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 665, White

Product Identification Numbers
GR-2001-0506-6

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.
Telephone: +44 (0)1344 858 000
E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number
+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive
Indication of danger
Dangerous for the environment; N; R50/53

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)

Dangerous for the environment

Contains:

No ingredients are assigned to the label.

Risk phrases
R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Non-Hazardous Ingredients	Mixture		50 - 60	
Calcium Carbonate	471-34-1	EINECS 207-439-9	10 - 20	
Quartz	14808-60-7	EINECS 238-878-4	1 - 10	Xn:R48/20 (Vendor) STOT RE 1, H372 (Self Classified)
Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	EINECS 264-150-0	1 - 10	Xi:R36 (Vendor) Eye Irrit. 2, H319 (Vendor) Aquatic Chronic 4, H413 (Self Classified)
Titanium dioxide	13463-67-7	EINECS 236-675-5	1 - 10	
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	EINECS 246-771-9	1 - 5	R52/53 (Self Classified) Aquatic Chronic 3, H412 (Self Classified)
Carbonic Acid, Zirconium Complex.	68309-95-5	EINECS 269-682-7	1 - 5	
Mica-Group Minerals	12001-26-2		1 - 5	
Zinc oxide	1314-13-2	EINECS 215-222-5	< 2.5	N:R50/53 (EU) Aquatic Acute 1, H400,M=10; Aquatic Chronic 1, H410,M=1 (CLP)
2-Butoxyethanol	111-76-2	EINECS 203-905-0	< 1	Xn:R20-21-22; Xi:R36-38 (EU) R52 (Self Classified) Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 4, H302;

				Skin Irrit. 2, H315; Eye Irrit. 2, H319 (CLP)
1,2-Benzisothiazol-3(2H)-one	2634-33-5	EINECS 220-120-9	< 0.1 {Typically 0.02)	Xn:R22; Xi:R38-41; N:R50; R43 (EU) Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Acute 1, H400,M=10 (CLP) Aquatic Chronic 1, H410,M=10 (Self Classified)
Diuron	330-54-1	EINECS 206-354-4	< 0.1	Carc.Cat.3:R40; Xn:R22-48/22; N:R50/53 (EU) Acute Tox. 4, H302; Carc. 2, H351; STOT RE 2, H373; Aquatic Acute 1, H400,M=10; Aquatic Chronic 1, H410,M=10 (CLP)
3-Iodo-2-propynyl butylcarbamate	55406-53-6	EINECS 259-627-5	< 0.05	T:R23-48/23; Xn:R22; Xi:R41; N:R50/53; R43 (Self Classified) Acute Tox. 3, H331; Acute Tox. 4, H302; Eye Dam. 1, H318; Skin Sens. 1A, H317; STOT RE 1, H372; Aquatic Acute 1, H400,M=10; Aquatic Chronic 1, H410,M=10 (Self Classified)
2-octyl-2H-isothiazol-3-one	26530-20-1	EINECS 247-761-7	< 0.025	T:R23-24; C:R34; Xn:R22; N:R50/53; R43 (EU) Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Acute 1, H400,M=100; Aquatic Chronic 1, H410,M=100 (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
Wash with soap and water. If signs/symptoms develop, get medical attention.

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

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

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

5.3. Advice for fire-fighters
No unusual fire or explosion hazards are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ventilate the area with fresh air. 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. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. 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. 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. Avoid breathing dust/fume/gas/mist/vapours/spray.

7.2. Conditions for safe storage including any incompatibilities
Store away from acids.

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
2-Butoxyethanol	111-76-2	Health and Safety Comm. (UK)	TWA:123 mg/m3(25 ppm);STEL:246 mg/m3(50 ppm)	Skin Notation
Mica-Group Minerals	12001-26-2	Health and Safety Comm. (UK)	TWA (Inhalable): 10 mg/m³; TWA (respirable): 0.8 mg/m³	
Titanium dioxide	13463-67-7	Health and Safety Comm. (UK)	TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m³	
Quartz	14808-60-7	Health and Safety Comm. (UK)	TWA(respirable):0.1 mg/m3	
Diuron	330-54-1	Health and Safety Comm. (UK)	TWA:10 mg/m³	
Limestone	471-34-1	Health and Safety Comm. (UK)	TWA(as inhalable dust):10 mg/m3;TWA(as respirable dust):4 mg/m3;TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m3	
Carbonic Acid, Zirconium Complex	68309-95-5	Health and Safety Comm. (UK)	TWA(as Zr):5 mg/m3;STEL(as Zr):10 mg/m3	

Health and Safety Comm. (UK) : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

Biological limit values

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
2-Butoxyethanol	111-76-2	UK EH40 BMGVs	Butoxyacetic acid	Creatinine in urine	EOS	240 mmol/mol	

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)
EOS: End of shift.

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:
Safety glasses with side shields.

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.
Gloves made from the following material(s) are recommended: Butyl rubber.
Neoprene.
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
Half facepiece or full facepiece air-purifying respirator suitable for organic vapours

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	Faint ammoniacal odour; White colour
Odour threshold	*No data available.*
pH	7
Boiling point/boiling range	>=100 ºC
Melting point	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	*Not applicable.*
Autoignition temperature	>=400 ºC
Flammable Limits(LEL)	*Not applicable.*
Flammable Limits(UEL)	*Not applicable.*
Vapour pressure	*No data available.*
Relative density	1.3 g/cm3 [*Ref Std:*WATER=1]
Water solubility	Complete
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*

Vapour density	*No data available.*
Decomposition temperature	*No data available.*
Density	1.3 g/ml

9.2. Other information

Volatile organic compounds (VOC)	0 g/l [*Details:*EU Definition]
Percent volatile	40 % 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.

10.5 Incompatible materials
Strong acids.

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 3M assessments.

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
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin contact
Contact with the skin during product use is not expected to result in significant irritation.

Eye contact
Contact with the eyes during product use is not expected to result in significant irritation.

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

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
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.0 mg/l
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 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
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
Mica-Group Minerals	Dermal		LD50 estimated to be > 5,000 mg/kg
Mica-Group Minerals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Zinc oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Zinc oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
2-Butoxyethanol	Dermal	Rabbit	LD50 400 mg/kg
2-Butoxyethanol	Inhalation-Vapor (4 hours)	Rat	LC50 2.2 mg/l
2-Butoxyethanol	Ingestion	Rat	LD50 560 mg/kg
3-Iodo-2-propynyl butylcarbamate	Dermal	Rabbit	LD50 > 2,000 mg/kg
3-Iodo-2-propynyl butylcarbamate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.67 mg/l
3-Iodo-2-propynyl butylcarbamate	Ingestion	Rat	LD50 1,056 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Quartz		No significant irritation
Titanium dioxide	Rabbit	No significant irritation
Zinc oxide	Human and animal	No significant irritation
2-Butoxyethanol	Rabbit	Irritant
3-Iodo-2-propynyl butylcarbamate	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value

Calcium Carbonate	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
Zinc oxide	Rabbit	Mild irritant
2-Butoxyethanol	Rabbit	Severe irritant
3-Iodo-2-propynyl butylcarbamate	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Titanium dioxide	Human and animal	Not sensitizing
Zinc oxide	Guinea pig	Some positive data exist, but the data are not sufficient for classification
2-Butoxyethanol	Guinea pig	Not sensitizing
3-Iodo-2-propynyl butylcarbamate	Multiple animal species	Sensitising

Respiratory Sensitisation

Name	Species	Value

Germ Cell Mutagenicity

Name	Route	Value
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
Zinc oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Zinc oxide	In vivo	Some positive data exist, but the data are not sufficient for classification
2-Butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Quartz	Inhalation	Human and animal	Carcinogenic.
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
2-Butoxyethanol	Inhalation	Multiple animal species	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
Calcium Carbonate	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Zinc oxide	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
2-Butoxyethanol	Dermal	Not toxic to development	Rat	NOAEL 1,760	during gestation

				mg/kg/day	
2-Butoxyethanol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg/day	during organogenesis
2-Butoxyethanol	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.48 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
2-Butoxyethanol	Dermal	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 902 mg/kg	6 hours
2-Butoxyethanol	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 72 mg/kg	not available
2-Butoxyethanol	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 451 mg/kg	6 hours
2-Butoxyethanol	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Inhalation	blood	May cause damage to organs	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
2-Butoxyethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
2-Butoxyethanol	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
2-Butoxyethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	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
Calcium Carbonate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
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 0.010 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure
Mica-Group Minerals	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Zinc oxide	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	10 days
Zinc oxide	Ingestion	endocrine system | hematopoietic system | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Other	NOAEL 500 mg/kg/day	6 months
2-Butoxyethanol	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Dermal	endocrine system	All data are negative	Rabbit	NOAEL 150	90 days

					mg/kg/day	
2-Butoxyethanol	Inhalation	blood	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.12 mg/l	90 days
2-Butoxyethanol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	14 weeks
2-Butoxyethanol	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.15 mg/l	14 weeks
2-Butoxyethanol	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 1.9 mg/l	8 days
2-Butoxyethanol	Ingestion	blood	Causes damage to organs through prolonged or repeated exposure	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
3-Iodo-2-propynyl butylcarbamate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL .00116 mg/l	90 days

Aspiration Hazard

Name	Value

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 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 Nbr	Organism	Type	Exposure	Test endpoint	Test result
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Algae	Experimental	72 hours	EC50	0.15 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Water flea	Experimental	48 hours	EC50	4.4 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Crustacea	Experimental	48 hours	EC50	0.062 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Rainbow trout	Experimental	96 hours	LC50	1.6 mg/l
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	Green algae	Experimental	72 hours	EC50	18.4 mg/l
Isobutyric acid,	25265-77-4	Water flea	Experimental	96 hours	EC50	>95 mg/l

monoester with 2,2,4-trimethylpentane-1,3-diol						
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	Fathead minnow	Experimental	96 hours	LC50	30 mg/l
2-Butoxyethanol	111-76-2	Rainbow trout	Experimental	96 hours	LC50	1,474 mg/l
2-Butoxyethanol	111-76-2	Water flea	Experimental	48 hours	EC50	1,550 mg/l
2-Butoxyethanol	111-76-2	Green Algae	Experimental	72 hours	EC50	>1,000 mg/l
2-Butoxyethanol	111-76-2	Crustacea	Experimental	96 hours	EC50	89.4 mg/l
3-Iodo-2-propynyl butylcarbamate	55406-53-6	Water flea	Experimental	48 hours	EC50	0.16 mg/l
3-Iodo-2-propynyl butylcarbamate	55406-53-6	Green algae	Experimental	72 hours	EC50	0.053 mg/l
3-Iodo-2-propynyl butylcarbamate	55406-53-6	Rainbow trout	Experimental	96 hours	LC50	0.067 mg/l
3-Iodo-2-propynyl butylcarbamate	55406-53-6	Mysid Shrimp	Experimental	96 hours	EC50	0.088 mg/l
Calcium Carbonate	471-34-1	Western Mosquitofish	Experimental	96 hours	LC50	>100 mg/l
Carbonic Acid, Zirconium Complex.	68309-95-5	Ricefish	Experimental	96 hours	LC50	410 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
Diuron	330-54-1	Crustacea	Experimental	48 hours	EC50	0.38 mg/l
Diuron	330-54-1	Green Algae	Experimental	96 hours	EC50	0.0013 mg/l
Diuron	330-54-1	Fish	Experimental	96 hours	LC50	0.5 mg/l
2-octyl-2H-isothiazol-3-one	26530-20-1	Rainbow trout	Experimental	96 hours	LC50	0.047 mg/l
2-octyl-2H-isothiazol-3-one	26530-20-1	Crustacea	Experimental	24 hours	EC50	0.002 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Sheepshead Minnow	Experimental	96 hours	LC50	>240 mg/l

Zinc oxide	1314-13-2	Water flea	Experimental	48 hours	EC50	3.2 mg/l
Zinc oxide	1314-13-2	Green Algae	Experimental	72 hours	EC50	0.046 mg/l
Zinc oxide	1314-13-2	Chinook Salmon	Experimental	96 hours	LC50	0.23 mg/l
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	Green algae	Experimental	72 hours	NOEC	3.28 mg/l
2-Butoxyethanol	111-76-2	Water flea	Experimental	21 days	NOEC	100 mg/l
2-Butoxyethanol	111-76-2	Green Algae	Experimental	72 hours	NOEC	130 mg/l
3-Iodo-2-propynyl butylcarbamate	55406-53-6	Green algae	Experimental	72 hours	NOEC	0.0046 mg/l
3-Iodo-2-propynyl butylcarbamate	55406-53-6	Water flea	Experimental	21 days	NOEC	0.05 mg/l
Calcium Carbonate	471-34-1	Rainbow trout	Experimental	21 days	NOEC	>100 mg/l
Titanium dioxide	13463-67-7	Fish	Experimental	30 days	NOEC	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	30 days	NOEC	3 mg/l
Zinc oxide	1314-13-2	Green Algae	Experimental	72 hours	NOEC	0.021 mg/l
Mica-Group Minerals	12001-26-2		Data not available or insufficient for classification			
Quartz	14808-60-7		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	Modeled Persistence		Photolytic half-life (in air)	2.25 days (t 1/2)	Other methods
Carbonic Acid, Zirconium Complex.	68309-95-5	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
2-octyl-2H-isothiazol-3-one	26530-20-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

3-Iodo-2-propynyl butylcarbamate	55406-53-6	Experimental Biodegradation	28 days	BOD	21 % weight	OECD 301F - Manometric respirometry
Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Diuron	330-54-1	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
Mica-Group Minerals	12001-26-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Zinc oxide	1314-13-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Calcium Carbonate	471-34-1	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
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	Experimental Biodegradation	34 days	Dissolv. Organic Carbon Deplet	70 % weight	OECD 301E - Modified OECD Scre
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
2-Butoxyethanol	111-76-2	Experimental Biodegradation	14 days	BOD	96 % weight	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Carbonic Acid, Zirconium Complex.	68309-95-5	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
Calcium Carbonate	471-34-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2-octyl-2H-isothiazol-3-one	26530-20-1	Experimental BCF - Bluegill	67 days	Bioaccumulation factor	165	Other methods
Quartz	14808-60-7	Data not	N/A	N/A	N/A	N/A

		available or insufficient for classification				
Diuron	330-54-1	Experimental BCF-Carp	42 days	Bioaccumulation factor	14	Other methods
Mica-Group Minerals	12001-26-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Zinc oxide	1314-13-2	Experimental BCF - Other	56 days	Bioaccumulation factor	<217	OECD 305E - Bioaccumulation flow-through fish test
Titanium dioxide	13463-67-7	Experimental BCF-Carp	42 days	Bioaccumulation factor	9.6	Other methods
3-Iodo-2-propynyl butylcarbamate	55406-53-6	Experimental Bioconcentration		Log Kow	2.81	Other methods
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Bioconcentration		Log Kow	1.45	Other methods
2-Butoxyethanol	111-76-2	Experimental Bioconcentration		Log Kow	0.83	Other methods
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	Experimental Bioaccumulation		Log Kow	3.47	Other methods

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
See Section 11.1 Information on toxicological effects

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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-2001-0506-6

ADR/RID: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID,N.O.S., (ZINC OXIDE), 9, III, (E), ENVIRONMENTALLY HAZARDOUS, ADR Classification Code: M6.
IMDG-CODE: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID, N.O.S., (ZINC OXIDE), 9., III, IMDG-Code segregation code: NONE, EMS: FA,SF.
ICAO/IATA: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID,N.O.S., (ZINC OXIDE), 9., III, fish and tree marking may be required (> 5kg/l).

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
2-Butoxyethanol	111-76-2	Gr. 3: Not classifiable	International Agency for Research on Cancer
Diuron	330-54-1	Carc. 2	Regulation (EC) No. 1272/2008, Table 3.1
Diuron	330-54-1	Carc.Cat.3	Regulation (EC) No. 1272/2008, Table 3.2
Quartz	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Global inventory status
All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. 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 Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

15.2. Chemical Safety Assessment
Not applicable

SECTION 16: Other information

List of relevant H statements

H302	Harmful if swallowed.
H311	Toxic 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.
H331	Toxic if inhaled.
H351	Suspected of causing cancer.
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.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

List of relevant R-phrases

R20	Harmful by inhalation.
R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R23	Toxic by inhalation.
R24	Toxic in contact with skin.
R34	Causes burns.
R36	Irritating to eyes.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R52	Harmful to aquatic organisms.
R52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Revision information:

Revision Changes:
Section 1: Product identification numbers heading information was modified.
Section 1: Product identification numbers information was modified.
Section 16: List of relevant R phrase information information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 2: Indication of danger information information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 9: Flammability (solid, gas) information information was modified.
Section 15: Regulations - Inventories information was modified.
Copyright information was modified.
Section 8: Occupational exposure limit table information was modified.
Telephone header information was modified.
Company Telephone information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was modified.
Section 5: Fire - Extinguishing media information information was modified.
Section 6: Accidental release environmental information information was modified.
Section 6: Accidental release clean-up information information was modified.
Section 7: Precautions safe handling information information was modified.
Section 13: 13.1. Waste disposal note information was modified.
Section 13: Standard Phrase Category Waste GHS information was modified.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.
Section 8: Respiratory protection - recommended respirators guide information was added.
Section 8: Personal Protection - Eye information information was added.
Section 8: Personal Protection - Skin/hand information information was added.
Section 8: Personal Protection - Respiratory Information information was added.
Section 9: Odour Threshold information was added.
Section 9: Solubility (non-water) information was added.
Section 09: Decomposition Temperature information was added.
Legend description information was added.
BLV Reg Agency Desc information was added.
Section 10: Hazardous decomposition products during combustion text information was added.
Section 11: Disclosed components not in tables text information was added.
Section 12: Classification Warning information was added.
Section 11: Classification disclaimer information was added.
Section 8: 8.1.1 Biological limit values table heading information was added.
Section 8: BLV table information was added.
Section 8: BLV table ingredient column heading information was added.
Section 8: BLV table cas nbr column heading information was added.
Section 8: BLV table agency column heading information was added.
Section 8: BLV table cas nbr column heading information was added.
Section 8: BLV table biological specimen Column heading information was added.
Section 8: BLV table sampling time Column heading information was added.
Section 8: BLV table value Column heading information was added.
Section 8: BLV table additional comments Column heading information was added.
Section 2: R phrase reference information was added.
Label: Graphic information was added.
Label: Graphic information was added.
Label: Graphic Text information was added.
Section 9: Flammability (solid, gas) information information was added.
Section 8: Eye/face protection text information was deleted.
Section 8: Respiratory protection - recommended respirators information was deleted.
Section 2: Symbol information was deleted.
Section 2: Symbols heading information was deleted.
Section 12: Acute aquatic hazard information information was deleted.
Section 12: Chronic aquatic hazard heading information was deleted.
Section 12: Acute aquatic hazard heading information was deleted.
Section 12: Chronic aquatic hazard information information was deleted.
Section 2: Notes on labelling heading information was deleted.
Section 2: Label remarks information was deleted.
Section 8: mg/m^3 key information was deleted.
Section 8: ppm key information was deleted.
Section 11: Aspiration Hazard Table information was deleted.
Section 11: Classification disclaimer information was deleted.
Section 11: Respiratory Sensitization Table information was deleted.
Section 12: Classification Warning information was deleted.

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