Safety Data Sheet

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Document group:	11-6516-6	**Version number:**	17.02
Revision date:	11/09/2026	**Supersedes date:**	08/07/2026

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006) as amended by Regulation (EU) 2020/878

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

1.1. Product identifier
3M™ Hot Melt Adhesive 3748 V0-PG, 3748 V0 Q, 3748 V0-TC

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

Identified uses
Hot melt adhesive.

1.3. Details of the supplier of the safety data sheet
Address: 3M Ireland Limited, 70 SIR JOHN ROGERSON'S QUAY, D02R296 DUBLIN 2
Telephone: +353 1 280 3555
E Mail: ner-productstewardship@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:
Carcinogenicity, Category 2 - Carc. 2; H351
Reproductive Toxicity, Category 1A - Repr. 1A; H360D
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD
DANGER.

Symbols
GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms



Ingredients:

Ingredient	Identifier(s)	EC No.	% by Wt
antimony trioxide	1309-64-4	215-175-0	3 - 7
lead powder; [particle diameter < 1 mm]	7439-92-1	231-100-4	< 0.1

HAZARD STATEMENTS:

H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P201	Obtain special instructions before use.
P273	Avoid release to the environment.
P280K	Wear protective gloves and respiratory protection.

Response:

P308 + P313	IF exposed or concerned: Get medical advice/attention.
P391	Collect spillage.

SUPPLEMENTAL INFORMATION:

Supplemental Precautionary Statements:
Avoid contact with hot extruded molten material or applicator tip. Avoid direct eye exposure to vapours. In case of eye/skin contact with molten material, immediately flush with cold water and cover with a clean dressing. Do not attempt to remove molten material. Have burn treated by a physician. Restricted to professional users.

15% of the mixture consists of components of unknown acute oral toxicity.

Contains 18% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

May cause thermal burns.
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]
Ethylene-Propylene Polymer	(CAS-No.) 9010-79-1	15 - 40	Substance not classified as hazardous
Hydrocarbon resin	Trade Secret	10 - 30	Substance not classified as hazardous
Brominated Flame Retardant	(CAS-No.) 32588-76-4 (EC-No.) 251-118-6	10 - 30	Substance not classified as hazardous
Styrene-Butadiene Polymer	Trade Secret	1 - 20	Substance not classified as hazardous
Polyolefin Wax	(CAS-No.) 8002-74-2 (EC-No.) 232-315-6 (REACH-No.) 01-2119488076-30	1 - 10	Substance with a national occupational exposure limit
Polypropylene	Mixture	1 - 10	Substance not classified as hazardous
Polyethylene	(CAS-No.) 9002-88-4 (EC-No.) 680-352-5	1 - 10	Substance with a national occupational exposure limit
antimony trioxide	(CAS-No.) 1309-64-4 (EC-No.) 215-175-0	3 - 7	Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 3, H412
Ethylene-propylene-ethylidenenorbornene terpolymer	(CAS-No.) 25038-36-2	1 - 5	Substance not classified as hazardous
mercury	(CAS-No.) 7439-97-6 (EC-No.) 231-106-7	< 0.1	Acute Tox. 2, H330 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400,M=100 Aquatic Chronic 1, H410,M=100
lead powder; [particle diameter < 1 mm]	(CAS-No.) 7439-92-1 (EC-No.) 231-100-4	< 0.1	Repr. 1A, H360FD Lact., H362 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=100 STOT RE 2, H373

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.
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
lead powder; [particle diameter < 1 mm]	(CAS-No.) 7439-92-1	(C >= 0.03%) Repr. 1A, H360D

	(EC-No.) 231-100-4	

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 flush skin with large amounts of cold water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Cover affected area with a clean dressing. Get immediate medical attention.

Eye contact
Immediately flush eyes with large amounts of water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Get immediate medical attention.

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

4.2. Most important symptoms and effects, both acute and delayed
No critical symptoms or effects. See Section 11.1, information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

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

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes.	During combustion.
Hydrocarbons.	During combustion.
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Bromide	During combustion.
Hydrogen cyanide.	During combustion.
Ketones.	During combustion.
Oxides of nitrogen.	During combustion.
Oxides of antimony.	During combustion.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Ventilate the area with fresh air. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. 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
For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. 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. Avoid release to the environment. Use personal protective equipment (eg. gloves, respirators…) as required.

7.2. Conditions for safe storage including any incompatibilities
No special storage requirements.

7.3. Specific end use(s)
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Ingredient	Identifier(s)	Agency	Limit type	Additional comments
lead powder; [particle diameter < 1 mm]	7439-92-1	Ireland OELs	TWA(8 hours):0.15 mg/m3	Known human reproductive tox
Polyolefin Wax	8002-74-2	Ireland OELs	TWA(as fume)(8 hours):2 mg/m3;STEL(as fume)(15 minutes):6 mg/m3	
Dusts non-specific	9002-88-4	Ireland OELs	TWA(Total inhalable dust)(8 hours):10 mg/m3;TWA(as respirable dust)(8 hours):4 mg/m3	

Ireland OELs : Ireland. OELs
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

Ingredient	Identifier(s)	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
Lead and its ionic compounds	7439-92-1	EU Binding BLVs	lead powder; [particle diameter < 1 mm]	Blood	DFLT	70 ug/100ml	

EU Binding BLVs : EU. Directive 98/24/EC: on the protection of workers from the risks related to chemical agents at work, Annex II Binding Biological Limit Values and Health Surveillance Measures
DFLT: Default.

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
None required.

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

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

Thermal hazards
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

Physical state	Solid.
Specific Physical Form:	Waxy Solid
Colour	Light White
Odor	Mild Resinous
Odour threshold	*No data available.*
Melting point/freezing point	*Not applicable.*
Boiling point/boiling range	*Not applicable.*
Flammability	Not applicable.
Flammable Limits(LEL)	*Not applicable.*
Flammable Limits(UEL)	*Not applicable.*
Flash point	280 ºC [*Test Method:*Cleveland Open Cup]
Autoignition temperature	330 ºC
Decomposition temperature	*No data available.*
pH	*substance/mixture is non-soluble (in water)*
Kinematic Viscosity	*Not applicable.*
Water solubility	Nil
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Density	1.09 g/cm3
Relative density	1.09 [*Ref Std:*WATER=1]
Relative Vapour Density	Nil
Particle Characteristics	*Not applicable.*

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	*No data available.*
Evaporation rate	*Not applicable.*
Molecular weight	*No data available.*
Percent volatile	0 % weight
Solids content	100 %

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

Substance	Condition
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
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
Thermal burns: Signs/symptoms may include intense pain, redness and swelling, and tissue destruction. May cause additional health effects (see below).

Eye contact
Thermal burns: Signs/symptoms may include severe pain, redness and swelling, and tissue destruction.

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Dermal effects: Signs/symptoms may include redness, itching, acne, or bumps on the skin.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Ethylene-Propylene Polymer	Dermal	Rabbit	LD50 > 2,000 mg/kg

Ethylene-Propylene Polymer	Ingestion	Rat	LD50 > 5,000 mg/kg
Brominated Flame Retardant	Dermal	Rabbit	LD50 > 2,000 mg/kg
Brominated Flame Retardant	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 51 mg/l
Brominated Flame Retardant	Ingestion	Rat	LD50 > 7,500 mg/kg
Styrene-Butadiene Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Styrene-Butadiene Polymer	Ingestion		LD50 estimated to be > 5,000 mg/kg
Polyethylene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyethylene	Ingestion	Rat	LD50 > 2,000 mg/kg
antimony trioxide	Dermal	Rabbit	LD50 > 6,685 mg/kg
antimony trioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.76 mg/l
antimony trioxide	Ingestion	Rat	LD50 > 34,600 mg/kg
Polyolefin Wax	Dermal	Rat	LD50 > 5,000 mg/kg
Polyolefin Wax	Ingestion	Rat	LD50 > 5,000 mg/kg
Polypropylene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polypropylene	Ingestion	Mouse	LD50 > 8,000 mg/kg
Ethylene-propylene-ethylidenenorbornene terpolymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Ethylene-propylene-ethylidenenorbornene terpolymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
lead powder; [particle diameter < 1 mm]	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ethylene-Propylene Polymer	Rabbit	No significant irritation
Brominated Flame Retardant	Rabbit	No significant irritation
Polyethylene	Professional judgement	No significant irritation
antimony trioxide	Human and animal	Minimal irritation
Polyolefin Wax	Rabbit	No significant irritation
Polypropylene	Human and animal	No significant irritation
Ethylene-propylene-ethylidenenorbornene terpolymer	Professional judgement	No significant irritation
lead powder; [particle diameter < 1 mm]	similar compounds	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ethylene-Propylene Polymer	Rabbit	No significant irritation
Brominated Flame Retardant	Rabbit	No significant irritation
antimony trioxide	Rabbit	Mild irritant
Polyolefin Wax	Rabbit	No significant irritation
Polypropylene	Professional judgement	No significant irritation
Ethylene-propylene-ethylidenenorbornene terpolymer	Professional	No significant irritation

	judgement	
lead powder; [particle diameter < 1 mm]	similar compounds	Mild irritant

Skin Sensitisation

Name	Species	Value
antimony trioxide	Human	Not classified
Polyolefin Wax	Guinea pig	Not classified
Polypropylene	Human and animal	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
Brominated Flame Retardant	In Vitro	Not mutagenic
antimony trioxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
antimony trioxide	In vivo	Some positive data exist, but the data are not sufficient for classification
Polyolefin Wax	In Vitro	Not mutagenic
Polypropylene	In Vitro	Not mutagenic
lead powder; [particle diameter < 1 mm]	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Polyethylene	Not specified.	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
antimony trioxide	Inhalation	Multiple animal species	Carcinogenic.
Polyolefin Wax	Ingestion	Rat	Not carcinogenic
Polypropylene	Not specified.	Rat	Some positive data exist, but the data are not sufficient for classification
lead powder; [particle diameter < 1 mm]	Not specified.	official classification	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Brominated Flame Retardant	Ingestion	Not classified for development	Multiple animal species	NOAEL 1,000 mg/kg/day	during organogenesis
antimony trioxide	Inhalation	Not classified for female reproduction	Rat	LOAEL 0.25 mg/l	premating & during gestation
lead powder; [particle diameter < 1 mm]	Not specified.	Toxic to female reproduction	Human	LOAEL 10 ug/dl blood	
lead powder; [particle diameter < 1 mm]	Not specified.	Toxic to male reproduction	Human	LOAEL 37 ug/dl blood	

lead powder; [particle diameter < 1 mm]	Not specified.	Toxic to development	Human	NOAEL Not available	

Lactation

Name	Route	Species	Value
lead powder; [particle diameter < 1 mm]	Not specified.	Human	Causes 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
antimony trioxide	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
lead powder; [particle diameter < 1 mm]	Ingestion	nervous system	May cause damage to organs	Human	LOAEL 90 ug/dl blood	poisoning and/or abuse
lead powder; [particle diameter < 1 mm]	Ingestion	heart	Not classified	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Brominated Flame Retardant	Ingestion	heart | endocrine system | hematopoietic system | liver | kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
antimony trioxide	Dermal	skin	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
antimony trioxide	Inhalation	pulmonary fibrosis	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.002 mg/l	1 years
antimony trioxide	Inhalation	liver	Not classified	Rat	NOAEL 0.043 mg/l	1 years
antimony trioxide	Inhalation	blood	Not classified	Rat	NOAEL 0.004 mg/l	not available
antimony trioxide	Inhalation	pneumoconiosis	Not classified	Human	LOAEL 0.01 mg/l	occupational exposure
antimony trioxide	Inhalation	heart	Not classified	Rat	NOAEL 0.02 mg/l	1 years
antimony trioxide	Ingestion	blood | liver	Not classified	Rat	NOAEL 418 mg/kg/day	not available
antimony trioxide	Ingestion	heart	Not classified	Rat	NOAEL Not available	not available
Polyolefin Wax	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 15 mg/kg/day	90 days
Polyolefin Wax	Ingestion	hematopoietic system | liver | immune system | skin | endocrine system | bone, teeth, nails, and/or hair | muscles | nervous system | eyes | kidney and/or bladder | respiratory system | vascular system	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
lead powder; [particle diameter < 1 mm]	Inhalation	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Human	LOAEL 60 ug/dl blood	occupational exposure

lead powder; [particle diameter < 1 mm]	Inhalation	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Human	LOAEL 50 ug/dl blood	occupational exposure
lead powder; [particle diameter < 1 mm]	Inhalation	gastrointestinal tract | nervous system	May cause damage to organs though prolonged or repeated exposure	Human	LOAEL 40 ug/dl blood	occupational exposure
lead powder; [particle diameter < 1 mm]	Inhalation	heart | endocrine system | immune system | vascular system	Not classified	Human	NOAEL Not available	occupational exposure
lead powder; [particle diameter < 1 mm]	Ingestion	bone, teeth, nails, and/or hair	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 20 ug/dl blood	3 months
lead powder; [particle diameter < 1 mm]	Ingestion	eyes	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 0.5 mg/kg/day	20 days
lead powder; [particle diameter < 1 mm]	Ingestion	gastrointestinal tract	May cause damage to organs though prolonged or repeated exposure	Human	LOAEL 60 ug/dl blood	environmental exposure
lead powder; [particle diameter < 1 mm]	Ingestion	hematopoietic system | kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Human	LOAEL 40 ug/dl blood	environmental exposure
lead powder; [particle diameter < 1 mm]	Ingestion	nervous system	May cause damage to organs though prolonged or repeated exposure	Human	LOAEL 11 ug/dl blood	environmental exposure
lead powder; [particle diameter < 1 mm]	Ingestion	auditory system | heart | endocrine system | vascular system	Not classified	Human	NOAEL Not available	environmental exposure

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	Identifier(s)	Organism	Type	Exposure	Test endpoint	Test result
Ethylene-Propylene Polymer	9010-79-1	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Brominated Flame Retardant	32588-76-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Hydrocarbon resin	Trade Secret	Water flea	Experimental	48 hours	EC50	>100 mg/l
Hydrocarbon resin	Trade Secret	Water flea	Experimental	21 days	NOEC	>2 mg/l

Styrene-Butadiene Polymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Polyethylene	9002-88-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Polyolefin Wax	8002-74-2	Green algae	Analogous Compound	96 hours	ErC50	>1,000 mg/l
Polyolefin Wax	8002-74-2	Rainbow trout	Analogous Compound	96 hours	LC50	>1,000 mg/l
Polyolefin Wax	8002-74-2	Water flea	Analogous Compound	48 hours	EL50	>10,000 mg/l
Polyolefin Wax	8002-74-2	Water flea	Analogous Compound	21 days	NOEL	10 mg/l
Polyolefin Wax	8002-74-2	Bacteria	Analogous Compound	10 minutes	NOEL	>1.93 mg/l
Polypropylene	Mixture	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
antimony trioxide	1309-64-4	Green algae	Endpoint not reached	72 hours	ErC50	>100 mg/l
antimony trioxide	1309-64-4	Fathead minnow	Estimated	96 hours	LC50	17.2 mg/l
antimony trioxide	1309-64-4	Fish	Estimated	96 hours	LC50	8.3 mg/l
antimony trioxide	1309-64-4	Invertebrate	Estimated	96 hours	EC50	2.12 mg/l
antimony trioxide	1309-64-4	Green algae	Estimated	72 hours	NOEC	2.53 mg/l
antimony trioxide	1309-64-4	Rainbow trout	Estimated	28 days	LC10	0.188 mg/l
antimony trioxide	1309-64-4	Water flea	Estimated	21 days	NOEC	2.08 mg/l
antimony trioxide	1309-64-4	Activated sludge	Estimated	4 hours	NOEC	6.1 mg/l
Ethylene-propylene-ethylidenenorbornene terpolymer	25038-36-2	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
lead powder; [particle diameter < 1 mm]	7439-92-1	Fathead minnow	Analogous Compound	96 hours	LC50	0.0408 mg/l
lead powder; [particle diameter < 1 mm]	7439-92-1	Green algae	Analogous Compound	72 hours	ErC50	0.0205 mg/l
lead powder; [particle diameter < 1 mm]	7439-92-1	Water flea	Analogous Compound	48 hours	LC50	0.026 mg/l
lead powder; [particle diameter < 1 mm]	7439-92-1	Giant Pond Snail	Analogous Compound	30 days	EC10	0.0017 mg/l
lead powder; [particle diameter < 1 mm]	7439-92-1	Green algae	Analogous Compound	72 hours	ErC10	0.006 mg/l
lead powder; [particle diameter < 1 mm]	7439-92-1	Rainbow trout	Analogous Compound	570 days	EC10	0.009 mg/l
lead powder; [particle diameter < 1 mm]	7439-92-1	Activated sludge	Analogous Compound	24 hours	IC10	1.06 mg/l
mercury	7439-97-6	Fish	Experimental	96 hours	LC50	0.0163 mg/l
mercury	7439-97-6	Green algae	Experimental	96 hours	EC50	0.009 mg/l
mercury	7439-97-6	Invertebrate	Experimental	96 hours	EC50	0.006 mg/l

12.2. Persistence and degradability

Material	Identifier(s)	Test type	Duration	Study Type	Test result	Protocol
Ethylene-Propylene Polymer	9010-79-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Brominated Flame Retardant	32588-76-4	Experimental Biodegradation	14 days	BOD	0 %BOD/ThOD	OECD 301C - MITI test (I)

Hydrocarbon resin	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Styrene-Butadiene Polymer	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Polyethylene	9002-88-4	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Polyolefin Wax	8002-74-2	Analogous Compound Biodegradation	28 days	BOD	40 %BOD/ThOD	OECD 301F - Manometric respirometry
Polypropylene	Mixture	Data not availbl-insufficient	N/A	N/A	N/A	N/A
antimony trioxide	1309-64-4	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Ethylene-propylene-ethylidenenorbornene terpolymer	25038-36-2	Data not availbl-insufficient	N/A	N/A	N/A	N/A
lead powder; [particle diameter < 1 mm]	7439-92-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
mercury	7439-97-6	Data not availbl-insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	Identifier(s)	Test type	Duration	Study Type	Test result	Protocol
Ethylene-Propylene Polymer	9010-79-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Brominated Flame Retardant	32588-76-4	Experimental BCF - Fish	56 days	Bioaccumulation factor	<3.3	
Brominated Flame Retardant	32588-76-4	Modeled Bioconcentration		Log Kow	9.8	Episuite™
Hydrocarbon resin	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Styrene-Butadiene Polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylene	9002-88-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyolefin Wax	8002-74-2	Modeled Bioconcentration		Log Kow	10.2	Episuite™
Polypropylene	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
antimony trioxide	1309-64-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ethylene-propylene-ethylidenenorbornene terpolymer	25038-36-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
lead powder; [particle diameter < 1 mm]	7439-92-1	Experimental BCF - Invertebrate		Bioaccumulation factor	1553	
mercury	7439-97-6	Experimental Bioconcentration		Log Kow	0.62	

12.4. Mobility in soil

Material	Identifier(s)	Test type	Study Type	Test result	Protocol
Brominated Flame Retardant	32588-76-4	Modeled Mobility in Soil	Koc	55,000 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 waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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
20 01 27*	Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 - UN Number or ID number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.

14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of 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	No data available.	No data available.	No data available.
IMDG Segregation Code	No data available.	No data available.	No data available.

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

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	Identifier(s)	Classification	Regulation
antimony trioxide	1309-64-4	Carc. 2	Regulation (EC) No. 1272/2008, Table 3.1
antimony trioxide	1309-64-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
lead powder; [particle diameter < 1 mm]	7439-92-1	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Polyethylene	9002-88-4	Gr. 3: Not classifiable	International Agency for Research on Cancer
Polypropylene	Mixture	Gr. 3: Not classifiable	International Agency for Research on Cancer

Restrictions on the manufacture, placing on the market and use:
The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

Ingredient	Identifier(s)
mercury	7439-97-6

Restriction status: listed in REACH Annex XVII
Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 for Conditions of Restriction

The synthetic polymer micorparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

Ingredient	%
3903 Polymers of styrene	<= 12
3911 Petroleum resins, coumarone-indene resins,	<= 15

polyterpenes, polysulphides, polysulphones	

Authorization status under REACH:
The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

Ingredient	Identifier(s)
lead powder; [particle diameter < 1 mm]	7439-92-1

Authorization status: listed in the Candidate List of Substances of Very High Concern for Authorization

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional 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 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. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA 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
E2 Hazardous to the Aquatic environment	200	500

Seveso named dangerous substances, Annex 1, Part 2
None

Regulation (EU) No 649/2012

Chemical	Identifier(s)	Annex I
lead powder; [particle diameter < 1 mm]	7439-92-1	Part 1
mercury	7439-97-6	Part 1 and Part 2

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

H330	Fatal if inhaled.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H360FD	May damage fertility. May damage the unborn child.

H362	May cause harm to breast-fed children.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:
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 Environmental Hazard Statements information was modified.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Precautionary - Response information was added.
Label: Graphic information was modified.
Label: Signal Word information was modified.
Section 02: SDS Elements: CLP Supplemental Precautionary Statements information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 7: Precautions safe handling information information was modified.
Section 09: Color information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Mobility in soil information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 15: Carcinogenicity information information was modified.
Section 15: Microplastics Table information was modified.
Section 15: Restrictions on manufacture ingredients information information was added.
Section 15: Seveso Hazard Category Text information was added.
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.

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