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.

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

1.1. Product identifier

3M Scotchkote Poly-Tech AW 654, Mid Grey

Product identification numbers

GR-2000-9992-1 GR-2001-0492-9 GR-2001-0494-5 GR-2001-3225-0

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

Identified uses

Coating.

1.3. Details of the supplier of the substance or mixture

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

E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive
Indication of danger

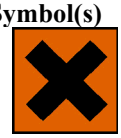
Flammable; R10
Irritant; Xi; R38
R67
Dangerous for the environment; N; R51/53

For full text of R phrases, see Section 16.

2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbol(s)


Irritant


Dangerous for the environment

Contains:

No ingredients are assigned to the label.

Risk phrases

R10	Flammable.
R38	Irritating to skin.
R67	Vapours may cause drowsiness and dizziness.
R51/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases

S23A	Do not breathe vapour.
S24	Avoid contact with skin.
S62	If swallowed, do not induce vomiting: Seek medical advice immediately and show this container or label.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Notes on labelling
R65 is not required on the label due to the product's viscosity.

Nota P applied to CAS# 64742-95-6.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Non-hazardous ingredients	Mixture		35 - 45	
Solvent naphtha (petroleum), light aromatic	64742-95-6	EINECS 265-199-0	20 - 30	Xn:R65 - Nota 4,P (EU) R10 (Vendor) Xi:R38; R67 (Self Classified) Asp. Tox. 1, H304 - Nota P (CLP) Flam. Liq. 3, H226 (Vendor) Skin Irrit. 2, H315; STOT SE 3, H336 (Self Classified)
Barium Sulfate	7727-43-7	EINECS 231-784-4	10 - 20	
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	EINECS 273-219-4	1 - 10	
Titanium dioxide	13463-67-7	EINECS 236-	1 - 10	

		675-5		
Talc	14807-96-6	EINECS 238-877-9	1 - 10	
Amines, N-tallow alkyltrimethylenedi-, oleates	61791-53-5	EINECS 263-186-4	1 - 5	C:R34; N:R50/53 (Vendor) Skin Corr. 1B, H314 (Vendor) Aquatic Acute 1, H400,M=10 (Self Classified)
Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	EINECS 264-150-0	1 - 5	Xi:R36 (Vendor) Eye Irrit. 2, H319 (Vendor) Aquatic Chronic 4, H413 (Self Classified)
Quartz	14808-60-7	EINECS 238-878-4	< 1	Xn:R48/20 (Vendor) STOT RE 1, H372 (Self Classified)
1,2,4-Trimethylbenzene	95-63-6	EINECS 202-436-9	< 1	Xn:R20; Xi:R36-37-38; N:R51/53; R10 (EU) Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 2, H411 (CLP)

Please see section 16 for the full text of any R phrases and H statements referred to in this section
Please refer to section 15 for the any applicable Notas that have been applied to the above components

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

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

4.2. Most important symptoms and effects, both acute and delayed
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 flammable liquids and solids 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	Condition
Carbon monoxide.	During combustion.
Carbon dioxide.	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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Eliminate all ignition sources if safe to do so. 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. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. 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
For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. 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. 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.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Protect from sunlight. Store away from heat. Keep from freezing. Store at temperatures not exceeding 32C/90F. Keep cool. 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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Titanium dioxide	13463-67-7	Health and Safety Comm. (UK)	TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m³	
Talc	14807-96-6	Health and Safety Comm. (UK)	TWA(as respirable dust):1 mg/m³	
Silica, crystalline (airborne particles of respirable size)	14808-60-7	Health and Safety Comm. (UK)	TWA(respirable):0.1 mg/m3	
Barium Sulfate	7727-43-7	Health and Safety Comm. (UK)	TWA(as inhalable dust):10 mg/m³;TWA(as respirable dust):4 mg/m³	
Benzene, trimethyl-	95-63-6	Health and Safety Comm. (UK)	TWA:125 mg/m3(25 ppm)	

Health and Safety Comm. (UK) : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
ppm: parts per million
mg/m³: milligrams per cubic metre
CEIL: Ceiling

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

Wear eye/face protection.
The following eye protection(s) are recommended: Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Thixotropic liquid.
Appearance/Odour	Aromatic hydrocarbon odour; Mid grey colour
Odour threshold	*No data available.*
pH	*No data available.*
Boiling point/boiling range	>=160 ºC
Melting point	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	45 ºC [*Test Method:*Closed Cup]
Autoignition temperature	>=430 ºC
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	438.6 Pa [@ 25 ºC]
Relative density	1.140 [*Ref Std:*WATER=1]
Water solubility	Negligible
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*No data available.*
Vapour density	*No data available.*
Decomposition temperature	*No data available.*
Viscosity	> 0.1 Pa-s
Density	1.14 g/ml

9.2. Other information

Volatile organic compounds (VOC)	320 g/l [*Test Method:*Estimated] [*Details:*EU Definition]
Percent volatile	28 % 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
Temperatures above the boiling point.
Heat.
Sparks and/or flames.

10.5 Incompatible materials
Alcohols.
Combustibles.
Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.
Strong acids.
Strong oxidising agents.

10.6 Hazardous decomposition products

Substance	Condition
None known.	

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

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 target organ effects after inhalation.

Skin contact
Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

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.

Target Organ Effects:

Single exposure may cause:
Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Carcinogenicity:
Contains a chemical or chemicals which can cause cancer.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value
Overall product	Inhalation-Vapor(4 hr)		Data not available or insufficient for classification; calculated ATE21 mg/l
Overall product	Ingestion		Data not available or insufficient for classification; calculated ATE >5,000 mg/kg
Non-hazardous ingredients			Data not available or insufficient for classification
Solvent naphtha (petroleum), light aromatic	Dermal	Rabbit	LD50 > 2,000 mg/kg
Solvent naphtha (petroleum), light aromatic	Inhalation-Vapor (4 hours)	Rat	LC50 > 5.2 mg/l
Solvent naphtha (petroleum), light aromatic	Ingestion	Rat	LD50 > 5,000 mg/kg
Barium Sulfate	Ingestion	Rat	LD50 > 15,000 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
Talc	Ingestion		LD50 Not available
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 12.6 mg/l
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Ingestion	Rat	LD50 > 5,000 mg/kg
Paraffin waxes and Hydrocarbon waxes, chloro	Dermal	Rabbit	LD50 > 13,000 mg/kg
Paraffin waxes and Hydrocarbon waxes, chloro	Ingestion	Rat	LD50 > 4,000 mg/kg
Amines, N-tallow alkyltrimethylenedi-, oleates			Data not available or insufficient for classification
1,2,4-Trimethylbenzene	Dermal	Rabbit	LD50 > 3,160 mg/kg
1,2,4-Trimethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 18 mg/l
1,2,4-Trimethylbenzene	Ingestion	Rat	LD50 3,400 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Non-hazardous ingredients		Data not available or insufficient for classification
Solvent naphtha (petroleum), light aromatic	Rabbit	Irritant
Barium Sulfate		Data not available or insufficient for classification
Titanium dioxide	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite		Data not available or insufficient for classification
Paraffin waxes and Hydrocarbon waxes, chloro		Data not available or insufficient for

		classification
Amines, N-tallow alkyltrimethylenedi-, oleates		Data not available or insufficient for classification
1,2,4-Trimethylbenzene	Rabbit	Irritant
Quartz		No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Non-hazardous ingredients		Data not available or insufficient for classification
Solvent naphtha (petroleum), light aromatic	Rabbit	Mild irritant
Barium Sulfate	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite		Data not available or insufficient for classification
Paraffin waxes and Hydrocarbon waxes, chloro		Data not available or insufficient for classification
Amines, N-tallow alkyltrimethylenedi-, oleates		Data not available or insufficient for classification
1,2,4-Trimethylbenzene	Rabbit	Mild irritant
Quartz		Data not available or insufficient for classification

Skin Sensitisation

Name	Species	Value
Non-hazardous ingredients		Data not available or insufficient for classification
Solvent naphtha (petroleum), light aromatic	Guinea pig	Not sensitizing
Barium Sulfate		Data not available or insufficient for classification
Titanium dioxide	Human and animal	Not sensitizing
Talc		Data not available or insufficient for classification
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite		Data not available or insufficient for classification
Paraffin waxes and Hydrocarbon waxes, chloro		Data not available or insufficient for classification
Amines, N-tallow alkyltrimethylenedi-, oleates		Data not available or insufficient for classification
1,2,4-Trimethylbenzene	Guinea pig	Not sensitizing
Quartz		Data not available or insufficient for classification

Respiratory Sensitisation

Name	Species	Value
Non-hazardous ingredients		Data not available or insufficient for classification
Solvent naphtha (petroleum), light aromatic		Data not available or insufficient for classification
Barium Sulfate		Data not available or insufficient for classification
Titanium dioxide		Data not available or insufficient for classification
Talc	Human	Not sensitizing
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite		Data not available or insufficient for classification

Paraffin waxes and Hydrocarbon waxes, chloro		Data not available or insufficient for classification
Amines, N-tallow alkyltrimethylenedi-, oleates		Data not available or insufficient for classification
1,2,4-Trimethylbenzene		Data not available or insufficient for classification
Quartz		Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Non-hazardous ingredients		Data not available or insufficient for classification
Barium Sulfate		Data not available or insufficient for classification
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite		Data not available or insufficient for classification
Paraffin waxes and Hydrocarbon waxes, chloro		Data not available or insufficient for classification
Amines, N-tallow alkyltrimethylenedi-, oleates		Data not available or insufficient for classification
1,2,4-Trimethylbenzene	In Vitro	Not mutagenic
Quartz	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Non-hazardous ingredients			Data not available or insufficient for classification
Solvent naphtha (petroleum), light aromatic	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Barium Sulfate			Data not available or insufficient for classification
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite			Data not available or insufficient for classification
Paraffin waxes and Hydrocarbon waxes, chloro			Data not available or insufficient for classification
Amines, N-tallow alkyltrimethylenedi-, oleates			Data not available or insufficient for classification
1,2,4-Trimethylbenzene			Data not available or insufficient for classification
Quartz	Inhalation	Human and animal	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration

Non-hazardous ingredients		Data not available or insufficient for classification			
Solvent naphtha (petroleum), light aromatic	Inhalation	Not toxic to female reproduction	Rat	NOAEL 1,500 ppm	2 generation
Solvent naphtha (petroleum), light aromatic	Inhalation	Not toxic to male reproduction	Rat	NOAEL 1,500 ppm	2 generation
Solvent naphtha (petroleum), light aromatic	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 500 ppm	2 generation
Barium Sulfate		Data not available or insufficient for classification			
Titanium dioxide		Data not available or insufficient for classification			
Talc	Ingestion	Not toxic to development	Rat	NOAEL 1,600 mg/kg	during organogenesis
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite		Data not available or insufficient for classification			
Paraffin waxes and Hydrocarbon waxes, chloro		Data not available or insufficient for classification			
Amines, N-tallow alkyltrimethylenedi-, oleates		Data not available or insufficient for classification			
1,2,4-Trimethylbenzene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 1.5 mg/l	during gestation
Quartz		Data not available or insufficient for classification			

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Non-hazardous			Data not available or insufficient for			

ingredients			classification			
Solvent naphtha (petroleum), light aromatic	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Solvent naphtha (petroleum), light aromatic	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Solvent naphtha (petroleum), light aromatic	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Barium Sulfate			Data not available or insufficient for classification			
Talc			Data not available or insufficient for classification			
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite			Data not available or insufficient for classification			
Paraffin waxes and Hydrocarbon waxes, chloro			Data not available or insufficient for classification			
Amines, N-tallow alkyltrimethylenedi-, oleates			Data not available or insufficient for classification			
1,2,4-Trimethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
1,2,4-Trimethylbenzene	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Non-hazardous ingredients			Data not available or insufficient for classification			
Barium Sulfate	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	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 0.010 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure

Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis | respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 18 mg/m3	113 weeks
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite			Data not available or insufficient for classification			
Paraffin waxes and Hydrocarbon waxes, chloro			Data not available or insufficient for classification			
Amines, N-tallow alkyltrimethylenedi-, oleates			Data not available or insufficient for classification			
1,2,4-Trimethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.1 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
1,2,4-Trimethylbenzene	Inhalation	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	heart | endocrine system | immune system	All data are negative	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	14 days
1,2,4-Trimethylbenzene	Ingestion	liver | immune system | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	28 days
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or	Human	NOAEL Not available	occupational exposure

			repeated exposure			

Aspiration Hazard

Name	Value
Non-hazardous ingredients	Not an aspiration hazard
Solvent naphtha (petroleum), light aromatic	Aspiration hazard
Barium Sulfate	Not an aspiration hazard
Titanium dioxide	Not an aspiration hazard
Talc	Not an aspiration hazard
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Not an aspiration hazard
Paraffin waxes and Hydrocarbon waxes, chloro	Not an aspiration hazard
Amines, N-tallow alkyltrimethylenedi-, oleates	Not an aspiration hazard
1,2,4-Trimethylbenzene	Aspiration hazard
Quartz	Not an 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.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
1,2,4-Trimethylbenzene	95-63-6	Water flea	Experimental	48 hours	EC50	3.6 mg/l
1,2,4-Trimethylbenzene	95-63-6	Mysid Shrimp	Experimental	96 hours	EC50	2 mg/l
1,2,4-Trimethylbenzene	95-63-6	Fathead minnow	Experimental	96 hours	LC50	7.72 mg/l
Barium Sulfate	7727-43-7	Fish other	Experimental	96 hours	LC50	>100 mg/l
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Zebra Fish	Analogous Compound	96 hours	LC50	>100 mg/l
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl,	68953-58-2	Water flea	Analogous Compound	48 hours	EC50	>100 mg/l

salts with bentonite						
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Green algae	Analogous Compound	72 hours	EC50	>100 mg/l
Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	Water flea	Experimental	24 hours	EC50	102 mg/l
Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	Rainbow trout	Experimental	96 hours	LC50	>300 mg/l
Solvent naphtha (petroleum), light aromatic	64742-95-6		Data not available or insufficient for classification			
Amines, N-tallow alkyltrimethylenedi-, oleates	61791-53-5	Water flea	Laboratory	48 hours	EC50	0.13 mg/l
Amines, N-tallow alkyltrimethylenedi-, oleates	61791-53-5	Zebra Fish	Laboratory	96 hours	LC50	0.1 mg/l
Quartz	14808-60-7		Data not available or insufficient for classification			
Non-hazardous ingredients	Mixture		Data not available or insufficient for classification			
Talc	14807-96-6		Data not available or insufficient for classification			
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Crustacea other	Experimental	96 hours	EC50	>300 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	30 days	NOEC	3 mg/l
Titanium dioxide	13463-67-7	Fish	Experimental	30 days	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Sheepshead Minnow	Experimental	96 hours	LC50	>240 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Amines, N-tallow alkyltrimethylenedi-, oleates	61791-53-5	Laboratory Biodegradation		BOD	62 % weight	Other methods
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Non-hazardous ingredients	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent naphtha (petroleum), light aromatic	64742-95-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Barium Sulfate	7727-43-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2,4-Trimethylbenzene	95-63-6	Experimental Photolysis		Photolytic half-life (in air)	11.8 hours (t 1/2)	Other methods
1,2,4-Trimethylbenzene	95-63-6	Experimental Biodegradation	28 days	BOD	4 % weight	OECD 301C - MITI test (I)
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Amines, N-tallow alkyltrimethylenedi-, oleates	61791-53-5	Calculated BCF - Other		Bioaccumulation factor	7.63	Estimated: Bioconcentration factor

Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Non-hazardous ingredients	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
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 - Other	42 days	Bioaccumulation factor	9.6	Other methods
Solvent naphtha (petroleum), light aromatic	64742-95-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Barium Sulfate	7727-43-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2,4-Trimethylbenzene	95-63-6	Experimental BCF-Carp	56 days	Bioaccumulation factor	275	Other methods
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil
Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal 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 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transportation information

GR-2000-9992-1, GR-2001-0492-9, GR-2001-3225-0

ADR/RID: UN1263, PAINT RELATED MATERIAL, LIMITED QUANTITY, 3., III, (E), ADR Classification Code: F1.
IMDG-CODE: UN1263, PAINT RELATED MATERIAL, (LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)), 3, III, LIMITED QUANTITY, EMS: FE,SE.
ICAO/IATA: UN1263, PAINT RELATED MATERIAL, 3., III.

GR-2001-0494-5

ADR/RID: UN1263, PAINT RELATED MATERIAL, 3., III, (D/E), ENVIRONMENTALLY HAZARDOUS, ADR Classification Code: F1.
IMDG-CODE: UN1263, PAINT RELATED MATERIAL, (LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)), 3, III, EMS: FE,SE.
ICAO/IATA: UN1263, PAINT RELATED MATERIAL, 3., III.

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
Quartz	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Talc	14807-96-6	Gr. 3: Not classifiable	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical 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 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 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.

15.2. Chemical Safety Assessment
Not applicable

SECTION 16: Other information

List of relevant H statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

List of relevant R-phrases

R10	Flammable.
R20	Harmful by inhalation.
R34	Causes burns.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53	Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R65	Harmful: May cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.

Revision information:
Revision Changes:
Risk phrase was modified.
Section 8: Respiratory protection - recommended respirators was modified.
Section 1: Product identification numbers was modified.
Section 16: List of relevant R phrase information was modified.
Section 3: Composition/ Information of ingredients table was modified.
Section 2: Indication of danger information was modified.
Section 9: Flammability (solid, gas) information was modified.
Section 16: Regulations - Inventories - EU ONLY was modified.
Copyright was modified.
Section 11: Acute Toxicity table was modified.
Carcinogenicity Table was modified.
Serious Eye Damage/Irritation Table was modified.
Germ Cell Mutagenicity Table was modified.
Skin Sensitisation Table was modified.
Respiratory Sensitisation Table was modified.
Reproductive Toxicity Table was modified.
Skin Corrosion/Irritation Table was modified.
Target Organs - Repeated Table was modified.
Target Organs - Single Table was modified.
Section 11: Health Effects - Eye information was modified.

Section 11: Health Effects - Skin information was modified.
Section 11: Health Effects - Inhalation information was modified.
Section 11: Health Effects - Ingestion information was modified.
Section 5: Fire - Extinguishing media information was modified.
Section 6: Accidental release personal information was modified.
Section 6: Accidental release clean-up information was modified.
Section 7: Precautions safe handling information was modified.
Section 7: Conditions safe storage was modified.
Section 8: Appropriate Engineering controls information was modified.
Section 8: Personal Protection - Eye information was modified.
Section 13: Standard Phrase Category Waste GHS was modified.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. was modified.
Section 8: Respiratory protection - recommended respirators guide was added.
Section 8: Skin protection - protective clothing text was added.
Section 12: Component ecotoxicity information was added.
Section 12: Persistence and Degradability information was added.
Section 12:Bioccumulative potential information was added.
Section 12: Component Ecotoxicity table Material column header was added.
Section 12: Component Ecotoxicity table CAS No column header was added.
Section 12: Component Ecotoxicity table Organism column header was added.
Section 12: Component Ecotoxicity table Type column header was added.
Section 12: Component Ecotoxicity table Exposure column header was added.
Section 12: Component Ecotoxicity table End point column header was added.
Section 12: Component Ecotoxicity table Result column header was added.
Section 12: Persistence and degradability table Material column header was added.
Section 12: Persistence and degradability table CAS No column header was added.
Section 12: Persistence and degradability table Test Type column header was added.
Section 12: Persistence and degradability table Duration column header was added.
Section 12: Persistence and degradability table Test Result column header was added.
Section 12: Persistence and degradability table Protocol column header was added.
Section 12:Bioccumulative potential table Material column header was added.
Section 12:Bioccumulative potential table CAS No column header was added.
Section 12:Bioccumulative potential table CAS No column header was added.
Section 12:Bioccumulative potential table Test Result column header was added.
Section 12:Bioccumulative potential table Protocol column header was added.
Section 12:Bioccumulative potential table Test Type column header was added.
Section 12: Persistence and degradability table Study Type column header was added.
Section 12:Bioccumulative potential table Test Type column header was added.
Label: Graphic Text was added.
Section 9: Odour Threshold was added.
Section 9: Solubility (non-water) was added.
Section 09: Decomposition Temperature was added.
Section 11: Single exposure may cause: heading was added.
Section 11: Single exposure may cause standard phrases was added.
Section 2: R phrase reference was added.
Label: Graphic was added.
Label: Graphic was added.
Label: Graphic Text was added.
Section 9: Flammability (solid, gas) information was added.
Section 2: Symbol was deleted.
Section 2: Symbols heading was deleted.
Section 12: Acute aquatic hazard information was deleted.
Section 12: Chronic aquatic hazard heading was deleted.
Section 12: Acute aquatic hazard heading was deleted.
Section 12: Chronic aquatic hazard information was deleted.

Prints No Data if Component ecotoxicity information is not present was deleted.
Prints No Data if Persistence and Degradability information is not present was deleted.
Prints No Data if Bioccumulative potential information is not present was deleted.
Section 11: Health Effects - Other information was deleted.
Section 8: Personal Protection - Skin/hand information was deleted.
Section 8: Personal Protection - Respiratory Information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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