECTION 2: Hazards identification

SECTION 2. Huzurus lucitumeution

Classified according to Regulation (EC) No. 1272/2008 (CLP).

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)



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 UFI: CGC3-155T-2104-UDT9 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 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 |
|---|---|--------|--|------|
| ethanediol;ethylene glycol | CAS No.: 107-21-1 EC No.: 203-473-3 REACH: Index No.: | 60-80% | Acute Tox. 4, H302 STOT SE 3, H336 STOT RE 2, H373 | [1] |
| 2-Propenoic acid, homopolymer, sodium salt | CAS No.: 9003-04-7 EC No.: 618-349-8 REACH: Index No.: | 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

[1] European occupational exposure limit.

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

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: 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

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the National Poisons Information Centre (NPIC) on +353 (0) 1 809 256 (24 h service) in order to obtain further advice.

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

ethanediol; ethylene glycol

Long term exposure limit (8 hours) (mg/m³): 52 Long term exposure limit (8 hours) (ppm): 20 Short term exposure limit (15 minutes) (mg/m³): 104 Short term exposure limit (15 minutes) (ppm): 40 Annotations: IOELV = Indicative Occupational Exposure Limit Value

IOELV = Indicative Occupational Exposure Limit Values are health based limits set under the Chemical Agents Directive (98/24/EC).

Sk = Substance, which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body.

2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019).

DNEL

ethanediol;ethylene glycol

| Duration: | Route of exposure: | DNEL: |
|---|--------------------|------------------|
| Long term – Systemic effects - General population | Dermal | 53 mg/kg bw/day |
| Long term – Systemic effects - Workers | Dermal | 106 mg/kg bw/day |
| Long term – Local effects - General population | Inhalation | 7 mg/m³ |
| Long term – Local effects - Workers | Inhalation | 35 mg/m³ |

PNEC

No data available.

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 CE marked protective equipment.

Respiratory Equipment

| Туре | Class | Colour | Standards | |
|-----------------------------------|---------------|--------|-----------|--|
| No special when used as intended. | | | | |
| kin protection | | | | |
| Recommended | Type/Category | St | andards | |
| 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 | Mn |

Eye protection

| Туре | Standards | |
|--|-----------|--|
| Wear safety goggles with protective side shields in accordance with standard EN166. | EN 166 | |

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties
  Physical state
      Solid
  Colour
      Red
  Odour / Odour threshold
      None
  pН
      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
  Particle characteristics
      Testing not relevant or not possible due to the nature of the product.
Phase changes
  Melting point/Freezing point (°C)
      70
  Softening point/range (waxes and pastes) (°C)
      Does not apply to solids.
  Boiling point (°C)
      Not applicable - product is a solid
  Vapour pressure
      Not applicable - product is a solid
  Relative vapour density
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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. Lower and upper explosion limit (% 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 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 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: Test: | Inhalation 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 | a, the classification criteria are not met. |
| Serious eye damage/irrita | tion |
| | a, the classification criteria are not met. |
| Respiratory sensitisation | |
| Based on available data | a, the classification criteria are not met. |
| Skin sensitisation | |
| Based on available data | a, the classification criteria are not met. |
| Germ cell mutagenicity | |
| Based on available data | a, the classification criteria are not met. |
| Carcinogenicity | |
| Based on available data | a, the classification criteria are not met. |
| Reproductive toxicity | |
| Based on available data | a, 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.

11.2. Information on other hazards

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.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. 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. | 40000 mg/L |
|--|---|
| Product/substance Species: Duration: Test: Result: | ethanediol;ethylene glycol Algae, Pseudokirchneriella subcapitata 96 hours EC50 6500 mg/L |
| | |

46300 mg/l

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

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. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste. HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity HP 6 - Acute toxicity Dispose of contents/container to an approved waste disposal plant. Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste. EWC code 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 / I | 14.2 D UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other information: |
|------|----------------|-----------------------------------|--------------------------|-------------|---------------|-----------------------|
| ADR | - | - | - | - | - | - |
| IMDG | - | - | - | - | - | - |
| ΙΑΤΑ | - | - | - | - | - | - |

* 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.

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.

SEVESO - Categories / dangerous substances Not applicable.

Additional information

Not applicable.

Sources

Protection of Young Persons (Employment) Act, 1996

Maternity Protection Act 1994 (34/1994) with later amendments.

Commission 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

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

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

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.

Abbreviations and acronyms

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 (European conformity) 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 EuPCS = European Product Categorisation System 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

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

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: IE-en