

Trade name: Desiccant RAYM P type**Product no.:** 206-70558**Current version :** 3.1.0, issued: 14.11.2022**Replaced version:** 3.0.2, issued: 15.09.2021**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****Desiccant RAYM P type****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

General chemical processes

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet**Address**

Shimadzu Europa GmbH

Albert-Hahn-Str. 6-10

47269 Duisburg

Telephone no. +49 (0)203 - 7687-0

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Information provided by / telephone

Tel.: +49 (0)203 - 7687-0

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Eye Dam. 1; H318

Skin Irrit. 2; H315

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS05

Signal word

Danger

Hazardous component(s) to be indicated on label:

CALCIUM OXIDE

CALCIUM DIHYDROXIDE

Hazard statement(s)

H315

Causes skin irritation.

H318

Causes serious eye damage.

Precautionary statement(s)

P305+P351+P338

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

P310

Immediately call a POISON CENTER/doctor.

2.3 Other hazards

No data available.

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Not applicable. The product is not a substance.

3.2 Mixtures**Chemical characterization**

Mixture (preparation)

Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration
			%
1	CALCIUM OXIDE		
	1305-78-8 215-138-9 -	Eye Dam. 1; H318 Skin Irrit. 2; H315	>= 90.00 wt%
2	Calcium carbonate		
	471-34-1 207-439-9 -	-	<= 5.00 wt%
3	CALCIUM DIHYDROXIDE		
	1305-62-0 215-137-3 -	Eye Dam. 1; H318	<= 5.00 wt%
4	MAGNESIUM OXIDE		
	1309-48-4 215-171-9 -	-	<= 5.00 wt%
5	Quartz (SiO₂)		
	14808-60-7 238-878-4 -	-	<= 3.00 wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

After ingestion

Seek medical advice immediately. Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

No data available.

Unsuitable extinguishing media

No data available.

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Product itself does not burn. Adapt extinguisher and fire-fighting measures to fire in the environment.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Avoid dust formation.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Avoid product contact with skin, eyes and clothing; Provide eye wash fountain in work area. Do not inhale dust.

Advice on protection against fire and explosion

No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Protect against wetness. Product is hygroscopic.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage.

Incompatible products

Do not store together with: Acids; Halogens; Do not store with combustible materials.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	CALCIUM OXIDE	1305-78-8	215-138-9
	2017/164/EU		
	Calcium oxide		
	WEL short-term (15 min reference period)	4 (Resp)	mg/m ³
	WEL long-term (8-hr TWA reference period)	1 (Resp)	mg/m ³
	List of approved workplace exposure limits (WELs) / EH40		
	Calcium oxide		
	WEL long-term (8-hr TWA reference period)	2	mg/m ³
	List of approved workplace exposure limits (WELs) / EH40		
	Calcium oxide (Respirable fraction)		
	WEL short-term (15 min reference period)	4	mg/m ³
	WEL long-term (8-hr TWA reference period)	1	mg/m ³
2	CALCIUM DIHYDROXIDE	1305-62-0	215-137-3

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2017/164/EU			
Calcium dihydroxide			
WEL short-term (15 min reference period)	4 (Resp)	mg/m ³	
WEL long-term (8-hr TWA reference period)	1 (Resp)	mg/m ³	
List of approved workplace exposure limits (WELs) / EH40			
Calcium hydroxide			
WEL long-term (8-hr TWA reference period)	5	mg/m ³	
List of approved workplace exposure limits (WELs) / EH40			
Calcium hydroxide (Respirable fraction)			
WEL short-term (15 min reference period)	4	mg/m ³	
WEL long-term (8-hr TWA reference period)	1	mg/m ³	
3	MAGNESIUM OXIDE	1309-48-4	215-171-9
List of approved workplace exposure limits (WELs) / EH40			
Magnesium oxide			
inhalable dust			
Mg			
WEL long-term (8-hr TWA reference period)	10	mg/m ³	
List of approved workplace exposure limits (WELs) / EH40			
Magnesium oxide			
fume and respirable dust			
Mg			
WEL long-term (8-hr TWA reference period)	4	mg/m ³	
4	Quartz (SiO₂)	14808-60-7	238-878-4
2004/37/EC			
Respirable crystalline silica dust			
WEL long-term (8-hr TWA reference period)	0,1 (9)	mg/m ³	

8.2 Exposure controls**Appropriate engineering controls**

No data available.

Personal protective equipment**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn.

Eye / face protection

Safety glasses (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material

In case of longer-term contact:

Inappropriate material

viton

Appropriate Material

In case of short-term contact / splash protection:

Inappropriate material

nitrile

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

State of aggregation	
solid	
Form	
solid	
Colour	
white; grey	
Odour	
odourless	
pH value	
Value	12.5

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Boiling point / boiling range	
Value	2850 °C
Melting point/freezing point	
Value	2614 °C
Decomposition temperature	
No data available	
Flash point	
Not applicable	
Ignition temperature	
No data available	
Flammability	
No data available	
Lower explosion limit	
No data available	
Upper explosion limit	
No data available	
Vapour pressure	
No data available	
Relative vapour density	
No data available	
Relative density	
No data available	
Density	
Value	3.25 - 3.38
Comments	H2O = 1
Solubility in water	
Comments	Reacts with water
Solubility	
No data available	
Partition coefficient n-octanol/water (log value)	
No data available	
Kinematic viscosity	
No data available	
Particle characteristics	
No data available	

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat; Moisture.

10.5 Incompatible materials

Acids; Halogens; Reactions with combustible substances. Reacts strongly with water.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

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Acute oral toxicity
No data available
Acute dermal toxicity
No data available
Acute inhalational toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Reproduction toxicity
No data available
Carcinogenicity
No data available
STOT - single exposure
No data available
STOT - repeated exposure
No data available
Aspiration hazard
No data available
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Contact of the product with skin or eyes may cause irritation. Danger of acute eye damage.

11.2 Information on other hazards**Endocrine disrupting properties**

No data available.

Other information

No data available.

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish (acute)
No data available
Toxicity to fish (chronic)
No data available
Toxicity to Daphnia (acute)
No data available
Toxicity to Daphnia (chronic)
No data available
Toxicity to algae (acute)
No data available
Toxicity to algae (chronic)
No data available
Bacteria toxicity
No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

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No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information**Other information**

Ecological data are not available.

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

Class	8
Packing group	III
UN number	UN1910
Proper shipping name	Calcium oxide
Label	-

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

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No	Substance name	CAS no.	EC no.	No
1	Calcium carbonate	471-34-1	207-439-9	75
2	MAGNESIUM OXIDE	1309-48-4	215-171-9	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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