

Material Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



58935 Laponite® RD

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Revised edition: 21.12.2012

Version: 3

Printed: 18.11.2014

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Laponite® RD

Article No.: 58935

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

*Used to adjust the viscosity and flow properties of aqueous formulations, such as toothpastes, paints, cosmetics and household cleaning agents.
Laponite causes a strong shear-thinning, pseudoplastic thickening and prevents, e.g. the formation of syneresis. It is also used to produce antistatic coatings.*

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.de

EMail: info@kremer-pigmente.de

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to EC Regulation 1272/2008

This product is not classified as hazardous according to the CLP/GHS Directive.

Classification according to EC Regulation No. 67/548 or No. 1999/45

The material is not subject to classification according to EC lists.

Safety Phrases:

Possible Environmental Effects:

2.2. Label Elements

Classification according to EC Regulation 1272/2008

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

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Safety designation:

Hazardous components for labelling:

2.3. Other Hazards

Floor may be slippery; use care to avoid falling.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization:

Hazardous Ingredients:

Silicic acid, lithium magnesium sodium salt;
REACH Reg. No. 01-2119489772-23-0000

100 %

CAS-Nr: 53320-86-8

EINECS-Nr: 258-476-2

EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

No special measures required.

After inhalation:

Supply fresh air and seek medical advice in case of complaints.

After skin contact:

*Wash with soap and rinse with plenty of water.
If irritation continues consult a physician.*

After eye contact:

*Rinse eyes with water.
Seek medical attention if irritation persists.*

After ingestion:

*After swallowing larger amount of product seek medical aid.
Rinse mouth with plenty of water.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

No further information available.

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

All extinguishing agents suitable.

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Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

No special hazards.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid formation of dust, wear protective clothing. Keep spectators away.

Together with water product causes slippery surfaces.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

Contact local authorities if product pollutes soil or vegetation.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal.

Collect powder using a special dust vacuum cleaner with particle filter and dispose in a adequate resealable container.

Clean with water.

6.4. Reference to other Sections

Protective clothing, see Section 8.

See Section 13 for information on disposal.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Provide adequate ventilation.

Avoid formation and deposition of dust. Provide adequate ventilation.

Avoid contact with eyes and skin.

Hygienic measures:

Avoid contact with eyes and skin.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a well ventilated location.

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Requirements for storage areas and containers:

No special measures necessary.

Information on fire and explosion protection:

No special measures necessary.

Storage class (VCI):

Further Information:

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900

TLV: 10 mg/m³ inhalable fraction (general dust limit)

TLV: 3 mg/m³ air-borne fraction (general dust limit)

Parameters to be controlled (EC):

Derived No-Effect Level (DNEL):

Silicic acid, lithium magnesium sodium salt (53320-86-8):

40 mg/kg (worker, skin contact)

10 mg/m³ (worker, inhalation, long-term exposition - systemic effects)

Predicted No-Effect Concentration (PNEC):

Silicic acid, lithium magnesium sodium salt: Fresh water: 0.1 mg/l

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Provide adequate ventilation/exhaust system.

Personal Protection

General protective measures:

Do not inhale dust.

Avoid contact with eyes.

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

Required in case of insufficient ventilation (EN 143 or 149).

Hand protection:

Recommended

Protective glove material:

PVC, rubber.

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Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Avoid contamination of sewage system, open water ways and ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: *crystalline*

Color: *white*

Odor: *odorless*

Odor threshold:

No information available.

pH-Value: *9.8 (2% in H₂O)*

Melting temperature: *> 900°C*

Boiling temperature:

not determined

Flash point:

not applicable

Evaporation rate:

not applicable

Flammability (solid, gas):

not applicable

Upper explosion limit:

no information available

Lower explosion limit:

no information available

Vapor pressure:

not applicable

Vapor density:

No information available.

Density: *2.4 (22°C/71.6°C)*

Solubility in water: *No data available*

Coefficient of variation (n-Octanol/Water):

no information available

Auto-ignition temperature:

No information available.

Decomposition temperature:

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No data available.

Viscosity, dynamic:

not available

Explosive properties:

not applicable

Oxidizing properties:

no information available

Bulk density:

not determined

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

Surface tension: 71.9 mN/m (20°C; 1000 mg/l)

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

None if used according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid formation of dust.

Avoid humidity.

Thermal decomposition:

No data available.

10.5. Incompatible Materials

Strong acids and strong oxidizing agents.

10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

Product does not polymerize.

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

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<i>LD50, oral:</i>	<i>> 2000 mg/kg (rat)</i>
<i>LD50, dermal:</i>	<i>> 2000 mg/kg (rabbit)</i>
<i>LC50, inhalation:</i>	<i>> 200 mg/l (rat)</i>
<i>Primary effects</i>	
<i>Irritant effect on skin:</i>	<i>Non irritating</i>
<i>Irritant effect on eyes:</i>	<i>Dust may cause irritation.</i>
<i>Inhalation:</i>	<i>Non irritating.</i>
<i>Ingestion:</i>	<i>Non irritating.</i>
<i>Sensitization:</i>	<i>No sensitizing effects known.</i>
<i>Mutagenicity:</i>	<i>Not mutagenic.</i>
<i>Reproductive toxicity:</i>	<i>No negative effects.</i>
<i>Cancerogenity:</i>	<i>No negative effects.</i>
<i>Teratogenicity:</i>	<i>Not considered to be teratogenic.</i>
<i>Specific target organ toxicity (STOT):</i>	<i>No data available.</i>

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects. The product is not subject to classification according to latest version of the General EU Classification Guidelines for Preparations.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

*LC50: > 100 mg/l (96h)
LC50: > 100 mg/l (96h, *Oncorhynchus mykiss*)*

Daphnia toxicity:

*LC50: > 100 mg/l (24h, *Daphnia magna*)
LC50: > 100 mg/l (48h, *Daphnia magna*)*

Bacteria toxicity:

Algae toxicity:

EC50: > 100 mg/l (72h)

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12.2. Persistency and Degradability

*Not readily biodegradable.
Methods for the evaluation of the biological degradability are not applicable for inorganic substances.*

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

Not applicable.

12.6. Other Adverse Effects

Water hazard class:

1, slightly hazardous

Behaviour in sewage systems:

Further ecological effects:

No ecological problems expected.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA

14.2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR (land transportation).

IMDG/IATA:

No hazardous goods according to IMDG.

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel no.:

IMDG Class (sea):

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Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

Not classified as environmentally hazardous.

14. 6. Special Precautions for User

not applicable

14. 7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not evaluated

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Not applicable.

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

15. 3. Further Information

EINECS (258-476-2), TSCA (US), AICS (AUS), DSL (CA), ENCS (JP), ECL (KR), PICCS (PH), IECSC (CN), NZIoC (NZ)

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.