



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

## 1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 PRODUCT IDENTIFIER

Product Name	Andricite, Milled Andricite, Industrial Grade Andricite
CAS No.	7778-18-9
EC No.	231-900-3
REACH Registration No.	01-2119444918-26-0141

### 1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Identified Use(s)	Filler for adhesives, sealants and other product specific applications.
Uses Advised Against	Not known.

### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

#### Manufacturer & Supplied

Company Identification	Francis Flower (Northern) Ltd.
Address of Manufacturer	The White House Gurney Slade Somerset
Postal code	BA3 4UU
Telephone:	+44 (0)1749 841146
Fax	+44 (0)1749 841730
E-mail	ff@francisflower.co.uk

### 1.4 EMERGENCY TELEPHONE NUMBER

Emergency Phone No.	+44 (0)1749 841146
Contact	No information available.
National response centre	
Address	National Poisons Information Service (Birmingham Centre) City Hospital Dudley Road, Birmingham, United Kingdom
Emergency Phone No.	+44 (0)8706 006 266 NHS Direct - 0845 4647 or 111

## 2. SECTION 2: HAZARDS IDENTIFICATION

### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Regulation (EC) No. 1272/2008 (CLP)	This substance is not classified as hazardous according to Regulation (EC) No 1272/2008 [EU-GHS/CLP].
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Directive 67/548/EEC	This substance is not classified as dangerous according to 67/548/EEC
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### 2.2 LABEL ELEMENTS



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Regulation (EC) No. 1272/2008 (CLP) This substance is not labelled according to Regulation (EC) No 1272/2008 [CLP]  
2.3 OTHER HAZARDS

No special remarkable hazards.

## 3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 SUBSTANCES

Not applicable.

### 3.2 MIXTURES

INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%WW	Hazard Statement(s)	Hazard Pictogram(s)
Anhydrous Calcium Sulphate	7778-18-9	231-900-3 / 01-2119444918-26-0141	96	Not classified	n/a

## 4. SECTION 4: FIRST AID MEASURES

### 4.1 DESCRIPTION OF FIRST AID MEASURES

General notes	No adverse effects are expected during normal use of the substance, however if any effects do appear the following recommendations apply.
Inhalation	Following inhalation of large quantities of dust remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin Contact	If some discomfort appears immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
Ingestion	Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Notes for the doctor	Skin – friendly neutral salt. No allergic reactions known. Soluble dust

### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No specific symptoms or effects have been reported.

### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Not applicable.

## 5. SECTION 5: FIREFIGHTING MEASURES

### 5.1 EXTINGUISHING MEDIA

Suitable Extinguishing media	Use any means suitable for extinguishing surrounding fire.
Unsuitable extinguishing media	None.



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## 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

None

## 5.3 ADVICE FOR FIREFIGHTERS

Product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

## 6. SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Ventilate area of leak or spill. Wear appropriate personal protective equipment. Avoid generation of dust. Special danger of slipping by leaking/spilling product.

### 6.2 ENVIRONMENTAL PRECAUTIONS

No special environmental measures are necessary.

### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

For containment	All containment for dry substances suitable
For cleaning up	Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal

### 6.4 REFERENCE TO OTHER SECTIONS

None

## 7. SECTION 7: HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

Protective measures	No special provisions if the product is used appropriately
Avoid	Dust dispersion. Inhalation of dust/particles Eye contact
Measures to prevent fire	Product itself does not burn. No special fire protection measures are necessary
Measures to prevent aerosol and dust generation	If technically possible use local exhaust ventilation
Measures required to protect the environment	No special provisions if the product is used appropriately

### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Technical measures and storage conditions	None
Packaging materials	Keep/store only in original container materials
Requirements for storage rooms and vessels	None
Hints on storage assembly	None. Storage under cover, protected from the weathering and in particular moisture. Store the product in closed containers in order to protect from moisture
Storage class	Non-combustible solids.

## 7.3 SPECIFIC END USE(S)

Self-levelling floors, plasters, panels and bricks for internal applications.

## 8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

Substance	Dust, respirable	
	Limit value - Eight hours	Limit value - Short term
	mg/m <sup>3</sup>	mg/m <sup>3</sup>
Austria	3	10
Belgium	5	
France	5 respirable aerosol	6
Germany (AGS)	3	
Germany (DFG)	1.5	
Hungary	6	
Italy		
Latvia	4	
Poland		
Spain	3	
Sweden	5	
Switzerland	3	
The Netherlands		
USA - NIOSH		
USA - OSHA	5	
United Kingdom	4	

	Remarks
Austria	STV 15 minutes average
France	Bold type: Restrictive statutory limit values
Germany (AGS)	15 minutes average value, insoluble particulates
Germany (DFG)	insoluble particulates
Latvia	dust containing chemicals

Substance	Dust, inhalable	
	Limit value - Eight hours	Limit value - Short term
	mg/m <sup>3</sup>	mg/m <sup>3</sup>
Austria	10	20
Belgium	10	
Denmark	10	20
<b>France</b>	<b>10</b>	



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Germany (AGS)	10	20
Germany (DFG)	4	
Hungary	10	
Poland	10	
Spain	10	
Sweden	10	
Switzerland	10	
USA - OSHA	15	
United Kingdom	10	

Substance	Calcium sulfate	
	Limit value - Eight hours	Limit value - Short term
	mg/m3	mg/m3
Austria	5 respirable aerosol	10 respirable aerosol
Belgium	10	
Denmark	5	
Germany (AGS)	6 respirable aerosol	
Germany (DFG)	4 inhalable aerosol	
	1.5 respirable aerosol	
Hungary	6 respirable aerosol	
Latvia	6 respirable aerosol	
Spain	10 respirable aerosol	
Switzerland	3 respirable aerosol	
USA - NIOSH	10 total dust	
	2 respirable aerosol	

Substance	Dust, mineral, respirable	
	Limit value - Eight hours	Limit value - Short term
	mg/m3	mg/m3
Belgium	3	
Denmark	5	10

8.1.2 Biological limit values

None

8.1.3 Appropriate engineering controls

Local exhaust ventilation for indoor use. Chimney filters for industrial use

8.1.4 Additional exposure limits under the conditions of use



**DNEL/DMEL and PNEC-values:**

**DNELS:**

Exposure route	Exposure pattern	DNEL (workers)
Inhalation	Acute systemic effects	5082 mg/m <sup>3</sup>
	Long term systemic	21.17 mg/m <sup>3</sup>

Exposure route	Exposure pattern	DNEL (general population)
Inhalation	Acute systemic effects	3811 mg/m <sup>3</sup>
	Long term systemic	5.29 mg/m <sup>3</sup>
Oral	Acute systemic effects	11.4 mg/kg bw/day
	Long term systemic	1.52 mg/kg bw/day

**PNECS:**

PNEC	Remarks
Aquatic	Not acutely toxic to fish, invertebrates, algae and microorganisms at the concentrations tested in the studies. Acute toxicity of calcium sulfate to fish, invertebrates, algae and microorganisms are generally greater than the highest concentrations tested and are greater than the maximum solubility of calcium sulfate in water.
Sediment	Not applicable due to ubiquitous nature of calcium and sulfate ions in the environment
Soil	Not applicable due to ubiquitous nature of calcium and sulfate ions in the environment
STP	100 mg/L

**8.2 EXPOSURE CONTROLS**

8.2.1. Appropriate engineering controls The working places must be properly aired. When possible, install local aspirators and efficient system of total air replacement. If these measures are not sufficient to keep the particle concentrations below the exposure limits, it will be necessary to use suitable respiratory protection apparatus.

8.2.2. Personal protection equipment



Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection

If the conditions of use generate dust, use approved respiratory protection with filter P2.

8.2.3. Environmental Exposure Controls Avoid release to the environment.



## 9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid, crystalline powder. Colour : White
Odour	Neutral.
Odour threshold	Not known.
pH	About pH 11 (in aqueous solution)
Melting point/freezing point	calcium sulphate: 1450 °C
Initial boiling point and boiling range	Not applicable.
Flash Point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	calcium sulphate: 2.96 g/cm <sup>3</sup>
Solubility(ies)	Solubility (Water): calcium sulphate: 2 g/l @ 20 °C Solubility (Other): Not known.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	calcium sulphate: CaSO <sub>4</sub> x ½ H <sub>2</sub> O and H <sub>2</sub> O about 140 °C CaSO <sub>4</sub> and H <sub>2</sub> O about 700 °C CaO and SO <sub>3</sub> about 1000 °C
Viscosity	Not known.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

### 9.2 OTHER INFORMATION

None.

## 10. SECTION 10: STABILITY AND REACTIVITY

### 10.1 REACTIVITY

Materials to avoid: No materials known

### 10.2 CHEMICAL STABILITY

The substance is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Mixing with an aqueous solution of sodium carbonate will result in the formation of carbon dioxide.

### 10.4 CONDITIONS TO AVOID

Avoid contamination by sulphur-reducing bacteria and water under anaerobic conditions.

### 10.5 INCOMPATIBLE MATERIALS

No incompatible materials known.



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## 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition takes place from temperatures above 1450 °C. Decomposition under formation of: Sulphur trioxide and calcium oxide.

## 11. SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Relevant hazard class	Effect dose	Species	Method	Remark
Acute oral toxicity	LD50 > 1581 mg/kg bw	Rat.	OECD 420	
Acute dermal toxicity	n/a			No dermal toxicity envisaged due to low potential for absorption
Acute inhalative toxicity	LC50 > 2.61 mg/L	Rat	OECD 403	Maximum attainable dose
Skin corrosion/irritation	n/a	Rabbit	OECD 404	Not irritating
Serious eye damage/irritation	n/a	Rabbit	OECD 405	Not irritating
Respiratory or skin sensitization	n/a	Guinea pig	OECD 406	Not a skin sensitizer
Germ cell mutagenicity	n/a	In vitro tests	OECD 471 OECD 476	Not mutagenic
		Mouse	OECD 474	Not mutagenic
Carcinogenicity	n/a			No risk of carcinogenicity posed by calcium sulphate
Reproductive toxicity	NOAEL 790 mg/kg bw	Rat	OECD 422	No signs of reproductive toxicity observed
STOT single exposure	n/a			No organ toxicity observed in acute tests
STOT repeated exposure	n/a			It is considered to classify based on RCS content . STOT RE 2 (If calcium sulfate contains crystalline silica in respirable form >1 % - < 10 %.)
Aspiration hazard	n/a			No aspiration hazard envisaged

### 11.2 OTHER INFORMATION

Not known.

## 12. SECTION 12: ECOLOGICAL INFORMATION

### 12.1. TOXICITY

Aquatic toxicity	Effect dose	Exposure time	Species	Method	Evaluation	Remark
Acute fish toxicity	LC50 >79mg/L	96 h	Japanese rice fish	OECD 203	Hamless to fish up to the tested concentration.	LIMIT-test
Acute daphnia toxicity	EC50 >79 mg/L	48 h	Daphnia magna	OECD 202	Hamless to daphnia up to the tested concentration.	LIMIT-test
Acute algae toxicity	E50 > 79 mg/L	72 h	Selenastrum capricornutum	OECD 201	Hamless to algae up to the concentration tested.	LIMIT-test
Toxicity to STP microorganisms	EC 50 >790 mg/L	3 h	Activated sludge	OECD 209	Hamless to STP microorganisms	

After neutralisation, toxicity is no longer observed.

The product can hydrolyse into Calcium and Sulfate ions.

The stated effect can be caused partly by the decomposition products.





The ecological data were measured on the hydrolysed product.

## 12.2 PERSISTENCE AND DEGRADATION

### Abiotic Degradation

Physical- and photo-chemical elimination:

The product hydrolyses quickly in the presence of water to:

Calcium and Sulfate Ions

The individual components are poorly eliminated from water.

No photo-chemical elimination..

### Biodegradation

The methods for determining the biological degradability are not applicable to inorganic substances.

Inorganic product which is not eliminable from water through biological cleaning processes.

## 12.3 BIOACCUMULATIVE POTENTIAL

Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

No indication to bioaccumulation potential.

The ecological data were measured on the hydrolysed product.

According to experiences this product is inert and not degradable biologically.

## 12.4 MOBILITY IN SOIL

Water-soluble solid.

Natural constituent in soils.

If product enters soil, it will be mobile and may contaminate groundwater.

## 12.5 RESULTS OF PBT AND VPVB ASSESSMENT

This substance does not meet the criteria for classification as PBT or vPvB.

## 12.6 OTHER ADVERSE EFFECTS

According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as „dangerous for the environment“.

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely..

The information about ecology refer to the main components

## 13. SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 WASTE TREATMENT METHODS

Unused product, residues deriving from its use and empty packages have to be disposed according to the rules in force.

During handling adopt the precaution measures indicated in section 7 and 8..

### 13.2 ADDITIONAL INFORMATION

Disposal should be in accordance with local, state or national legislation.

## 14. SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous in terms of transport regulations.

## 15. SECTION 15: REGULATORY INFORMATION



#### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

##### European Regulations - Authorisations and/or Restrictions on Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

High Concern for Authorisation

REACH: ANNEX XIV list of substances subject to authorisation Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

National regulations

Other Not known.

#### 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out.

## 16. SECTION 16: OTHER INFORMATION

#### 16.1 DOCUMENTATION OF CHANGES

None

#### 16.2 TRAINING INSTRUCTIONS

None

#### 16.3 RECOMMENDED RESTRICTIONS ON USE

None

#### 16.4 FURTHER INFORMATION

Caution advise (P)

P270 – Do not eat, drink or smoke when using this product.

P260 – Do not breath dust

P262 – Do not get in eyes, on skin, or on clothing



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## Caution advise (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.

S20: When using do not eat or drink

S21: When using do not smoke

S22: Do not breath dust

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

## Disclaimers

The product must not be used for applications other than those for which it is sold, without having obtained previous written instructions. The producer takes no responsibility for improper use.

Information supplied in this "Material Safety Data Sheet" is based on the best available knowledge and our experience, and it is not exhaustive. It is applied on the product exactly as it is, in case of mixture or compound make sure that no new danger can rise.

In any case people who handle the product must respect the current law and regulation related to the product, hygiene and security on work place.

The information contained in this form are a description of product characteristics for safety purpose, should not be considered as guarantee of the properties of the product itself.