

SAFETY DATA SHEET

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R&R Cast shoe molding plaster

Revision 0 **Revision date** 2019-10-07

1.1. Product identifier

Product name R&R Cast shoe molding plaster

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

Description Foundry material.

1.3. Details of the supplier of the safety data sheet

Company Ransom & Randolph

Address 3535 Briarfield Boulevard, PO Box 1570

Maumee, Ohio 43537 USA

Web www.ransom-randolph.com

Telephone +1 (419) 865-9497 **Fax** +1 (419) 865-9997

Email RR.SDS@dentsply.com
Email address of the RR.SDS@dentsply.com

1.4. Emergency telephone number

Emergency telephone

competent person

number

Company

USA +1 419 865 9497

Ransom & Randolph Co.

08:00-17:00 (US Eastern Std. / GMT minus 5)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - EC 1272/2008

Carc. 1A: H350; STOT RE 1: H372;

2.2. Label elements

This substance / mixture has been classified in accordance with the US Federal OSHA Hazard Communication Standard 29CFR 1910.1200. Substance concentration band-ranges are presented, and minor ingredient compostion maybe withheld, to protect trade secrets.

Hazard pictograms



Signal Word

Hazard Statement

Danger

Carc. 1A: H350 - May cause cancer inhalation.

STOT RE 1: H372 - Causes damage to organs (lungs) through prolonged or repeated exposure inhalation

Precautionary Statement:

Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash (hands) thoroughly after handling.
- P270 Do no eat, drink or smoke when using this product.

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2.2. Label elements

	P280 - Wear protective gloves/protective clothing/eye protection/face protection. P285 - In case of inadequate ventilation wear respiratory protection.				
Precautionary Statement: Response	P308+P313 - IF exposed or concerned: Get medical advice/attention. P314 - Get medical advice/attention if you feel unwell.				
Precautionary Statement: P405 - Store locked up. Storage					
Precautionary Statement: Disposal	Local and national regulations P501 - Dispose of contents/container to				
2.3. Other hazards					
Other hazards Product contains respirable crystalline silica (RCS).					
Further information					
	Not applicable. PBT and vPvB assessment.				

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. Classification (%w/w)
quartz > 10 % USA		14808-60-7	238-878-4		50 - 60% Carc. 1A: H350; STOT RE 1: H372;
calcium sulfate. (Plaster of Paris)		26499-65-0			20 - 30%
silica - cristobalite USA		14464-46-1	238-455-4		20 - 30% Carc. 1A: H350; STOT RE 1: H372;

Further information

Full text for all Risk Phrases mentioned in this section are displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

real Production and the second				
Inhalation	Move the exposed person to fresh air.			
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open.			
Skin contact	Wash with soap and water.			
Ingestion	Drink 1 to 2 glasses of water. DO NOT INDUCE VOMITING.			
4.2. Most important symptoms and effects, both acute and delayed				
Inhalation	May cause irritation to respiratory system.			
Eye contact	May cause irritation to eyes.			
Skin contact	May cause irritation to skin.			
Ingestion	May cause irritation to mucous membranes.			

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

Inhalation	Seek medical attention if irritation or symptoms persist.			
Eye contact	Seek medical attention if irritation or symptoms persist.			
Skin contact	Seek medical attention if irritation or symptoms persist.			
Ingestion	Seek medical attention if irritation or symptoms persist.			

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing media appropriate to the surrounding fire conditions.

5.2. Special hazards arising from the substance or mixture

Burning produces irritating, toxic and obnoxious fumes.

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5.3. Advice for firefighters

Self-contained breathing apparatus. Wear suitable protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid raising dust.

6.2. Environmental precautions

Use appropriate container to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Avoid raising dust. Clean the area using a vacuum cleaner. Transfer to suitable, labelled containers for disposal.

6.4. Reference to other sections

See section [2, 8 & 13] for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid formation of dust. Ensure adequate ventilation of the working area. <. OEL: Occupational exposure limit. In case of insufficient ventilation, wear suitable respiratory equipment.

Do not eat, drink or smoke in areas where this product is used or stored. Wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed.

7.3. Specific end use(s)

Foundry material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

all respirable crystaline silica - sum of all types - quartz + cristoablite TWA PEL OSHA (respirable fraction) 0.050 mg/m3
Action Level OSHA (respirable fraction) 0.025 mg/m3.

8.1.1. Exposure Limit Values

calcium sulfate. (Plaster of	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: -
Paris)		
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit mg/m3 total 10	WEL 15 min limit mg/m3 total -
	inhalable dust:	inhalable dust:
	WEL 8-hr limit mg/m3 total 4	WEL 15 min limit mg/m3 total -

respirable dust:

8.2. Exposure controls





8.2.1. Appropriate engineering controls 8.2.2. Individual protection measures

Eye / face protection

Ensure adequate ventilation of the working area. <. OEL: Occupational exposure limit.

Wear:. Protective clothing. applicable international Standards are. EN13982, ANSI 103 or =.

Avoid contact with eyes. Wear:. Approved safety goggles. safety glasses with side-shields. applicable international Standards are. EN166, ANSI Z87.1 or =.

respirable dust:

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8.2. Exposure controls

Skin protection - Handprotection	Avoid contact with skin. Wear suitable gloves. applicable international Standards are. EN374, ASTM F1001 or =.
Respiratory protection	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects.
	After seletion by a Qualifed person. Wear:. Suitable respiratory equipment. applicable international Standards are. EN140, EN143, ASTM F2704-10 or =.
8.2.3. Environmental	Use appropriate container to avoid environmental contamination.
exposure controls	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Powder
Colour	White
Explosive properties	No data available
Oxidising properties	Not applicable.
Odour threshold	Not applicable.
рН	6 - 8
Melting point	Not applicable.
Freezing Point	Not applicable.
Initial boiling point	Not applicable.
Flash point	No data available
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Vapour pressure	No data available
Vapour density	Not applicable.
Relative density	2.2 - 2.7
Fat Solubility	Not applicable.
Partition coefficient	Not applicable.
Autoignition temperature	Not applicable.
Viscosity	No data available
Solubility	Slightly soluble in water

9.2. Other information

Conductivity	Not applicable.
Surface tension	Not applicable.
Gas group	Not applicable.

SECTION 10: Stability and reactivity

1	0.	.1	Re	a	ct	İ٧	ity

	Not applicable.		
10.2. Chemical stability			
	Stable under normal conditions.		
10.3. Possibility of hazardous reactions			
	No Significant Hazard.		
10.4. Conditions to avoid			

Moisture.

10.5. Incompatible materials

No Significant Hazard.

10.6. Hazardous decomposition products

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10.6. Hazardous decomposition products

Hazardous Decomposition Products (silica): Crystalline silica will dissolve in hydrofluoric acid and produce silicone tetrafluoride. Reaction with water or acids generates heat.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin corrosion/irritation Prolonged or repeated exposerious eye damage/irritation No irritation expected.

Respiratory or skin sensitisation

Acute toxicity

Germ cell mutagenicity Carcinogenicity

Reproductive toxicity
STOT-single exposure

STOT-repeated exposure

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

Prolonged or repeated exposure may cause irritation to skin and mucous membranes.

No sensitizaton effects reported.

No mutagenic effects reported.

No observed effect level. No observed effect concentration.

No known adverse health effects.

Known Human Carcinogens (Category 1).

Chronic effects

Prolonged inhalation of respirable crystalline silica

In 1997, the International Agency for Research on Cancer (IARC) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibers, 1997, Vol. 68, IARC, Lyon, France). In June 2003, the European Commission's Scientific Committee for Occupational Exposure Limits (SCOEL) concluded:

"that the main effect in humans of the inhalation of respirable crystalline silica is silicosis. There is sufficient information to conclude that the relative lung cancer risk is increased in persons with silicosis (and apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk. Since a clear threshold for silicosis development cannot be identified, any reduction of exposure will reduce the risk of silicosis."

(SCOEL SUM Doc 94-final on respirable crystalline silica, June 2003)

There is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required (see Section 16).

Aspiration hazard

Repeated or prolonged exposure

No Significant Hazard.

Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.

11.1.4. Toxicological Information

R&R Cast shoe molding plaster Oral Mouse LD50: 5000 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

R&R Cast shoe molding plaster Fish LC50/96h: 10000.0000 mg/l

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

Does not bioaccumulate.

Partition coefficient

R&R Cast shoe molding plaster Not applicable.

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12.4. Mobility in soil		
	Not determined.	
12.5. Results of PBT and vPvB assessment		
	Not determined.	
12.6. Other adverse effects		
	Not applicable.	
SECTION 13: Disposal con	siderations	
13.1. Waste treatment method	s	
	Dispose of in compliance with all. local and national regulations.	
Disposal methods		
	Contact a licensed waste disposal company.	
Disposal of packaging		
	Empty containers can be sent for disposal or recycling.	
SECTION 14: Transport inf	ormation	
14.1. UN number		
	The product is not classified as dangerous for carriage.	
14.2. UN proper shipping nam	е	
	The product is not classified as dangerous for carriage.	
14.3. Transport hazard class(e	es)	
	The product is not classified as dangerous for carriage.	
14.4. Packing group		
	The product is not classified as dangerous for carriage.	
14.5. Environmental hazards		
	The product is not classified as dangerous for carriage.	
14.6. Special precautions for u	T	
	The product is not classified as dangerous for carriage.	
14.7. Transport in bulk accord	ing to Annex II of MARPOL 73/78 and the IBC Code	
	The product is not classified as dangerous for carriage.	
Further information		
	The product is not classified as dangerous for carriage.	
SECTION 15: Regulatory information		

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations	U.S. FEDERAL REGULATIONS: R&R Cast shoe molding investment. CERCLA 103 Reportable Quantity: is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations. SARA TITLE III: Hazard Category For Section 311/312: Chronic health quartz. Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None Section 302 Extremely Hazardous Substances (TPQ): None EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed
	EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	
	INTERNATIONAL REGULATIONS:
	Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).
	Canadian WHMIS Classification: Class D2A (Chronic toxic effects), D2A (Carcinogenicity).
15.2. Chemical safety assessm	nent
	No data is available on this product.
SECTION 16: Other information	ation
Other information	
Text of Hazard Statements in Section 3	Carc. 1A: H350 - May cause cancer . STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure .
Further information	
	Training Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.
	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.