

# Safety Data Sheet

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This product is defined as an article under REACH and does not require a Safety Data Sheet under Article 31 of Regulation (EC) No. 1907/2006 as amended for Great Britain. Since an SDS is not required, this document does not contain all of the information that is required for substance and mixture SDSs under REACH.

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

#### 1.1. Product identifier

3M<sup>TM</sup> Abrasive Products, Cubitron<sup>TM</sup> II 967F Belts

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

#### **Identified uses**

Abrasive Product

#### 1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**Telephone:** +44 (0)1344 858 000

E Mail: ner-productstewardship@mmm.com

Website: www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### **SECTION 2: Hazard identification**

#### 2.1. Classification of the substance or mixture

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

### **CLASSIFICATION:**

This material is exempt from hazard classification according to Regulation (EC) No. 1272/2008, as amended for Great Britain, on classification, labelling, and packaging of substances and mixtures.

#### 2.2. Label elements

#### The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

Not applicable

34% of the mixture consists of components of unknown acute oral toxicity.

34% of the mixture consists of components of unknown acute dermal toxicity.

69% of the mixture consists of components of unknown acute inhalation toxicity.

#### Notes on labelling

Products should be marked with safety pictograms as recommended by FEPA (Federation of European Producers of Abrasives).

#### 2.3. Other hazards

Dust clouds of this material in sufficient concentration in combination with an ignition source may be explosive. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Aluminium Oxide (non-fibrous)	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	15 - 45	Substance with a national occupational exposure limit
Cured resin	Mixture	5 - 40	Substance not classified as hazardous
Cloth Backing	Mixture	5 - 35	Substance not classified as hazardous
Potassium tetrafluoroborate	(CAS-No.) 14075-53-7 (EC-No.) 237-928-2	5 - 15	Substance not classified as hazardous
Iron(III) oxide	(CAS-No.) 1309-37-1 (EC-No.) 215-168-2	0.1 - 1.5	Substance with a national occupational exposure limit
trisodium hexafluoroaluminate	(CAS-No.) 13775-53-6 (EC-No.) 237-410-6	5 - 15	Acute Tox. 4, H332 STOT RE 1, H372 Aquatic Chronic 2, H411
Wollastonite	(CAS-No.) 13983-17-0 (EC-No.) 237-772-5	1 - 10	Substance not classified as hazardous
Limestone	(CAS-No.) 1317-65-3 (EC-No.) 215-279-6	1 - 10	Substance with a national occupational exposure limit
Titanium dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5	0.1 - 1.5	Substance with a national occupational exposure limit
Quartz	(CAS-No.) 14808-60-7 (EC-No.) 238-878-4	< 0.4	STOT RE 1, H372
ALUMINUM COBALT OXIDE	(CAS-No.) 12672-27-4 (EC-No.) 235-762-5	< 0.1	Resp. Sens. 1B, H334 Skin Sens. 1A, H317 Muta. 2, H341

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#### 3M<sup>™</sup> Abrasive Products, Cubitron<sup>™</sup> II 967F Belts

	Carc. 1B, H350
	Repr. 1B, H360Fd

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin contact

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### If swallowed

Rinse mouth. If you feel unwell, get medical attention.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Exposure to extreme heat can give rise to thermal decomposition.

#### **Hazardous Decomposition or By-Products**

SubstanceConditionCarbon monoxideDuring combustion.Carbon dioxide.During combustion.Hydrogen FluorideDuring combustion.

#### 5.3. Advice for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and

chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Not applicable.

#### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Avoid inhalation of thermal decomposition products. For industrial/occupational use only. Not for consumer sale or use. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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

No special storage requirements.

#### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Aluminium oxides, inhalable dust	12672-27-4	UK HŠE	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
Cobalt and cobalt compounds (as Co)	12672-27-4	UK HSE	TWA(as Co):0.1 mg/m3	Respiratory Sensitizer
Iron(III) oxide	1309-37-1	UK HSE	TWA(respirable):4 mg/m3;TWA(Inhalable):10 mg/m3;TWA(as Fe, fume):5 mg/m3;STEL(as Fe, fume):10 mg/m3	
Limestone	1317-65-3	UK HSE	TWA(respirable):4 mg/m3;TWA(as respirable dust):4	

			mg/m3;TWA(Inhalable):10 mg/m3;TWA(as inhalable dust):10 mg/m3
Aluminium Oxide (non-fibrous)	1344-28-1	UK HSE	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3
Titanium dioxide	13463-67-7	UK HSE	TWA(respirable):4 mg/m3;TWA(Inhalable):10 mg/m3
Aluminium salts, soluble	13775-53-6	UK HSE	TWA:2 mg/m3
Flouride (inorganic, as F)	13775-53-6	UK HSE	TWA(as F):2.5 mg/m3
Silica, respirable crystalline	14808-60-7	UK HSE	TWA(respirable):0.1 mg/m3

UK HSE: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

# Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

#### 8.2. Exposure controls

#### 8.2.1. Engineering controls

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Provide appropriate local exhaust ventilation for sanding, grinding or machining. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

To minimise the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety glasses with side shields.

Applicable Norms/Standards

Use eye protection conforming to EN 166

### Skin/hand protection

Wear appropriate gloves to minimise risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

#### Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure.

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use a positive pressure supplied-air respirator.

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter types A & P

# **SECTION 9: Physical and chemical properties**

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

ColourRedOdorSlight PolymericOdour thresholdNot applicable.Melting point/freezing pointNot applicable.Boiling point/boiling rangeNot applicable.FlammabilityNot applicable.Flammable Limits(LEL)Not applicable.Flammable Limits(UEL)Not applicable.Flash pointNot applicable.Autoignition temperatureNot applicable.Decomposition temperatureNot applicable.PHNot applicable.Kinematic ViscosityNot applicable.Water solubilityNot applicable.	Thior mation on basic physical and chemical properties			
OdorSlight PolymericOdour thresholdNot applicable.Melting point/freezing pointNot applicable.Boiling point/boiling rangeNot applicable.FlammabilityNot applicable.Flammable Limits(LEL)Not applicable.Flammable Limits(UEL)Not applicable.Flash pointNot applicable.Autoignition temperatureNot applicable.Decomposition temperatureNot applicable.PHNot applicable.Kinematic ViscosityNot applicable.Water solubilityNot applicable.	Physical state	Solid.		
Odour thresholdNot applicable.Melting point/freezing pointNot applicable.Boiling point/boiling rangeNot applicable.FlammabilityNot applicable.Flammable Limits(LEL)Not applicable.Flammable Limits(UEL)Not applicable.Flash pointNot applicable.Autoignition temperatureNot applicable.Decomposition temperatureNot applicable.PHNot applicable.Kinematic ViscosityNot applicable.Water solubilityNot applicable.	Colour	Red		
Melting point/freezing point  Boiling point/boiling range  Not applicable.  Flammability  Not applicable.  Not applicable.  Flammable Limits(LEL)  Flammable Limits(UEL)  Not applicable.  Not applicable.	Odor	Slight Polymeric		
Boiling point/boiling range  Flammability  Not applicable.  Flammable Limits(LEL)  Flammable Limits(UEL)  Flash point  Not applicable.	Odour threshold	Not applicable.		
Flammability  Not applicable.  Flammable Limits(LEL)  Not applicable.  Work applicable.  Not applicable.  Not applicable.  Not applicable.  Not applicable.	Melting point/freezing point			
Flammable Limits(LEL)  Flammable Limits(UEL)  Not applicable.  Water solubility  Not applicable.  Not applicable.	Boiling point/boiling range	Not applicable.		
Flammable Limits(UEL)  Flash point  Not applicable.  Water solubility  Not applicable.  Not applicable.  Not applicable.	Flammability	Not applicable.		
Flammable Limits(UEL)  Flash point  Not applicable.  Water solubility  Not applicable.  Not applicable.  Not applicable.				
Flash point  Autoignition temperature  Decomposition temperature  Not applicable.  Not applicable.  Not applicable.  Not applicable.  Water solubility  Not applicable.  Not applicable.  Not applicable.	Flammable Limits(LEL)	Not applicable.		
Autoignition temperature  Decomposition temperature  Not applicable.  Not applicable.  Kinematic Viscosity  Not applicable.  Water solubility  Not applicable.	Flammable Limits(UEL)	Not applicable.		
Decomposition temperature  pH  Kinematic Viscosity  Not applicable.  Not applicable.  Not applicable.  Not applicable.	Flash point	Not applicable.		
pH Kinematic Viscosity Not applicable. Water solubility Not applicable.	Autoignition temperature	Not applicable.		
Kinematic Viscosity  Not applicable.  Not applicable.	Decomposition temperature	Not applicable.		
Water solubility Not applicable.	pH			
	Kinematic Viscosity	Not applicable.		
Solubility- non-water Not applicable.	Water solubility	Not applicable.		
	Solubility- non-water	Not applicable.		
Partition coefficient: n-octanol/water Not applicable.	Partition coefficient: n-octanol/water	Not applicable.		
Vapour pressure Not applicable.	Vapour pressure	Not applicable.		
Relative density Not applicable.	Relative density	Not applicable.		
	Relative Vapour Density			
Particle Characteristics Not applicable.	Particle Characteristics	Not applicable.		

#### 9.2. Other information

#### 9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNot applicable.Percent volatileNot applicable.

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

This material is considered to be non reactive under normal use conditions

#### 10.2 Chemical stability

Stable.

# 10.3 Possibility of hazardous reactions

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Hazardous polymerisation will not occur.

#### 10.4 Conditions to avoid

None known.

#### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

Substance
None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

Extreme heat arising from situations such as misuse or equipment failure can generate hydrogen fluoride as a decomposition product.

# **SECTION 11: Toxicological information**

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### Skin contact

Mechanical skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching. Allergic Skin Reaction (non-photo induced) in sensitive people: Signs/symptoms may include redness, swelling, blistering, and itching.

#### Eve contact

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion. Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

#### Additional information:

This document covers only the product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered. This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered. This product contains titanium dioxide and quartz (crystalline) silica. Cancer of the lungs has been associated with inhalation of high levels of titanium dioxide in animal studies, and occupational exposure to inhaled quartz silica has been associated with silicosis and lung cancer. No exposure to titanium dioxide or quartz silica is expected during the normal handling and use of this product. Titanium dioxide and quartz silica were not detected when air sampling was conducted during simulated use of similar products containing these substances. Therefore, the health effects associated

with titanium dioxide and quartz (crystalline) silica are not expected during the normal use of this product.

### **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity** 

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation- Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Aluminium Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium Oxide (non-fibrous)	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminium Oxide (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Potassium tetrafluoroborate	Dermal		LD50 estimated to be > 5,000 mg/kg
Potassium tetrafluoroborate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
Potassium tetrafluoroborate	Ingestion	Rat	LD50 5,854 mg/kg
trisodium hexafluoroaluminate	Dermal	Rabbit	LD50 > 2,100 mg/kg
trisodium hexafluoroaluminate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 4.5 mg/l
trisodium hexafluoroaluminate	Ingestion	Rat	LD50 > 5,000 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation- Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Limestone	Ingestion	Rat	LD50 6,450 mg/kg
Wollastonite	Ingestion	Rat	LD50 > 5,000 mg/kg
Wollastonite	Dermal	similar compoun ds	LD50 > 5,000 mg/kg
Wollastonite	Inhalation- Dust/Mist (4 hours)	similar compoun ds	LC50 > 2.08 mg/l
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Iron(III) oxide	Dermal	Not available	LD50 3,100 mg/kg
Iron(III) oxide	Ingestion	Not available	LD50 3,700 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg
ALUMINUM COBALT OXIDE	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
ALUMINUM COBALT OXIDE	Ingestion	Rat	LD50 > 2,000  mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value

Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Potassium tetrafluoroborate	Rabbit	No significant irritation
trisodium hexafluoroaluminate	Multiple	No significant irritation
	animal	
	species	
Limestone	Rabbit	No significant irritation
Wollastonite	similar	No significant irritation
	compoun	
	ds	
Titanium dioxide	Rabbit	No significant irritation
Iron(III) oxide	Rabbit	No significant irritation
Quartz	Professio	No significant irritation
	nal	
	judgemen	
	t	
ALUMINUM COBALT OXIDE	In vitro	No significant irritation
	data	

Serious Eve Damage/Irritation

Name	Species	Value
Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Potassium tetrafluoroborate	Rabbit	No significant irritation
trisodium hexafluoroaluminate	Rabbit	Mild irritant
Limestone	Rabbit	No significant irritation
Wollastonite	similar	Mild irritant
	compoun	
	ds	
Titanium dioxide	Rabbit	No significant irritation
Iron(III) oxide	Rabbit	No significant irritation
ALUMINUM COBALT OXIDE	In vitro	No significant irritation
	data	

#### **Skin Sensitisation**

Name	Species	Value
Wollastonite	Human	Not classified
Titanium dioxide	Human	Not classified
	and	
	animal	
Iron(III) oxide	Human	Not classified
ALUMINUM COBALT OXIDE	similar	Sensitising
	compoun	
	ds	

**Respiratory Sensitisation** 

Name	Species	Value
ALUMINUM COBALT OXIDE	similar	Sensitising
	compoun ds	

**Germ Cell Mutagenicity** 

Name	Route	Value
Aluminium Oxide (non-fibrous)	In Vitro	Not mutagenic
Wollastonite	In Vitro	Not mutagenic
Wollastonite	In vivo	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
Iron(III) oxide	In Vitro	Not mutagenic
Quartz	In Vitro	Some positive data exist, but the data are not
		sufficient for classification

Quartz	In vivo	Some positive data exist, but the data are not sufficient for classification
ALUMINUM COBALT OXIDE	In Vitro	Some positive data exist, but the data are not sufficient for classification
ALUMINUM COBALT OXIDE	In vivo	Mutagenic

Carcinogenicity

Name	Route	Species	Value
Aluminium Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Iron(III) oxide	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Quartz	Inhalation	Human and animal	Carcinogenic.
ALUMINUM COBALT OXIDE	Inhalation	similar compoun ds	Carcinogenic.

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Limestone	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Wollastonite	Ingestion	Not classified for development	Multiple animal species	NOAEL 1,600 mg/kg/day	during organogenesis
ALUMINUM COBALT OXIDE	Ingestion	Toxic to development	similar compoun ds	NOAEL 5 mg/kg/day	during gestation
ALUMINUM COBALT OXIDE	Ingestion	Toxic to male reproduction	similar compoun ds	NOAEL Not available	
ALUMINUM COBALT OXIDE	Inhalation	Toxic to male reproduction	similar compoun ds	NOAEL Not available	

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Limestone	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes

**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Aluminium Oxide (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminium Oxide (non- fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
trisodium hexafluoroaluminate	Inhalation	bone, teeth, nails, and/or hair	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.0005 mg/l	5 months
trisodium hexafluoroaluminate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.00021 mg/l	90 days
trisodium	Ingestion	bone, teeth, nails,	Causes damage to organs through	Rat	LOAEL 0.58	14 weeks

hexafluoroaluminate		and/or hair	prolonged or repeated exposure		mg/kg/day	
Limestone	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Wollastonite	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Wollastonite	Inhalation	pulmonary fibrosis	Not classified	Human and animal	NOAEL Not available	
Wollastonite	Ingestion	liver   kidney and/or bladder   hematopoietic system	Not classified	Rat	NOAEL 2,500 mg/kg/day	2 years
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Iron(III) oxide	Inhalation	pulmonary fibrosis   pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
ALUMINUM COBALT OXIDE	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	similar compoun ds	NOAEL Not available	13 weeks

#### **Aspiration Hazard**

For the component/components, either no data is currently available or the data is not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

#### 11.2. Information on other hazards

Not applicable.

# **SECTION 12: Ecological information**

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

#### 12.1. Toxicity

No product test data available.

Material	CAS#	Organism	Type	Exposure	Test endpoint	Test result
Aluminium Oxide (non-fibrous)	1344-28-1	N/A	Experimental	96 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Iron(III) oxide	1309-37-1	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Iron(III) oxide	1309-37-1	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Iron(III) oxide	1309-37-1	Zebra Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Iron(III) oxide	1309-37-1	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l

Iron(III) oxide	1309-37-1	Water flea	Experimental	21 days	No tox obs at lmt	>100 mg/l
Iron(III) oxide	1309-37-1	Activated sludge	Experimental	3 hours	of water sol EC50	>10,000 mg/l
Potassium	14075-53-7	Golden Orfe	Experimental	96 hours	LC50	760 mg/l
tetrafluoroborate			•			
Potassium tetrafluoroborate	14075-53-7	Green algae	Experimental	72 hours	ErC50	>100 mg/l
Potassium tetrafluoroborate	14075-53-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Potassium tetrafluoroborate	14075-53-7	Water flea	Estimated	21 days	NOEC	216 mg/l
Potassium tetrafluoroborate	14075-53-7	Green algae	Experimental	72 hours	NOEC	100 mg/l
Potassium tetrafluoroborate	14075-53-7	Bacteria	Experimental	18 hours	EC50	550 mg/l
trisodium hexafluoroaluminat e	13775-53-6	Green algae	Experimental	72 hours	ErC50	8.8 mg/l
trisodium hexafluoroaluminat e	13775-53-6	Water flea	Experimental	48 hours	EC50	156 mg/l
trisodium hexafluoroaluminat e	13775-53-6	Zebra Fish	Experimental	96 hours	LC50	99 mg/l
trisodium hexafluoroaluminat e	13775-53-6	Green algae	Experimental	72 hours	NOEC	1 mg/l
trisodium hexafluoroaluminat e	13775-53-6	Activated sludge	Experimental	3 hours	EC50	>160 mg/l
trisodium hexafluoroaluminat e	13775-53-6	Honeybee	Experimental	1 days	LD50	2,245 ug/bee
Limestone	1317-65-3	Green algae	Estimated	72 hours	EC50	>100 mg/l
Limestone	1317-65-3	Rainbow trout	Estimated	96 hours	LC50	>100 mg/l
Limestone	1317-65-3	Water flea	Estimated	48 hours	EC50	>100 mg/l
Limestone	1317-65-3	Green algae	Estimated	72 hours	EC10	>100 mg/l
Wollastonite	13983-17-0	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium dioxide	13463-67-7	Fathead minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l
Quartz	14808-60-7	Green algae	Estimated	72 hours	EC50	440 mg/l
Quartz	14808-60-7	Water flea	Estimated	48 hours	EC50	7,600 mg/l
Quartz	14808-60-7	Zebra Fish	Estimated	96 hours	LC50	5,000 mg/l
Quartz	14808-60-7	Green algae	Estimated	72 hours	NOEC	60 mg/l
ALUMINUM CORAL TOYUDE	12672-27-4	Ciliated protozoa	Estimated	9 hours	IC50	112.34 mg/l
COBALT OXIDE ALUMINUM COBALT OXIDE	12672-27-4	Green algae	Estimated	96 hours	No tox obs at lmt of water sol	>100 mg/l

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ALUMINUM	12672-27-4	Rainbow trout	Estimated	96 hours	No tox obs at lmt	>100 mg/l
COBALT OXIDE					of water sol	
ALUMINUM	12672-27-4	Water flea	Estimated	48 hours	No tox obs at lmt	>100 mg/l
COBALT OXIDE					of water sol	
ALUMINUM	12672-27-4	Green algae	Estimated	72 hours	No tox obs at lmt	>100 mg/l
COBALT OXIDE					of water sol	
ALUMINUM	12672-27-4	Water flea	Estimated	7 days	No tox obs at lmt	>100 mg/l
COBALT OXIDE					of water sol	
ALUMINUM	12672-27-4	Zebra Fish	Estimated	16 days	No tox obs at lmt	>100 mg/l
COBALT OXIDE					of water sol	

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Aluminium Oxide (non-fibrous)	1344-28-1	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Iron(III) oxide	1309-37-1	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Potassium tetrafluoroborate	14075-53-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
trisodium hexafluoroaluminat e	13775-53-6	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Limestone	1317-65-3	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Wollastonite	13983-17-0	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Quartz	14808-60-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
ALUMINUM COBALT OXIDE	12672-27-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A

# 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Aluminium Oxide (non-fibrous)	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Iron(III) oxide	1309-37-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Potassium tetrafluoroborate	14075-53-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
trisodium hexafluoroaluminat e	13775-53-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Wollastonite	13983-17-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Experimental BCF - Fish	42 days	Bioaccumulation factor	9.6	
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
ALUMINUM COBALT OXIDE	12672-27-4	Estimated BCF - Fish	63 days	Bioaccumulation factor	190	

# 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
trisodium hexafluoroaluminat	13775-53-6	Experimental Mobility in Soil	Koc	603-6502	
e					

#### 12.5. Results of the PBT and vPvB assessment

Not applicable

#### 12.6. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include HF. Facility must be capable of handling halogenated materials.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

#### EU waste code (product as sold)

160304 Inorganic wastes other than those mentioned in 16 03 03

# **SECTION 14: Transportation information**

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)	
14.1 UN number	No data available.	No data available.	No data available.	
14.2 UN proper shipping name	No data available.	No data available.	No data available.	
14.3 Transport hazard class(es)	No data available.	No data available.	available. No data available.	
14.4 Packing group	No data available.	No data available.	No data available.	
14.5 Environmental hazards	No data available.	No data available.	No data available.	
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.  Please refer to the other sections of SDS for further information.		
14.7 Transport in bulk according to Annex II of Marpol 73/78 and	No data available.	No data available.	No data available.	

IBC Code			
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.
IMDG Segregation Code	No data available.	No data available.	No data available.

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

# **SECTION 15: Regulatory information**

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

#### Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
ALUMINUM COBALT OXIDE	12672-27-4	Carc. 1B	3M Classified according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
Iron(III) oxide	1309-37-1	Gr. 3: Not classifiable	International Agency for Research on Cancer
Quartz	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Wollastonite	13983-17-0	Gr. 3: Not classifiable	International Agency for Research on Cancer

#### Global inventory status

Contact 3M for more information.

#### COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1 None

Seveso named dangerous substances, Annex 1, Part 2 None

### Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

# 15.2. Chemical Safety Assessment

Not applicable.

### **SECTION 16: Other information**

#### List of relevant H statements

H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

#### **Revision information:**

- Section 1: E-mail address information was modified.
- Section 3: Composition/Information of ingredients table information was modified.
- Section 6: Accidental release personal information information was modified.
- Section 8: Occupational exposure limit table information was modified.
- OEL Reg Agency Desc information was modified.
- Section 9: Flammability (solid, gas) information information was deleted.
- Section 09: Flammability information information was added.
- Section 09: Particle Characteristics N/A information was added.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Health Effects Additional Information information was modified.
- Section 11: Reproductive Toxicity Table information was modified.
- Section 11: Serious Eye Damage/Irritation Table information was modified.
- Section 11: Skin Corrosion/Irritation Table information was modified.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Target Organs Repeated Table information was modified.
- Section 12: Component ecotoxicity information information was modified.
- Section 15: Seveso Substance Text information was deleted.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

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#### 3M SDSs for Great Britain are available at www.3M.com/uk

For Northern Ireland documents, please contact your 3M representative to obtain a copy.