

SAFETY DATA SHEET

Multiseal HR.

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

1.1. Product identifier

Trade name

Multiseal HR.

Unique formula identifier (UFI)

JF00-X0Q2-W006-4V04

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Cleaning fluid

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Unipak A/S

Marktoften 3C

8464 Galten

Denmark

+45 8626 1177

www.unipak.dk

E-mail

sales@unipak.dk

Revision

31/01/2023

SDS Version

3.0

Date of previous version

19/01/2023

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

Met. Corr. 1; H290, May be corrosive to metals.

Skin Corr. 1; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

May be corrosive to metals. (H290)

Causes severe skin burns and eye damage. (H314)

Safety statement(s)

General

-

Prevention

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301+P330+P331)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303+P361+P353)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

-

Hazardous substances

Citric acid monohydrate

2-phosphonobutane-1,2,4-tricarboxylic acid

Additional labelling

UFI: JF00-X0Q2-W006-4V04

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
Citric acid monohydrate	CAS No.: 5949-29-1 EC No.: 201-069-1 UK-REACH: Index No.:	25-40%	Eye Irrit. 2, H319 STOT SE 3, H335	
2-phosphonobutane-1,2,4-tricarboxylic acid	CAS No.: 37971-36-1 EC No.: 253-733-5 UK-REACH: Index No.:	5-10%	Met. Corr. 1, H290 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

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

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on

follow-up and treatment.

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

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate medical advice/attention.

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 Service (dial 111, 24 h service) in order to obtain further advice.

Hazchem Code: 2X

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth 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

Avoid direct contact with the product.

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.

Store in a container with a resistant inner liner.

Recommended storage material

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

Storage temperature

Dry, cool and well ventilated

Incompatible materials

bases and metals

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

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

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

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

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

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

8.3. Individual protection measures, such as personal protective equipment

Generally

Wash contaminated clothing before reuse.

Use only UKCA marked protective equipment.

Respiratory Equipment

No specific requirements

Skin protection

Work situation	Recommended	Type/Category	Standards
When there is risk of splash- / intermittent exposure	Dedicated work clothing should be worn.	-	-



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,3	120	EN374-2



Eye protection

Type	Standards
Face shield alternatively 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

Brown

Odour / Odour threshold

Faint

pH

1,1

Density (g/cm³)

1.28

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.

Ignition (°C)

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

Auto 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

VOC (g/l)

0

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions with metals and bases.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Hydrogen is given off by reacting with metals.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

bases and metals

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 as retained and amended in UK law

Acute toxicity

Product/substance	Citric acid monohydrate
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	3000 mg/kg ·
Other information	

Product/substance	Citric acid monohydrate
Test method	
Species	
Route of exposure	Oral
Test	LD50
Result	5400 mg/kg Mouse ·
Other information	

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	> 4000mg/kg ·
Other information	

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

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

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Endocrine disrupting properties

None known.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Citric acid monohydrate
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	1516-1710 mg/L ·
Other information	

Product/substance	Citric acid monohydrate
Test method	
Species	Algae
Compartment	
Duration	3 hours
Test	EC0
Result	640 mg/L ·
Other information	

Product/substance	Citric acid monohydrate
Test method	
Species	Crustacean
Compartment	
Duration	48 hours
Test	LC50
Result	160mg/L ·
Other information	

Product/substance	Citric acid monohydrate
Test method	
Species	Daphnia
Compartment	
Duration	72 hours
Test	
Result	120 mg/L ·
Other information	

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	> 1042 mg/L ·
Other information	

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Test method	

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	> 1071 mg/L
Other information	

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	IC50
Result	> 140 mg/L
Other information	

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Test method	
Potential bioaccumulation	No data available.
LogPow	-1,3600
BCF	No data available.
Other information	

12.4. Mobility in soil

No data available.

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

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 8 - Corrosive

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

20 01 14* Acids

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) Labels: 8 Classification code: C3	14.4 PG*	14.5 Env**	Other information
ADR	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2- phosphonobutane- 1,2,4-tricarboxylic		III	No	Limited quantities: 5 L Tunnel restriction code: (E) See below for

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
		acid)				additional information.
IMDG	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-phosphonobutane-1,2,4-tricarboxylic acid)	Class: 8 Labels: 8 Classification code: C3 	III	No	Limited quantities: 5 L EmS: F-A S-B See below for additional information.
IATA	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-phosphonobutane-1,2,4-tricarboxylic acid)	Class: 8 Labels: 8 Classification code: C3 	III	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

Hazchem Code: 2X

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.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

REGULATION (EC) No 648/2004 on detergents.
phosphonate < 5%

Sources

The Management of Health and Safety at Work Regulations 1999.

Regulation (EC) No 648/2004 on detergents as retained and amended in UK law.

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.

Compiled in accordance with REACH Regulation (EC) No 1907/2006, 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

H290, May be corrosive to metals.
 H319, Causes serious eye irritation.
 H335, May cause respiratory irritation.

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

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
 The classification of the substance/mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

▼ The safety data sheet is validated by

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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.

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

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