



Safety Data Sheet

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

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

3M 51009 Filler/Hardener (Kit)

Product Identification Numbers

KS-9990-0692-1

7000095200

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

1.3. Details of the supplier of the safety data sheet

Address: 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone: +353 1 280 3555
E Mail: tox.uk@mmm.com

Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the MSDSs for components of this product are:

27-4760-8, 27-4733-5

TRANSPORTATION INFORMATION

Refer to section 14 of the kit components for transport information.

KIT LABEL

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226
 Organic Peroxide, Type E - Org. Perox. E; H242
 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
 Skin Sensitization, Category 1A - Skin Sens. 1A; H317
 Reproductive Toxicity, Category 2 - Repr. 2; H361d
 Specific Target Organ Toxicity-Repeated Exposure, Category 1 - STOT RE 1; H372
 Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400
 Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols

GHS02 (Flame) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) | GHS09 (Environment) |

Pictograms



Contains:

2,2'-(p-Tolylimino)diethanol; dibenzoyl peroxide; maleic anhydride; styrene.

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H361d	Suspected of damaging the unborn child.

H372	Causes damage to organs through prolonged or repeated exposure: sensory organs.
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H410	Very toxic to aquatic life with long lasting effects.
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PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234	Keep only in original packaging.
P260A	Do not breathe vapours.
P280I	Wear protective gloves, eye/face protection, and respiratory protection.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Storage:

P411 Store at temperatures not exceeding 50 °C.

For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure: sensory organs.

<=125 ml Precautionary statements**Prevention:**

P260A Do not breathe vapours.

P280I Wear protective gloves, eye/face protection, and respiratory protection.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Refer to Safety Data Sheet for component % unknown values (www.3M.com/msds).

Revision information:

Kit Information: CLP Target Organ Hazard Statement information was deleted.

Label: CLP Ingredients - kit components information was modified.

Section 1: Emergency telephone information was modified.

Label: CLP Classification information was modified.

Label: CLP Target Organ Hazard Statement information was added.



Safety Data Sheet

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Document group:	27-4733-5	Version number:	7.00
Revision date:	18/03/2025	Supersedes date:	20/06/2023

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 (TM) Filler (Italy)

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

Identified uses

Automotive.

1.3. Details of the supplier of the safety data sheet

Address:	3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone:	+353 1 280 3555
E Mail:	tox.uk@mmm.com
Website:	www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

The aspiration hazard classification is not required due to the product's viscosity.

The carcinogenicity classification for titanium dioxide is not applicable based on physical form (material is not a powder).

CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Reproductive Toxicity, Category 2 - Repr. 2; H361d
Specific Target Organ Toxicity-Repeated Exposure, Category 1 - STOT RE 1; H372

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols

GHS02 (Flame) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

Pictograms



Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
styrene	100-42-5	202-851-5	10 - 20
Quartz	14808-60-7	238-878-4	0.5 - 1.5
2,2'-(p-Tolylimino)diethanol	3077-12-1	221-359-1	< 1
maleic anhydride	108-31-6	203-571-6	< 0.1

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H361d	Suspected of damaging the unborn child.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure: sensory organs.
H373	May cause damage to organs through prolonged or repeated exposure: respiratory system.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260A	Do not breathe vapours.
P280E	Wear protective gloves.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H317	May cause an allergic skin reaction.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure: sensory organs.

<=125 ml Precautionary statements**Prevention:**

P260A	Do not breathe vapours.
P280E	Wear protective gloves.

Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
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SUPPLEMENTAL INFORMATION:**Supplemental Hazard Statements:**

EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
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25% of the mixture consists of components of unknown acute oral toxicity.

25% of the mixture consists of components of unknown acute dermal toxicity.

25% of the mixture consists of components of unknown acute inhalation toxicity.

Contains 25% of components with unknown hazards to the aquatic environment.

EU VOC Directive (2004/42/EC) labelling: 2004/42/EC IIB(b)(250)

2.3. Other hazards

None known.

This material does not contain any substances that are assessed to be a PBT or vPvB

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]
Talc	(CAS-No.) 14807-96-6 (EC-No.) 238-877-9	40 - 70	Substance with a national occupational exposure limit
Unsaturated polyester dry resin styrene	None (CAS-No.) 100-42-5 (EC-No.) 202-851-5	10 - 30 10 - 20	Substance not classified as hazardous Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT RE 1, H372 Nota D Aquatic Chronic 3, H412 Asp. Tox. 1, H304

			STOT SE 3, H335
Triiron tetraoxide	(CAS-No.) 1317-61-9 (EC-No.) 215-277-5	< 3	Substance not classified as hazardous
Castor oil, hydrogenated	(CAS-No.) 8001-78-3 (EC-No.) 232-292-2	< 3	Substance not classified as hazardous
xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7	< 3	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315 Nota C Asp. Tox. 1, H304 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412
Quartz	(CAS-No.) 14808-60-7 (EC-No.) 238-878-4	0.5 - 1.5	STOT RE 1, H372
Titanium dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5	0.5 - 1.5	Carc. 2, H351 (inhalation)
2,2'-(p-Tolylimino)diethanol	(CAS-No.) 3077-12-1 (EC-No.) 221-359-1	< 1	Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6	< 0.1	EUH071 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372

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

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6	(C >= 0.001%) Skin Sens. 1A, H317

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

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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

The most important symptoms and effects based on the CLP classification include:

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain).

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision).

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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products**Substance**

Carbon monoxide

Carbon dioxide.

Condition

During combustion.

During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools.

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

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 breathing of dust created by cutting, sanding, grinding or machining. Do not use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidising agents.

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
styrene	100-42-5	Ireland OELs	TWA(8 hours):85 mg/m ³ (20 ppm);STEL(15 minutes):170 mg/m ³ (40 ppm)	
maleic anhydride	108-31-6	Ireland OELs	TWA(inhalable fraction and vapour)(8 hours):0.01 ppm	
xylene	1330-20-7	Ireland OELs	TWA(8 hours):221 mg/m ³ (50 ppm);TWA(8 hours):50 ppm(221 mg/m ³);STEL(15 minutes):442 mg/m ³ (100 ppm)	SKIN

Titanium dioxide	13463-67-7	Ireland OELs	ppm);STEL(15 minutes):100 ppm(442 mg/m ³) TWA(Total inhalable dust)(8 hours):10 mg/m ³ ;TWA(as respirable dust)(8 hours):4 mg/m ³
Talc	14807-96-6	Ireland OELs	TWA(Total inhalable dust)(8 hours):10 mg/m ³ ;TWA(as respirable dust)(8 hours):0.8 mg/m ³
Quartz	14808-60-7	Ireland OELs	TWA(as respirable dust)(8 hours):0.1 mg/m ³

Ireland OELs : Ireland. OELs
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.

Recommended monitoring procedures:Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

8.2. Exposure controls

8.2.1. Engineering controls

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. Use explosion-proof ventilation equipment.

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.

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	No data available	No data available

Applicable Norms/Standards

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then

use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

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:

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

Physical state	Liquid. Thick liquid
Specific Physical Form:	Paste
Colour	Dark Gray
Odor	Styrene
Odour threshold	No data available.
Melting point/freezing point	No data available.
Boiling point/boiling range	No data available.
Flammability	Flammable liquid: Category 3.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	> 23 °C [Test Method: Closed Cup]
Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	substance/mixture is non-soluble (in water)
Kinematic Viscosity	>=20.5 mm ² /sec [@ 40 °C]
Water solubility	Insoluble
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	No data available.
Density	1.59 - 1.65 kg/l
Relative density	No data available.
Relative Vapour Density	No data available.
Particle Characteristics	Not applicable.

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

No data available.

Percent volatile

16.5 - 18.5 % weight

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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None known.	
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Refer to section 5.2 for hazardous decomposition products during combustion.

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

May be harmful if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Moderate 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. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Liver

effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause target organ effects:

Silicosis: Signs/symptoms may include breathlessness, weakness, chest pain, persistent cough, increased amounts of sputum, and heart disease. Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests. Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

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-Vapour(4 hr)		No data available; calculated ATE >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
styrene	Dermal	Rat	LD50 > 2,000 mg/kg
styrene	Inhalation-Vapour (4 hours)	Rat	LC50 11.8 mg/l
styrene	Ingestion	Rat	LD50 5,000 mg/kg
Castor oil, hydrogenated	Dermal		LD50 estimated to be > 5,000 mg/kg
Triiron tetraoxide	Dermal	Not available	LD50 3,100 mg/kg
Triiron tetraoxide	Ingestion	Not available	LD50 3,700 mg/kg
xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Castor oil, hydrogenated	Ingestion	Rat	LD50 > 10,000 mg/kg
xylene	Inhalation-Vapour (4 hours)	Rat	LC50 29 mg/l
xylene	Ingestion	Rat	LD50 3,523 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg
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
2,2'-(p-Tolylimino)diethanol	Dermal	Rabbit	LD50 > 2,000 mg/kg
2,2'-(p-Tolylimino)diethanol	Ingestion	Rat	LD50 959 mg/kg
maleic anhydride	Dermal	Rabbit	LD50 2,620 mg/kg
maleic anhydride	Ingestion	Rat	LD50 1,030 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
styrene	Professional judgement	Mild irritant
Castor oil, hydrogenated	Mouse	No significant irritation
Triiron tetraoxide	Rabbit	No significant irritation
xylene	Rabbit	Mild irritant
Quartz	Professional judgement	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
2,2'-(p-Tolylimino)diethanol	Rabbit	No significant irritation
maleic anhydride	Human and animal	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
styrene	Professional judgement	Moderate irritant
Castor oil, hydrogenated	Rabbit	Mild irritant
Triiron tetraoxide	Rabbit	No significant irritation
xylene	Rabbit	Mild irritant
Titanium dioxide	Rabbit	No significant irritation
2,2'-(p-Tolylimino)diethanol	Rabbit	Corrosive
maleic anhydride	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
styrene	Guinea pig	Not classified
Triiron tetraoxide	Human	Not classified
Titanium dioxide	Human and animal	Not classified
2,2'-(p-Tolylimino)diethanol	Mouse	Sensitising
maleic anhydride	Multiple animal species	Sensitising

Respiratory Sensitisation

Name	Species	Value
Talc	Human	Not classified
maleic anhydride	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
styrene	In Vitro	Some positive data exist, but the data are not

		sufficient for classification
styrene	In vivo	Some positive data exist, but the data are not sufficient for classification
Castor oil, hydrogenated	In Vitro	Not mutagenic
Triiron tetraoxide	In Vitro	Not mutagenic
xylene	In Vitro	Not mutagenic
xylene	In vivo	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
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
2,2'-(p-Tolylimino)diethanol	In Vitro	Not mutagenic
maleic anhydride	In vivo	Not mutagenic
maleic anhydride	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
styrene	Ingestion	Mouse	Carcinogenic.
styrene	Inhalation	Human and animal	Carcinogenic.
Triiron tetraoxide	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
xylene	Dermal	Rat	Not carcinogenic
xylene	Ingestion	Multiple animal species	Not carcinogenic
xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Quartz	Inhalation	Human and animal	Carcinogenic.
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
styrene	Ingestion	Not classified for female reproduction	Rat	NOAEL 21 mg/kg/day	3 generation
styrene	Inhalation	Not classified for female reproduction	Rat	NOAEL 2.1 mg/l	2 generation
styrene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.1 mg/l	2 generation
styrene	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	60 days
styrene	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during gestation
styrene	Inhalation	Not classified for development	Multiple animal species	NOAEL 2.1 mg/l	during gestation
xylene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
xylene	Ingestion	Not classified for development	Mouse	NOAEL Not	during

				available	organogenesis
xylene	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	during gestation
maleic anhydride	Ingestion	Not classified for female reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
maleic anhydride	Ingestion	Not classified for male reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
maleic anhydride	Ingestion	Not classified for development	Rat	NOAEL 140 mg/kg/day	during organogenesis

Lactation

Name	Route	Species	Value
xylene	Ingestion	Mouse	Not classified for effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
styrene	Inhalation	auditory system	Causes damage to organs	Multiple animal species	LOAEL 4.3 mg/l	not available
styrene	Inhalation	liver	Causes damage to organs	Mouse	LOAEL 2.1 mg/l	not available
styrene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
styrene	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
styrene	Inhalation	endocrine system	Not classified	Rat	NOAEL Not available	not available
styrene	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2.1 mg/l	not available
xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
xylene	Inhalation	eyes	Not classified	Rat	NOAEL 3.5 mg/l	not available
xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
xylene	Ingestion	eyes	Not classified	Rat	NOAEL 250 mg/kg	not applicable
2,2'-(p-Tolylimino)diethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
maleic anhydride	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Repeated and prolonged exposure to large amounts of talc dust can cause lung injury	Human	NOAEL Not available	occupational exposure

Talc	Inhalation	pulmonary fibrosis respiratory system	Not classified	Rat	NOAEL 18 mg/m ³	113 weeks
styrene	Inhalation	auditory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL not available	occupational exposure
styrene	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
styrene	Inhalation	liver	May cause damage to organs though prolonged or repeated exposure	Mouse	LOAEL 0.85 mg/l	13 weeks
styrene	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	LOAEL 1.1 mg/l	not available
styrene	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 0.85 mg/l	7 days
styrene	Inhalation	endocrine system	Not classified	Rat	NOAEL 0.6 mg/l	10 days
styrene	Inhalation	respiratory system	Not classified	Multiple animal species	LOAEL 0.09 mg/l	not available
styrene	Inhalation	heart gastrointestinal tract bone, teeth, nails, and/or hair muscles kidney and/or bladder	Not classified	Multiple animal species	NOAEL 4.3 mg/l	2 years
styrene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 500 mg/kg/day	8 weeks
styrene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
styrene	Ingestion	liver kidney and/or bladder	Not classified	Rat	NOAEL 677 mg/kg/day	6 months
styrene	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 600 mg/kg/day	470 days
styrene	Ingestion	heart respiratory system	Not classified	Rat	NOAEL 35 mg/kg/day	105 weeks
Triiron tetraoxide	Inhalation	pulmonary fibrosis pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
xylene	Inhalation	auditory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
xylene	Inhalation	heart endocrine system gastrointestinal tract hematopoietic system muscles kidney and/or bladder respiratory system	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
xylene	Ingestion	auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
xylene	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
xylene	Ingestion	liver	Not classified	Multiple animal species	NOAEL Not available	
xylene	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks

		system immune system nervous system respiratory system				
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
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
maleic anhydride	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.0011 mg/l	6 months
maleic anhydride	Inhalation	endocrine system hematopoietic system nervous system kidney and/or bladder heart liver eyes	Not classified	Rat	NOAEL 0.0098 mg/l	6 months
maleic anhydride	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 55 mg/kg/day	80 days
maleic anhydride	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 250 mg/kg/day	183 days
maleic anhydride	Ingestion	heart nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	183 days
maleic anhydride	Ingestion	gastrointestinal tract	Not classified	Rat	NOAEL 150 mg/kg/day	80 days
maleic anhydride	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 60 mg/kg/day	90 days
maleic anhydride	Ingestion	skin endocrine system immune system eyes respiratory system	Not classified	Rat	NOAEL 150 mg/kg/day	80 days

Aspiration Hazard

Name	Value
styrene	Aspiration hazard
xylene	Aspiration hazard

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

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

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
Talc	14807-96-6	N/A	Data not available or insufficient for	N/A	N/A	N/A

3M (TM) Filler (Italy)

			classification			
styrene	100-42-5	Activated sludge	Experimental	30 minutes	EC50	500 mg/l
styrene	100-42-5	Fathead minnow	Experimental	96 hours	LC50	4.02 mg/l
styrene	100-42-5	Green algae	Experimental	72 hours	EC50	4.9 mg/l
styrene	100-42-5	Water flea	Experimental	48 hours	EC50	4.7 mg/l
styrene	100-42-5	Green algae	Experimental	96 hours	EC10	0.28 mg/l
styrene	100-42-5	Water flea	Experimental	21 days	NOEC	1.01 mg/l
Castor oil, hydrogenated	8001-78-3	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
Castor oil, hydrogenated	8001-78-3	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
Triiron tetraoxide	1317-61-9	Green algae	Analogous Compound	72 hours	No tox obs at lmt of water sol	>100 mg/l
Triiron tetraoxide	1317-61-9	Water flea	Analogous Compound	48 hours	No tox obs at lmt of water sol	>100 mg/l
Triiron tetraoxide	1317-61-9	Zebra Fish	Analogous Compound	96 hours	No tox obs at lmt of water sol	>100 mg/l
Triiron tetraoxide	1317-61-9	Green algae	Analogous Compound	72 hours	No tox obs at lmt of water sol	>100 mg/l
Triiron tetraoxide	1317-61-9	Water flea	Analogous Compound	21 days	No tox obs at lmt of water sol	>100 mg/l
Triiron tetraoxide	1317-61-9	Activated sludge	Analogous Compound	3 hours	EC50	>=10,000 mg/l
xylene	1330-20-7	Activated sludge	Estimated	3 hours	NOEC	157 mg/l
xylene	1330-20-7	Green algae	Estimated	72 hours	EC50	4.36 mg/l
xylene	1330-20-7	Rainbow trout	Estimated	96 hours	LC50	2.6 mg/l
xylene	1330-20-7	Water flea	Estimated	48 hours	EC50	3.82 mg/l
xylene	1330-20-7	Green algae	Estimated	72 hours	NOEC	0.44 mg/l
xylene	1330-20-7	Water flea	Estimated	7 days	NOEC	0.96 mg/l
xylene	1330-20-7	Rainbow trout	Experimental	56 days	NOEC	>1.3 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
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
2,2'-(p- Tollylimino)diethanol	3077-12-1	Activated sludge	Analogous Compound	3 hours	EC50	>1,000 mg/l
2,2'-(p- Tollylimino)diethanol	3077-12-1	Common Carp	Analogous Compound	96 hours	LC50	>100 mg/l

3M (TM) Filler (Italy)

2,2'-(p-Tolylimino)diethanol	3077-12-1	Green algae	Analogous Compound	72 hours	ErC50	>100 mg/l
2,2'-(p-Tolylimino)diethanol	3077-12-1	Water flea	Analogous Compound	48 hours	EC50	48 mg/l
2,2'-(p-Tolylimino)diethanol	3077-12-1	Green algae	Analogous Compound	72 hours	NOEC	100 mg/l
maleic anhydride	108-31-6	Bacteria	Experimental	18 hours	EC10	44.6 mg/l
maleic anhydride	108-31-6	Rainbow trout	Experimental	96 hours	LC50	75 mg/l
maleic anhydride	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC50	74.4 mg/l
maleic anhydride	108-31-6	Water flea	Hydrolysis Product	48 hours	EC50	93.8 mg/l
maleic anhydride	108-31-6	Water flea	Experimental	21 days	NOEC	10 mg/l
maleic anhydride	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC10	11.8 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Talc	14807-96-6	Data not availbl-insufficient	N/A	N/A	N/A	N/A
styrene	100-42-5	Experimental Biodegradation	28 days	BOD	70.9 %BOD/ThOD	
styrene	100-42-5	Experimental Photolysis		Photolytic half-life (in air)	6.64 hours (t 1/2)	
Castor oil, hydrogenated	8001-78-3	Experimental Biodegradation	28 days	BOD	64 %BOD/ThOD	
Triiron tetraoxide	1317-61-9	Data not availbl-insufficient	N/A	N/A	N/A	N/A
xylene	1330-20-7	Experimental Biodegradation	28 days	BOD	90-98 %BOD/ThOD	OECD 301F - Manometric respirometry
xylene	1330-20-7	Experimental Photolysis		Photolytic half-life (in air)	1.4 days (t 1/2)	
Quartz	14808-60-7	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
2,2'-(p-Tolylimino)diethanol	3077-12-1	Analogous Compound Biodegradation	29 days	CO2 evolution	1.5 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
maleic anhydride	108-31-6	Hydrolysis product Biodegradation	25 days	CO2 evolution	>90 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
maleic anhydride	108-31-6	Experimental Hydrolysis		Hydrolytic half-life	0.37 minutes (t 1/2)	

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
styrene	100-42-5	Experimental Bioconcentration		Log Kow	2.96	
Castor oil, hydrogenated	8001-78-3	Estimated Bioconcentration		Bioaccumulation factor	7.4	
Triiron tetraoxide	1317-61-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
xylene	1330-20-7	Experimental BCF - Fish	56 days	Bioaccumulation factor	25.9	

3M (TM) Filler (Italy)

Quartz	14808-60-7	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	
2,2'-(p-Tolylimino)diethanol	3077-12-1	Experimental Bioconcentration		Log Kow	2.0	
maleic anhydride	108-31-6	Experimental Bioconcentration		Log Kow	-2.61	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
2,2'-(p-Tolylimino)diethanol	3077-12-1	Experimental Mobility in Soil	Koc	214 l/kg	EC C.19 Estim. of Koc by HPLC

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

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.

Incinerate in a permitted waste incineration facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN1993	UN1993	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S.(STYRENE MONOMER)	FLAMMABLE LIQUID, N.O.S.(STYRENE MONOMER)	FLAMMABLE LIQUID, N.O.S.(STYRENE MONOMER)

14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
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 the SDS for further information.
14.7 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
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	F1	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
Quartz	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
styrene	100-42-5	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
Talc	14807-96-6	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
xylene	1330-20-7	Gr. 3: Not classifiable	International Agency for Research on Cancer

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of Australia

National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Industrial Safety and Health Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
P5c FLAMMABLE LIQUIDS*	5000	50000

*If maintained at a temperature above its boiling point or if particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, P5a or P5b FLAMMABLE LIQUIDS may apply

Seveso named dangerous substances, Annex 1, Part 2

None

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information**List of relevant H statements**

EUH071	Corrosive to the respiratory tract.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351i	Suspected of causing cancer by inhalation.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H372	Causes damage to organs through prolonged or repeated exposure: sensory organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure: respiratory system.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

Section 2: <125ml Precautionary - Prevention information was modified.
CLP: Ingredient table information was modified.
Section 02: CLP Physical and Health Hazard Statements information was modified.
Label: CLP Classification information was modified.
Label: CLP Percent Unknown information was added.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Supplemental Hazard Statements information was added.
Label: CLP Target Organ Hazard Statement information was modified.
Section 3 and Section 9: General physical form information information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 03: SCL table information was modified.
Section 04: First Aid - Symptoms and Effects (CLP) information was modified.
Section 6: Accidental release personal information information was modified.
Section 7: Conditions safe storage information was modified.
Section 8: Eye/face protection information information was modified.
Section 8: glove data value information was deleted.
Section 8: glove data value information was modified.
Section 8: Occupational exposure limit table information was modified.
Section 9: Density information 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 9: Relative density information information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Aspiration Hazard Table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Health Effects - Ingestion information information was modified.
Section 11: Health Effects - Inhalation information information was modified.
Lactation Table information was added.
Section 11: Prolonged or repeated exposure may cause standard phrases information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Reproductive/developmental effects information information was deleted.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Single exposure may cause standard phrases 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 11: Target Organs - Single Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Mobility in soil information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12: Biocumulative potential information information was modified.
Section 15: Carcinogenicity information information was modified.
Section 15: Regulations - Inventories information was modified.
Section 15: Restrictions on manufacture ingredients information information was deleted.
Section 15: Seveso Hazard Category Text information was added.
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.

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.

3M Ireland MSDSs are available at www.3M.com



Safety Data Sheet

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Revision date:	31/10/2023	Supersedes date:	05/01/2021

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™ Hardener for Plastic Filler

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

Identified uses

Automotive.

1.3. Details of the supplier of the safety data sheet

Address:	3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone:	+353 1 280 3555
E Mail:	tox.uk@mmm.com
Website:	www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

CLASSIFICATION:

Organic Peroxide, Type E - Org. Perox. E; H242

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319

Skin Sensitization, Category 1B - Skin Sens. 1B; H317

Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400

Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

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

WARNING.

Symbols

GHS02 (Flame) | GHS07 (Exclamation mark) | GHS09 (Environment) |

Pictograms**Ingredients:**

Ingredient	CAS Nbr	EC No.	% by Wt
dibenzoyl peroxide	94-36-0	202-327-6	45 - 55

HAZARD STATEMENTS:

H242	Heating may cause a fire.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS**Prevention:**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234	Keep only in original packaging.
P273	Avoid release to the environment.
P280B	Wear protective gloves and eye/face protection.

Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
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Storage:

P411	Store at temperatures not exceeding 50 °C.
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For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H317	May cause an allergic skin reaction.
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<=125 ml Precautionary statements**Prevention:**

P280B	Wear protective gloves and eye/face protection.
-------	---

Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
-------------	--

Contains 12% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

None known.

This material does not contain any substances that are assessed to be a PBT or vPvB

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]
dibenzoyl peroxide	(CAS-No.) 94-36-0 (EC-No.) 202-327-6 (REACH-No.) 01-2119511472-50	45 - 55	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10
Ethylenebis(oxyethylene) dibenzoate	(CAS-No.) 120-56-9 (EC-No.) 204-408-1	15 - 30	Substance not classified as hazardous
Non-Hazardous Ingredients	Mixture	5 - 20	Substance not classified as hazardous
Silane, trimethoxyoctyl-, hydrolysis products with silica	(CAS-No.) 67762-90-7	5 - 20	Substance with a national occupational exposure limit
Oxydipropyl dibenzoate	(CAS-No.) 27138-31-4 (EC-No.) 248-258-5 (REACH-No.) 01-2119529241-49	< 3	Aquatic Chronic 3, H412

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

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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 carbon dioxide or dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode. Part of the oxygen for combustion is supplied by the peroxide itself.

Hazardous Decomposition or By-Products**Substance**

Carbon monoxide

Carbon dioxide.

Irritant vapours or gases.

Condition

During combustion.

During combustion.

During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

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**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/fume/gas/mist/vapours/spray.

Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminium, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store away from heat. Store at temperatures not exceeding 5C/40F. Keep cool. Keep only in original container. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from other materials. Keep/store away from clothing and other combustible materials. Store away from amines.

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
Silicon dioxide	67762-90-7	Ireland OELs	TWA(Total inhalable dust)(8 hours):6 mg/m ³ ;TWA(as respirable dust)(8 hours):2.4 mg/m ³	
dibenzoyl peroxide	94-36-0	Ireland OELs	TWA(8 hours):5 mg/m ³	

Ireland OELs : Ireland. OELs
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.

Recommended monitoring procedures:Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

8.2. Exposure controls

8.2.1. Engineering controls

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.

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:

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	No data available	No data available

Applicable Norms/Standards

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

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:

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

Physical state	Liquid.
Specific Physical Form:	Paste
Colour	Red
Odor	Typical Odor
Odour threshold	No data available.
Melting point/freezing point	Not applicable.
Boiling point/boiling range	No data available.
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	substance/mixture is non-soluble (in water)
Kinematic Viscosity	No data available.
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	No data available.
Density	1.18 - 1.2 g/cm ³
Relative density	1.18 - 1.2 [Ref Std: WATER=1]
Relative Vapour Density	No data available.

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

No data available.

Percent volatile

10 - 11 %

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

Explosive when dry. May form explosive peroxides. Do not use beyond expiration date.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

High shear and high temperature conditions

Sparks and/or flames.

10.5 Incompatible materials

Accelerators

Amines.

Finely divided active metals

Reactive metals

Reducing agents.

Strong bases.

Strong oxidising agents.

Strong acids.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

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

This product may have a characteristic odour; however, no adverse health effects are anticipated.

Skin contact

May be harmful in contact with skin. Contact with the skin during product use is not expected to result in significant irritation. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

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

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 >2,000 - =5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
dibenzoyl peroxide	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
dibenzoyl peroxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 24.3 mg/l
dibenzoyl peroxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Oxydipropyl dibenzoate	Dermal	Rat	LD50 > 2,000 mg/kg
Oxydipropyl dibenzoate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 200 mg/l
Oxydipropyl dibenzoate	Ingestion	Rat	LD50 3,295 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
dibenzoyl peroxide	Rabbit	Minimal irritation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation
Oxydipropyl dibenzoate	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
dibenzoyl peroxide	Rabbit	Severe irritant
Silane, trimethoxyoctyl-, hydrolysis products with silica	Rabbit	No significant irritation
Oxydipropyl dibenzoate	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
dibenzoyl peroxide	Guinea pig	Sensitising
Silane, trimethoxyoctyl-, hydrolysis products with silica	Human and animal	Not classified
Oxydipropyl dibenzoate	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
dibenzoyl peroxide	In Vitro	Not mutagenic
dibenzoyl peroxide	In vivo	Not mutagenic
Silane, trimethoxyoctyl-, hydrolysis products with silica	In Vitro	Not mutagenic
Oxydipropyl dibenzoate	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
dibenzoyl peroxide	Ingestion	Multiple animal species	Not carcinogenic
dibenzoyl peroxide	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Silane, trimethoxyoctyl-, hydrolysis products with silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity
Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
dibenzoyl peroxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
dibenzoyl peroxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	premating & during gestation
dibenzoyl peroxide	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	premating & during gestation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silane, trimethoxyoctyl-, hydrolysis products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Oxydipropyl dibenzoate	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Silane, trimethoxyoctyl-, hydrolysis products with silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Oxydipropyl dibenzoate	Ingestion	hematopoietic system liver	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 days

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

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

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
dibenzoyl peroxide	94-36-0	Green algae	Experimental	72 hours	EC50	0.071 mg/l
dibenzoyl peroxide	94-36-0	Rainbow trout	Experimental	96 hours	LC50	0.06 mg/l
dibenzoyl peroxide	94-36-0	Water flea	Experimental	48 hours	EC50	0.11 mg/l
dibenzoyl peroxide	94-36-0	Green algae	Experimental	72 hours	NOEC	0.02 mg/l
dibenzoyl peroxide	94-36-0	Water flea	Experimental	21 days	EC10	0.001 mg/l
dibenzoyl peroxide	94-36-0	Activated sludge	Experimental	30 minutes	EC50	35 mg/l
dibenzoyl peroxide	94-36-0	Redworm	Experimental	14 days	LC50	>1,000 mg/kg (Dry Weight)
dibenzoyl peroxide	94-36-0	Soil microbes	Experimental	28 days	EC50	2,300 mg/kg (Dry Weight)
Ethylenebis(oxyethylen e) dibenzoate	120-56-9	Fathead minnow	Estimated	96 hours	LL50	>100 mg/l
Ethylenebis(oxyethylen e) dibenzoate	120-56-9	Green algae	Estimated	96 hours	EL50	>100 mg/l
Ethylenebis(oxyethylen e) dibenzoate	120-56-9	Water flea	Estimated	48 hours	EL50	26 mg/l
Ethylenebis(oxyethylen e) dibenzoate	120-56-9	Green algae	Estimated	96 hours	EC10	24 mg/l
Silane, trimethoxyoctyl-,	67762-90-7	N/A	Data not available or insufficient for	N/A	N/A	N/A

hydrolysis products with silica			classification			
Oxydipropyl dibenzoate	27138-31-4	Fathead minnow	Experimental	96 hours	LC50	3.7 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green algae	Experimental	72 hours	EL50	4.9 mg/l
Oxydipropyl dibenzoate	27138-31-4	Water flea	Experimental	48 hours	EL50	19.31 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green algae	Experimental	72 hours	EC10	0.89 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
dibenzoyl peroxide	94-36-0	Experimental Biodegradation	28 days	BOD	71 %BOD/ThOD	OECD 301D - Closed bottle test
dibenzoyl peroxide	94-36-0	Experimental Hydrolysis		Hydrolytic half-life	5.2 hours (t _{1/2})	OECD 111 Hydrolysis func of pH
Ethylenebis(oxyethylene) dibenzoate	120-56-9	Estimated Biodegradation	28 days	CO2 evolution	92 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Oxydipropyl dibenzoate	27138-31-4	Experimental Biodegradation	28 days	CO2 evolution	85 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
dibenzoyl peroxide	94-36-0	Experimental Bioconcentration		Log Kow	3.2	OECD 117 log Kow HPLC method
Ethylenebis(oxyethylene) dibenzoate	120-56-9	Modeled Bioconcentration		Bioaccumulation factor	4.5	Episuite™
Ethylenebis(oxyethylene) dibenzoate	120-56-9	Estimated Bioconcentration		Log Kow	3.2	
Silane, trimethoxyoctyl-, hydrolysis products with silica	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oxydipropyl dibenzoate	27138-31-4	Modeled Bioconcentration		Bioaccumulation factor	8	Catalogic™

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
dibenzoyl peroxide	94-36-0	Experimental Mobility in Soil	Koc	6,310 l/kg	OECD 121 Estim. of Koc by HPLC
Ethylenebis(oxyethylene) dibenzoate	120-56-9	Modeled Mobility in Soil	Koc	140 l/kg	Episuite™

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

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 completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN3108	UN3108	UN3108
14.2 UN proper shipping name	ORGANIC PEROXIDE TYPE E, SOLID(DIBENZOYL PEROXIDE, 25-50 %)	ORGANIC PEROXIDE TYPE E, SOLID(DIBENZOYL PEROXIDE, 25-50 %)	ORGANIC PEROXIDE TYPE E, SOLID(DIBENZOYL PEROXIDE, 25-50 %)
14.3 Transport hazard class(es)	5.2	5.2	5.2
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
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 the SDS for further information.
14.7 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
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	P1	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	16 - PEROXIDES

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

dibenzoyl peroxide

CAS Nbr

94-36-0

Classification

Gr. 3: Not classifiable

Regulation

International Agency
for Research on Cancer

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

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
dibenzoyl peroxide	94-36-0	10	50

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Revision information:

Section 1: Emergency telephone information was modified.
Label: CLP Classification information was modified.
Section 8: Occupational exposure limit table information was modified.
OEL Reg Agency Desc information was modified.
Section 9: All Properties information was deleted.
Section 9: Vapour density value information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Health Effects - Inhalation information information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Target Organs - Repeated Table information was added.
Section 11: Target Organs - Repeated Table information was deleted.
Section 12: Component ecotoxicity information information was modified.
Section 12: Mobility in soil information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12: Biocumulative potential information information was modified.
Section 14 Classification Code – Regulation Data information was modified.
Section 14 Control Temperature – Regulation Data information was modified.
Section 14 Emergency Temperature – Regulation Data information was modified.
Section 14 Hazard Class + Sub Risk – Regulation Data information was modified.
Section 14 Hazardous/Not Hazardous for Transportation information was modified.
Section 14 Multiplier – Main Heading information was deleted.
Section 14 Multiplier – Regulation Data information was deleted.
Section 14 Other Dangerous Goods – Regulation Data information was modified.
Section 14 Packing Group – Regulation Data information was modified.
Section 14 Proper Shipping Name information was modified.
Section 14 Segregation – Regulation Data information was modified.
Section 14 Transport Category – Main Heading information was deleted.
Section 14 Transport Category – Regulation Data information was deleted.
Section 14 Transport in bulk – Regulation Data information was modified.
Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was modified.
Section 14 Transport Not Permitted – Main Heading information was deleted.
Section 14 Transport Not Permitted – Regulation Data information was deleted.
Section 14 Tunnel Code – Main Heading information was deleted.
Section 14 Tunnel Code – Regulation Data information was deleted.
Section 14 UN Number Column data information was modified.
Section 14 UN Number information was modified.
Section 14: Transportation classification information was deleted.
Section 15: Regulations - Inventories information was added.
Section 15: Seveso Substance Text information was added.
Section 2: No PBT/vPvB information available warning information was added.

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