



# SAFETY DATA SHEET

according to Regulation (EU) 2020/878

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## Brown Fused Alumina (BFA)

Revision 3  
Revision date 2023-11-01

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

#### 1.1. Product identifier

Product name Brown Fused Alumina (BFA)

#### 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, Ohio 43537 USA
Web	www.ransom-randolph.com
Telephone	+1 (419) 865-9497
Fax	+1 (419) 865-9997
Email	SDS@ransom-randolph.com
Email address of the competent person	rcarter@ransom-randolph.com

#### 1.4. Emergency telephone number

Emergency telephone number	USA +1 419 865 9497
Company	Ransom & Randolph Co. 08:00-17:00 (US Eastern Std. / GMT minus 5)

### SECTION 2: Hazards identification

#### 2.2. Label elements

Precautionary Statement: Prevention	While this material is not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and made available for employees and other users of this product. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P285 - In case of inadequate ventilation wear respiratory protection.
Precautionary Statement: Response	P302+P352 - IF ON SKIN: Wash with plenty of water/ . P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Hazard Statement	No Significant Hazard

#### Further information

Not applicable. PBT and vPvB assessment.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

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## 3.2. Mixtures

## EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
aluminum oxide (Aluminium oxides)		1344-28-1			90 - 100%	

## Further information

Non-flammable brown solid or powder. Particulate matter may scratch the eyes. May cause minor eye and skin irritation. Inhalation of high concentrations may cause transient upper respiratory irritation.

## 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	No irritation expected. Wash with soap and water.
Ingestion	No first aid requirements.

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

Inhalation	No known adverse health effects.
Eye contact	No known adverse health effects.
Skin contact	No known adverse health effects.
Ingestion	No known adverse health effects.

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

Inhalation	No known adverse health effects.
Eye contact	No known adverse health effects.
Skin contact	No known adverse health effects.
Ingestion	No known adverse health effects.

## 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

No Significant Hazard.

## 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 formation of dust. Wear suitable protective equipment.

## 6.2. Environmental precautions

No precautions required to be mentioned.

## 6.3. Methods and material for containment and cleaning up

Avoid formation of dust. Pick up mechanically and dispose of in accordance to regulations.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Avoid formation of dust. In case of insufficient ventilation, wear suitable respiratory equipment.

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## 7.2. Conditions for safe storage, including any incompatibilities

Handle and open container with care.

## 7.3. Specific end use(s)

Foundry material.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1. Exposure Limit Values

aluminum oxide (Aluminium oxides)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: -
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit mg/m3 total 10 inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total 4 respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:

## 8.2. Exposure controls

8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area. Observe standard industrial hygiene practice.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Wear suitable gloves.
Respiratory protection	Suitable respiratory equipment. Avoid raising dust. Do not breathe dust.
8.2.3. Environmental exposure controls	Avoid formation of dust.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Appearance	Powder
Colour	Brown
Odour	Odourless
Melting point	Not applicable.
Freezing Point	Not applicable.
Initial boiling point	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Vapour pressure	Not applicable.
Relative Vapour Density	Not applicable.
Fat Solubility	Not applicable.
Partition coefficient	No data available
Autoignition temperature	Not applicable.
Viscosity	No data available
Oxidising properties	Not applicable.
Solubility	Insoluble in water

## 9.2. Other information

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## 9.2. Other information

Conductivity	No data available
Surface tension	No data available
Bulk Density	> 3.9
Gas group	No data available
Benzene Content	Not applicable.
Lead content	Not applicable.
VOC (Volatile organic compounds)	Not applicable.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

	Not applicable.
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## 10.2. Chemical stability

	Stable under normal conditions.
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## 10.3. Possibility of hazardous reactions

	No Significant Hazard.
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## 10.4. Conditions to avoid

	Not relevant.
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## 10.5. Incompatible materials

	No Significant Hazard.
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## 10.6. Hazardous decomposition products

	None.
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## SECTION 11: Toxicological information

## 11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met. May cause irritation to skin.
Serious eye damage/irritation	Based on available data, the classification criteria are not met. Particles may cause physical injury to the eye.
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. May cause minor transient respiratory irritation.
Repeated or prolonged exposure	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.

## 11.1.4. Toxicological Information

Brown Fused Alumina (BFA)	Oral Rat LD50: > 5000 mg/kg	Inhalation Rat LC50/4 h: 7.6 mg/l
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## SECTION 12: Ecological information

## 12.1. Toxicity

Brown Fused Alumina (BFA)	Daphnia EC50/48h: 100.000 mg/l	Fish LC50/96h: 100.000 mg/l
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## 12.2. Persistence and degradability

Not applicable.

## 12.3. Bioaccumulative potential

Not applicable.

## Partition coefficient

Brown Fused Alumina (BFA) No data available

## 12.4. Mobility in soil

Not applicable.

## 12.5. Results of PBT and vPvB assessment

Not applicable.

## 12.7 Other adverse effects

No data is available on this product.

## SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

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

## Disposal methods

Contact a licensed waste disposal company.

## Disposal of packaging

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

## Further information

For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

## SECTION 14: Transport information

## 14.1. UN number

The product is not classified as dangerous for carriage.

## 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 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

## Further information

The product is not classified as dangerous for carriage.

## SECTION 15: Regulatory information

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

<b>Regulations</b>	<p>U.S. FEDERAL REGULATIONS: Alumina. CERCLA 103 Reportable Quantity: Alumina is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.</p> <p>SARA TITLE III: Hazard Category For Section 311/312: acute health</p> <p>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</p> <p>Section 302 Extremely Hazardous Substances (TPQ): None</p> <p>EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.</p> <p>U.S. STATE REGULATIONS</p> <p>California Proposition 65: This product contains the following substances known to the State of California to cause cancer: none</p> <p>INTERNATIONAL REGULATIONS:</p> <p>Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).</p> <p>Canadian WHMIS Classification: not a controlled product.</p>
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## 15.2. Chemical safety assessment

	Not required.
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**SECTION 16: Other information**

## Other information

<b>Revision</b>	<p>This document differs from the previous version in the following areas:.</p> <p>9 - 9.1. Information on basic physical and chemical properties (Initial boiling point).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Melting point).</p>
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## 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>
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