



## 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. 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.

<b>Document group:</b>	10-4844-6	<b>Version number:</b>	20.02
<b>Revision date:</b>	20/12/2022	<b>Supersedes date:</b>	15/05/2019

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

#### 1.1. Product identifier

3M™ Nextel™ Ceramic Fibre 312 with Organic Sizing

#### Product Identification Numbers

98-0400-0106-1	98-0400-0147-5	98-0400-5907-7	98-0400-5911-9
7100038471	7100033888	7000059426	7000059429

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

##### Identified uses

Ceramic Fibre

#### 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:** tox.uk@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

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

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

**2.2. Label elements****CLP REGULATION (EC) No 1272/2008**

Not applicable

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**

<b>Ingredient</b>	<b>Identifier(s)</b>	<b>%</b>	<b>Classification according to Regulation (EC) No. 1272/2008 [CLP]</b>
Cis-cyclohexane-1,2-dicarboxylic anhydride	(CAS-No.) 12788-79-3	95 - 100	Substance not classified as hazardous
Organic sizing	Trade Secret	< 5	Substance not classified as hazardous

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**

No need for first aid is anticipated. If symptoms develop, remove the affected person to fresh air. Get medical attention.

**Skin contact**

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

**Eye contact**

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

**If swallowed**

Do not induce vomiting. 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**

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

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

None inherent in this product.

**5.3. Advice for fire-fighters**

No special protective actions for fire-fighters are anticipated.

**SECTION 6: Accidental release measures**

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

Not applicable.

**6.2. Environmental precautions**

Not applicable.

**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 skin contact with hot material. Avoid breathing of dust created by cutting, sanding, grinding or machining. This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

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

Not applicable.

**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**

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

**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**

Not applicable.

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**

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**

No chemical protective gloves are required.

**Respiratory protection**

None required.

**Thermal hazards**

Wear heat insulating gloves      Wear heat insulating gloves, indirect vented goggles, and a full face shield when handling hot material to prevent thermal burns.

*Applicable Norms/Standards*

Use gloves tested to EN 407

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	Solid.
<b>Colour</b>	White
<b>Odor</b>	Odourless
<b>Odour threshold</b>	<i>Not applicable.</i>
<b>Melting point/freezing point</b>	$\geq 1,800$ °C
<b>Boiling point/boiling range</b>	<i>Not applicable.</i>
<b>Flammability (solid, gas)</b>	Not classified
<b>Flammable Limits(LEL)</b>	<i>Not applicable.</i>
<b>Flammable Limits(UEL)</b>	<i>Not applicable.</i>
<b>Flash point</b>	No flash point
<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Decomposition temperature</b>	<i>Not applicable.</i>
<b>pH</b>	
<b>Kinematic Viscosity</b>	<i>Not applicable.</i>
<b>Water solubility</b>	0.5 - 3.5 % [Details:CONDITIONS: 0.5-3.5% BY WEIGHT]
<b>Solubility- non-water</b>	<i>Not applicable.</i>
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Vapour pressure</b>	<i>Not applicable.</i>
<b>Density</b>	2.7 - 3.05 g/cm <sup>3</sup>
<b>Relative density</b>	2.7 - 3.05 [Ref Std:WATER=1]
<b>Relative Vapour Density</b>	<i>Not applicable.</i>

### 9.2. Other information

#### 9.2.2 Other safety characteristics

<b>EU Volatile Organic Compounds</b>	<i>No data available.</i>
<b>Evaporation rate</b>	<i>Not applicable.</i>
<b>Molecular weight</b>	<i>No data available.</i>

## 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

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

None known.

### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	At elevated temperatures.
Irritant vapours or gases.	At elevated temperatures.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

## SECTION 11: Toxicological information

The information below may not agree with the EU 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 internal hazard assessments.

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Signs and Symptoms of Exposure

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

#### Inhalation

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

#### Skin contact

Mechanical skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

#### Eye contact

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

#### Ingestion

Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation.

#### Additional Health Effects:

Due to their large size (7-15 microns in diameter), Nextel(TM) Ceramic Fibers do not meet the definition of respirable as defined by WHO convention and ECHA. Because Nextel fibers are considered non-respirable, they are not expected to pose a cancer risk.

**Additional information:**

This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards. Due to their large size (7-15 microns in diameter), Nextel(TM) Ceramic Fibers do not meet the definition of respirable as defined by WHO convention and ECHA. Because Nextel fibers are considered non-respirable, they are not expected to pose a cancer risk.

**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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Organic sizing	Dermal	Rabbit	LD50 > 20,000 mg/kg
Organic sizing	Ingestion	Rat	LD50 32,770 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Overall product	In vitro data	No significant irritation
Cis-cyclohexane-1,2-dicarboxylic anhydride	In vitro data	No significant irritation
Organic sizing	Rabbit	Minimal irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Organic sizing	Rabbit	Mild irritant

**Skin Sensitisation**

Name	Species	Value
Organic sizing	Guinea pig	Not classified

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

Name	Route	Value
Organic sizing	In Vitro	Not mutagenic
Organic sizing	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Organic sizing	Ingestion	Rat	Not carcinogenic

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
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**3M™ Nextel™ Ceramic Fibre 312 with Organic Sizing**

Organic sizing	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,125 mg/kg/day	during gestation
Organic sizing	Ingestion	Not classified for male reproduction	Rat	NOAEL 5699 +/- 1341 mg/kg/day	5 days
Organic sizing	Not specified.	Not classified for reproduction and/or development		NOEL N/A	
Organic sizing	Ingestion	Not classified for development	Mouse	NOAEL 562 mg/animal/day	during gestation

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Organic sizing	Inhalation	respiratory irritation	Not classified	Rat	NOAEL 1.008 mg/l	2 weeks

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Organic sizing	Inhalation	respiratory system	Not classified	Rat	NOAEL 1.008 mg/l	2 weeks
Organic sizing	Ingestion	kidney and/or bladder   heart   endocrine system   hematopoietic system   liver   nervous system	Not classified	Rat	NOAEL 5,640 mg/kg/day	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 EU 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
Cis-cyclohexane-1,2-dicarboxylic anhydride	12788-79-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Organic sizing	Trade Secret	Activated sludge	Experimental	N/A	EC50	>1,000 mg/l
Organic sizing	Trade Secret	Atlantic Salmon	Experimental	96 hours	LC50	>1,000 mg/l

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cis-cyclohexane-1,2-dicarboxylic anhydride	12788-79-3	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Organic sizing	Trade Secret	Experimental Biodegradation	28 days	BOD	53 %BOD/ThO D	OECD 301C - MITI test (I)

**12.3 : Bioaccumulative potential**

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Cis-cyclohexane-1,2-dicarboxylic anhydride	12788-79-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Organic sizing	Trade Secret	Estimated Bioconcentration		Bioaccumulation factor	2.3	

**12.4. Mobility in soil**

No test data available.

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

Not applicable

**12.6. Endocrine disrupting properties**

Not applicable

**12.7. 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.

Dispose of waste product in a permitted industrial waste facility.

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)**

101208 Waste ceramics, bricks, tiles and construction products (after thermal processing)

**SECTION 14: Transportation information**

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)



<b>14.1 UN number or ID number</b>	No data available.	No data available.	No data available.
<b>14.2 UN proper shipping name</b>	No data available.	No data available.	No data available.
<b>14.3 Transport hazard class(es)</b>	No data available.	No data available.	No data available.
<b>14.4 Packing group</b>	No data available.	No data available.	No data available.
<b>14.5 Environmental hazards</b>	No data available.	No data available.	No data available.
<b>14.6 Special precautions for user</b>	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 the SDS for further information.
<b>14.7 Marine Transport in bulk according to IMO instruments</b>	No data available.	No data available.	No data available.
<b>Control Temperature</b>	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
<b>ADR Classification Code</b>	No data available.	No data available.	No data available.
<b>IMDG Segregation Code</b>	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

#### Global inventory status

Contact 3M for more information.

#### DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

**Regulation (EU) No 649/2012**

No chemicals listed

**15.2. Chemical Safety Assessment**

Not applicable.

**SECTION 16: Other information**

**Revision information:**

EU Section 09: pH information information was added.

Section 02: CLP Classification Statements information was added.

Label: CLP Classification information was deleted.

Section 03: Composition table % Column heading information was added.

Section 3: Composition/ Information of ingredients table information was modified.

Section 03: Substance not applicable information was added.

Section 4: First aid for eye contact information information was modified.

Section 4: First aid for ingestion (swallowing) information information was modified.

Section 4: First aid for inhalation information information was modified.

Section 4: First aid for skin contact information information was modified.

Section 04: Information on toxicological effects information was modified.

Section 8: Personal Protection - Respiratory Information information was deleted.

Section 8: Personal Protection - Thermal hazards information information was modified.

Section 8: Respiratory protection - recommended respirators guide information was deleted.

Section 8: Respiratory protection - recommended respirators information information was deleted.

Section 8: Respiratory protection information information was added.

Section 09: Color information was added.

Section 9: Evaporation Rate information information was deleted.

Section 9: Explosive properties information information was deleted.

Section 09: Kinematic Viscosity information information was added.

Section 9: Melting point information information was modified.

Section 09: Odor information was added.

Sections 3 and 9: Odour, colour, grade information information was deleted.

Section 9: Oxidising properties information information was deleted.

Section 9: pH information information was deleted.

Section 9: Property description for optional properties information was modified.

Section 9: Vapour density value information was added.

Section 9: Vapour density value information was deleted.

Section 9: Viscosity information information was deleted.

Section 10: Hazardous decomposition or by-products table information was modified.

Section 11: Classification disclaimer information was modified.

Section 11: No endocrine disruptor information available warning information was added.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Target Organs - Repeated Table information was added.

Section 11: Target Organs - Repeated Table information was deleted.

Section 12: 12.6. Endocrine Disrupting Properties information was added.

Section 12: 12.7. Other adverse effects information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Contact manufacturer for more detail. information was deleted.

Section 12: No Data text for mobility in soil information was added.

Section 12: No endocrine disruptor information available warning information was added.

Section 12: Persistence and Degradability information information was modified.

Section 12: Bioaccumulative potential information information was modified.

Section 13: Standard Phrase Category Waste GHS information was modified.

Section 14 Classification Code – Main Heading information was added.  
Section 14 Classification Code – Regulation Data information was added.  
Section 14 Control Temperature – Main Heading information was added.  
Section 14 Control Temperature – Regulation Data information was added.  
Section 14 Disclaimer Information information was added.  
Section 14 Emergency Temperature – Main Heading information was added.  
Section 14 Emergency Temperature – Regulation Data information was added.  
Section 14 Hazard Class + Sub Risk – Main Heading information was added.  
Section 14 Hazard Class + Sub Risk – Regulation Data information was added.  
Section 14 Hazardous/Not Hazardous for Transportation information was added.  
Section 14 Other Dangerous Goods – Main Heading information was added.  
Section 14 Other Dangerous Goods – Regulation Data information was added.  
Section 14 Packing Group – Main Heading information was added.  
Section 14 Packing Group – Regulation Data information was added.  
Section 14 Proper Shipping Name information was added.  
Section 14 Regulations – Main Headings information was added.  
Section 14 Segregation – Regulation Data information was added.  
Section 14 Segregation Code – Main Heading information was added.  
Section 14 Special Precautions – Main Heading information was added.  
Section 14 Special Precautions – Regulation Data information was added.  
Section 14 Transport in bulk – Regulation Data information was added.  
Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was added.  
Section 14 UN Number Column data information was added.  
Section 14 UN Number information was added.  
Section 16: UK disclaimer information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

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