



SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Fascote (R) binder [NA]

Revision 1
Revision date 2017-01-19

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

1.1. Product identifier

| | |
|--------------|----------------------------|
| Product name | Fascote (R) binder [NA] |
| Product code | Fascote binder 011917 R095 |

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, Maumee, OH 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 competent person | RR.SDS@dentsply.com |

1.4. Emergency telephone number

| | |
|----------------------------|--|
| Emergency telephone number | USA +1 419 865 9497 |
| Company | Ransom & Randolph Co. 07:30 to 16:30 (Eastern Std. / GMT minus 5) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

| | |
|--------------|-----------------------|
| Main hazards | No Significant Hazard |
|--------------|-----------------------|

2.2. Label elements

| | |
|--|--|
| Precautionary Statement: Prevention Risk phrases | 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 composition maybe withheld, to protect trade secrets. |
| | P262 - Do not get in eyes, on skin, or on clothing. Wear suitable gloves and eye/face protection. |
| | No Significant Hazard |

2.3. Other hazards

| | |
|---------------|---|
| Other hazards | Portions of the amorphous silica may be converted to crystalline silica (cristobalite) when subjected to higher temperatures (1700° F / 927° C), such as when used in a mold for ferrous and other high temperature alloy castings. The exposure to crystalline silica is highest at the mold knockout stage of the casting process. Avoid breathing dust/fume/gas/mist/vapours/spray. Exposure to respirable crystalline silica may cause lung disease and cancer. |
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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. (%w/w) | Classification | M-factor. |
|--------------------|-----------|-----------|-----------|---------------------------|--------------|----------------|-----------|
| silica (amorphous) | | 7631-86-9 | 231-545-4 | | 20 - 30% | | |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|--------------|---|
| 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.

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

Wear suitable protective equipment.

6.2. Environmental precautions

Do not allow product to enter drains.

6.3. Methods and material for containment and cleaning up

Absorb with inert, absorbent material. Transfer to suitable, labelled container.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

| | |
|--|---|
| | Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Wash hands after handling the product. |
|--|---|

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--|--|
| | Do NOT allow to freeze. Keep in a cool, dry, well ventilated area. Keep containers tightly closed. |
|--|--|

7.3. Specific end use(s)


| | |
|--|-------------------|
| | Foundry material. |
|--|-------------------|

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|--|---|
| | <p>exposure limits - Crystalline Silica, Cristobalite - 0.025 mg/m³ TWA ACGIH TLV (respirable fraction); 10 mg/m³ / [2(% Silica + 2)] TWA PEL (respirable fraction).</p> <p>exposure limits - Silica, vitreous (fused, amorphous) 80 mg/m³ / (% Silica), TWA PEL (respirable fraction).</p> |
|--|---|

8.2. Exposure controls

| | |
|---|---|
| |  |
| 8.2.1. Appropriate engineering controls | Ensure adequate ventilation of the working area. |
| 8.2.2. Individual protection measures | Apron (Plastic or rubber). |
| Eye / face protection | In case of splashing, wear:.. Approved safety goggles. |
| Skin protection - Handprotection | Wear suitable gloves. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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| | |
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9.1. Information on basic physical and chemical properties

| | |
|---------------------------------|-------------------------------------|
| Appearance | Liquid |
| Colour | Off white |
| Odour | Characteristic |
| pH | 10 - 11 |
| Relative density | 1.15 (H ₂ O = 1 @ 20 °C) |
| Evaporation rate | No data available |
| Vapour pressure | No data available |
| Vapour density | No data available |
| Partition coefficient | No data available |
| Viscosity | No data available |
| Freezing Point | ≈ 0 °C |
| Initial boiling point | ≈ 100 °C |
| Flash point | Not applicable. |
| Melting point | Not applicable. |
| Fat Solubility | Not applicable. |
| Explosive properties | Not applicable. |
| Oxidising properties | Not applicable. |
| Autoignition temperature | Not applicable. |
| Odour threshold | Not applicable. |
| Solubility | Miscible in water |

9.2. Other information

| | |
|---|-------------------|
| Conductivity | No data available |
| Surface tension | No data available |
| Gas group | Not applicable. |
| Benzene Content | Not applicable. |
| Lead content | Not applicable. |
| VOC (Volatile organic compounds) | Not applicable. |

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|--|-----------------|
| | Not applicable. |
|--|-----------------|

10.2. Chemical stability

| | |
|--|---------------------------------|
| | Stable under normal conditions. |
|--|---------------------------------|

10.3. Possibility of hazardous reactions

| | |
|--|------------------------|
| | No Significant Hazard. |
|--|------------------------|

10.4. Conditions to avoid

| | |
|--|--|
| | Direct sunlight. Do NOT allow to freeze. |
|--|--|

10.5. Incompatible materials

| | |
|--|--------------------------------------|
| | Avoid contact with: Sodium chloride. |
|--|--------------------------------------|

10.6. Hazardous decomposition products

| | |
|--|-------|
| | None. |
|--|-------|

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|----------------------------------|---|
| Acute toxicity | Based on available data, the classification criteria are not met. |
| Skin corrosion/irritation | May cause irritation to skin. |

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11.1. Information on toxicological effects

| | |
|-----------------------------------|---|
| Serious eye damage/irritation | May cause irritation to eyes. |
| Respiratory or 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 | Based on available data, the classification criteria are not met. |
| Aspiration hazard | Based on available data, the classification criteria are not met. |
| Repeated or prolonged exposure | May cause irritation to skin. |

11.1.4. Toxicological Information

| | |
|-------------------------|--------------------------|
| Fascote (R) binder [NA] | Oral Rat LD50: > 15gm/kg |
|-------------------------|--------------------------|

SECTION 12: Ecological information

12.1. Toxicity

| | | |
|-------------------------|---------------------------------|------------------------------|
| Fascote (R) binder [NA] | Daphnia EC50/48h: 7600.000 mg/l | Fish LC50/96h: 5000.000 mg/l |
|-------------------------|---------------------------------|------------------------------|

12.2. Persistence and degradability

| | |
|--|---------------------------------------|
| | No data is available on this product. |
|--|---------------------------------------|

12.3. Bioaccumulative potential

| | |
|--|-------------------------|
| | Does not bioaccumulate. |
|--|-------------------------|

Partition coefficient

| | |
|--|---|
| | Fascote (R) binder [NA] No data available |
|--|---|

12.4. Mobility in soil

| | |
|--|-----------------|
| | Not determined. |
|--|-----------------|

12.5. Results of PBT and vPvB assessment

| | |
|--|-----------------|
| | Not applicable. |
|--|-----------------|

12.6. Other adverse effects

| | |
|--|-----------------|
| | Not applicable. |
|--|-----------------|

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
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| | Dispose of in compliance with all. local and national regulations. |
|--|--|

Disposal methods

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|--|--|
| | Contact a licensed waste disposal company. |
|--|--|

Disposal of packaging

| | |
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| | Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling. |
|--|--|

SECTION 14: Transport information

14.1. UN number

| | |
|--|--|
| | The product is not classified as dangerous for carriage. |
|--|--|

14.2. UN proper shipping name

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14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(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 user

The product is not classified as dangerous for carriage.

14.7. Transport in bulk according 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: Fascote binder.

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA toxic chemical 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: none

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 on the TSCA inventory.

U.S. STATE REGULATIONS

California Proposition 65: This product contains the following substances known to the State of California to cause cancer. AQUA AMMONIA (1336-21-6) trace. In-use-materials may form respirable crystalline silica - cristobalite (14464-46-1).

INTERNATIONAL REGULATIONS:

Canadian WHMIS Classification: Not a controlled product.

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).

15.2. Chemical safety assessment

No data is available on this product.

SECTION 16: Other information

Other information

IARC and SCOEL publications

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that

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Other information

| | |
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| | <p>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 fibres, 1997, Vol. 68, IARC, Lyon, France.)</p> <p>In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer 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..."</p> <p>So 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.</p> <p>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.</p> |
| Revision | <p>This document differs from the previous version in the following areas:.</p> <p>2 - 2.2. Label elements.</p> |

Further information

| | |
|--|---|
| | <p>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.</p> |
|--|---|