Safety Data Sheet

Document group:	24-3877-8	**Version number:**	4.00
Revision date:	22/11/2012	**Supersedes date:**	16/08/2012

Transportation version number: 2.00 (22/09/2011)

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 80349 Perfect-It III Extra Fine Compound

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

Identified uses
Automotive.

1.3. Details of the supplier of the 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
CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:
Flammable Liquid: Category 3.
Specific Target Organ Toxicity: Category 3.
Chronic Aquatic Toxicity: Category 3.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive
Indication of danger
Flammable; R10
R66
R67
Dangerous for the environment; R52/53

For full text of R phrases, see Section 16.

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

SIGNAL WORD
WARNING!

Symbols:
GHS02 (Flame) |GHS07 (Exclamation mark) |

Pictograms

Ingredient	CAS Nbr	% by Wt
Distillates (petroleum), hydrotreated light	64742-47-8	5 - 15
Naphtha (petroleum), hydrodesulphurised heavy	64742-82-1	5 - 10

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P271	Use only outdoors or in a well-ventilated area.

Response:

P331	Do NOT induce vomiting.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P370	In case of fire:
P378G	Use a fire fighting agent suitable for flammable liquids and solids such as dry chemical or carbon dioxide.

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SUPPLEMENTAL INFORMATION

Supplemental Hazard Statements:

EUH066	Repeated exposure may cause skin dryness or cracking.

Contains 13.43% of components with unknown hazards to the aquatic environment.

Notes on labelling

H304 is not required on the label due to the product's viscosity
Nota P applied to CAS 64742-82-1.

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

Symbol(s)

None.

Contains:

No ingredients are assigned to the label.

Risk phrases

R10	Flammable.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.
R52/53	Harmful 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.
S2	Keep out of the reach of children.

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

Nota P applied to CAS 64742-82-1.

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 - 80	
Distillates (petroleum), hydrotreated light	64742-47-8	EINECS 265-149-8	5 - 15	Xn:R65 - Nota 4 (EU) R10; R66; R67 (Self Classified) Asp. Tox. 1, H304 (CLP) Flam. Liq. 3, H226; STOT SE 3, H336; EUH066 (Self Classified)
Naphtha (petroleum), hydrodesulphurised heavy	64742-82-1	EINECS 265-185-4	5 - 10	Xn:R65 - Nota 4,P (EU) R10 (Vendor) N:R51/53; R66; R67 (Self Classified) Asp. Tox. 1, H304 - Nota P (CLP) Flam. Liq. 3, H226 (Vendor) STOT SE 3, H336; EUH066;

				Aquatic Chronic 2, H411 (Self Classified)
Aluminium oxide	1344-28-1	EINECS 215-691-6	3 - 7	
White mineral oil (petroleum)	8042-47-5	EINECS 232-455-8	1 - 5	Xn:R65 (Self Classified) Asp. Tox. 1, H304 (Self Classified)
(ethylenedioxy)dimethanol	3586-55-8	EINECS 222-720-6	0.1 - 0.2	R52 (Self Classified)

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

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

Inhalation
Remove person to fresh air. If you feel unwell, 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.

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
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Irritant vapours or gases.	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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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.

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR-AFFF type foam 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 toxic, corrosivity or flammability 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 detergent and 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
Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Do not use in a confined area or areas with little or no air movement. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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
Aluminium oxide	1344-28-1	Health and Safety Comm. (UK)	TWA(as inhalable dust):10 mg/m³;TWA(as respirable dust):4 mg/m³	

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

ppm: parts per million
mg/m^3: milligrams per cubic metre
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Use explosion-proof ventilation equipment. 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

Wear eye/face protection.
The following eye protection(s) are recommended: Safety glasses with side shields.

Skin/hand protection

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

Respiratory protection

Wear respiratory protection if ventilation is inadequate to prevent overexposure.
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:	Emulsion
Appearance/Odour	Light solvent odour; White liquid
pH	*No data available.*
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	48.8 ºC [*Test Method:*Closed Cup]
Autoignition temperature	*No data available.*
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Relative density	0.97 [*Ref Std:*WATER=1]
Water solubility	*Not applicable.*
Water solubility	Moderate
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*No data available.*
Vapour density	*No data available.*

Viscosity	12 Pa-s - 22 Pa-s
Density	0.95 - 0.99 g/ml

9.2. Other information

Volatile organic compounds (VOC)	<= 15 % weight [*Test Method:*calculated SCAQMD rule 443.1]
Percent volatile	70 - 90 % weight
VOC less H2O & exempt solvents	546.01 g/l [*Test Method:*calculated SCAQMD rule 443.1]

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
Sparks and/or flames.
High shear and high temperature conditions

10.5 Incompatible materials
Alkali and alkaline earth metals.
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:

Eye contact
Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin contact

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. May cause target organ effects after inhalation.

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

Target Organ Effects:
Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.
Prolonged or repeated exposure may cause:
Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No test data available; calculated ATE >5,000 mg/kg
Distillates (petroleum), hydrotreated light	Dermal	Rabbit	LD50 > 3,160 mg/kg
Distillates (petroleum), hydrotreated light	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 3.0 mg/l
Distillates (petroleum), hydrotreated light	Ingestion	Rat	LD50 > 5,000 mg/kg
Naphtha (petroleum), hydrodesulphurised heavy	Dermal	Rabbit	LD50 > 3,000 mg/kg
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation-Vapor (4 hours)	Rat	LC50 estimated to be 20 - 50 mg/l
Naphtha (petroleum), hydrodesulphurised heavy	Ingestion	Rat	LD50 > 5,000 mg/kg
Aluminium oxide	Inhalation-Dust/Mist (4 hours)	Rabbit	LC50 > 1.9 mg/l
Aluminium oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
White mineral oil (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
(ethylenedioxy)dimethanol			No data available

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Distillates (petroleum), hydrotreated light		Mild irritant
Naphtha (petroleum), hydrodesulphurised heavy		Mild irritant
Aluminium oxide		No data available
White mineral oil (petroleum)		Minimal irritation
(ethylenedioxy)dimethanol		No data available

Serious Eye Damage/Irritation

Name	Species	Value
Distillates (petroleum), hydrotreated light		Mild irritant
Naphtha (petroleum), hydrodesulphurised heavy		Mild irritant
Aluminium oxide		No data available
White mineral oil (petroleum)		Mild irritant
(ethylenedioxy)dimethanol		No data available

Skin Sensitisation

Name	Species	Value
Distillates (petroleum), hydrotreated light		Not sensitizing
Naphtha (petroleum), hydrodesulphurised heavy		Not sensitizing
Aluminium oxide		No data available
White mineral oil (petroleum)		Not sensitizing
(ethylenedioxy)dimethanol		No data available

Respiratory Sensitisation

Name	Species	Value
Distillates (petroleum), hydrotreated light		No data available
Naphtha (petroleum), hydrodesulphurised heavy		No data available
Aluminium oxide		No data available
White mineral oil (petroleum)		No data available
(ethylenedioxy)dimethanol		No data available

Germ Cell Mutagenicity

Name	Route	Value
Distillates (petroleum), hydrotreated light	In Vitro	Not mutagenic
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	Not mutagenic
Naphtha (petroleum), hydrodesulphurised heavy	In Vitro	Some positive data exist, but the data are not sufficient for classification
Aluminium oxide	In Vitro	Not mutagenic
White mineral oil (petroleum)	In Vitro	Not mutagenic
(ethylenedioxy)dimethanol		No data available

Carcinogenicity

Name	Route	Species	Value
Distillates (petroleum), hydrotreated light	Dermal		Some positive data exist, but the data are not sufficient for classification
Naphtha (petroleum), hydrodesulphurised heavy	Dermal		Some positive data exist, but the data are not sufficient for classification
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation		Some positive data exist, but the data are not sufficient for classification
Aluminium oxide	Inhalation		Not carcinogenic
White mineral oil (petroleum)	Dermal		Not carcinogenic
White mineral oil (petroleum)	Inhalation		Not carcinogenic
(ethylenedioxy)dimethanol			No data available

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Distillates (petroleum), hydrotreated light	Inhalation	Not toxic to reproduction and/or development		NOAEL 364 ppm	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	Not toxic to reproduction and/or development		NOAEL 2.356 mg/l	
Aluminium oxide		No data available			
White mineral oil (petroleum)	Ingestion	Not toxic to reproduction and/or development		NOAEL 4,350 mg/kg/day	
(ethylenedioxy)dimethanol		No data available			

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Distillates (petroleum), hydrotreated light	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL N/A	
Distillates (petroleum), hydrotreated light	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL N/A	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification		NOEL 6.5 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification		NOEL 2.4 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	heart	All data are negative		NOAEL 2.5 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	liver | kidney and/or bladder	All data are negative		NOAEL 0.610 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	muscles	All data are negative		NOAEL 0.61 mg/l	
Aluminium oxide	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
White mineral oil (petroleum)			No data available			
(ethylenedioxy)dimethanol			No data available			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Distillates (petroleum), hydrotreated light	Dermal	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for		NOEL N/A	

			classification			
Distillates (petroleum), hydrotreated light	Dermal	liver	Some positive data exist, but the data are not sufficient for classification		NOEL 1,000 mg/kg/day	
Distillates (petroleum), hydrotreated light	Inhalation	hematopoietic system	All data are negative		NOAEL 0.1 mg/l	
Distillates (petroleum), hydrotreated light	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification		NOEL 100 mg/kg/day	
Distillates (petroleum), hydrotreated light	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOAEL 100 mg/kg	
Naphtha (petroleum), hydrodesulphurised heavy	Dermal	nervous system	Some positive data exist, but the data are not sufficient for classification		LOEL 691 mg/kg	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification		LOEL 4.580 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification		NOEL 0.619 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	endocrine system | muscles	Some positive data exist, but the data are not sufficient for classification		LOEL 0.616 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOEL 0.57 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	bone, teeth, nails, and/or hair | blood | liver	All data are negative		NOAEL 5.62 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	heart	All data are negative		NOAEL 1.271 mg/l	
Naphtha (petroleum), hydrodesulphurised heavy	Inhalation	immune system	All data are negative		NOAEL 0.616 mg/l	
Aluminium oxide	Inhalation	pneumoconiosis	May cause damage to organs though prolonged or repeated		NOAEL N/A	

			exposure			
Aluminium oxide	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A	
White mineral oil (petroleum)	Ingestion	liver | immune system	Some positive data exist, but the data are not sufficient for classification		NOEL 6.4 mg/kg/day	
White mineral oil (petroleum)	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification		LOEL 340 mg/kg/day	
(ethylenedioxy)dimethanol			No data available			

Aspiration Hazard

Name	Value
Distillates (petroleum), hydrotreated light	Aspiration hazard
Naphtha (petroleum), hydrodesulphurised heavy	Aspiration hazard
Aluminium oxide	Not an aspiration hazard
White mineral oil (petroleum)	Aspiration hazard
(ethylenedioxy)dimethanol	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

Acute aquatic hazard:
GHS Acute 3: Harmful to aquatic life.

Chronic aquatic hazard:
GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
White mineral oil (petroleum)	8042-47-5		No data available.			
(ethylenedioxy)dimethanol	3586-55-8	Rainbow trout	Laboratory	96 hours	LC50	1.41 mg/l
(ethylenedioxy)dimethanol	3586-55-8	Water flea	Laboratory	48 hours	EC50	5.8 mg/l
Aluminium oxide	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l

Aluminium oxide	1344-28-1	Water flea	Experimental	48 hours	EC50	>100 mg/l
Aluminium oxide	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Aluminium oxide	1344-28-1	Fish	Experimental	96 hours	LC50	>100 mg/l
Naphtha (petroleum), hydrodesulphurised heavy	64742-82-1	Scud	Experimental	96 hours	EC50	2.6 mg/l
Distillates (petroleum), hydrotreated light	64742-47-8		No data available.			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
White mineral oil (petroleum)	8042-47-5	No data available.	N/A	N/A	N/A	N/A
(ethylenedioxy)dimethanol	3586-55-8	Experimental Photolysis		Photolytic half-life (in air)	3.21 days (t 1/2)	Other methods
(ethylenedioxy)dimethanol	3586-55-8	Estimated Hydrolysis		Hydrolytic half-life	8.75 minutes (t 1/2)	Other methods
(ethylenedioxy)dimethanol	3586-55-8	Experimental Biodegradation	14 days	BOD	90 % weight	OECD 301C - MITI test (I)
(ethylenedioxy)dimethanol	3586-55-8	Experimental Biodegradation	28 days	BOD	90 % weight	OECD 301D - Closed bottle test
Aluminium oxide	1344-28-1	No data available.	N/A	N/A	N/A	N/A
Naphtha (petroleum), hydrodesulphurised heavy	64742-82-1	Modeled Chemical Degradation		Photolytic half-life (in air)	12.99 days (t 1/2)	Other methods
Naphtha (petroleum), hydrodesulphurised heavy	64742-82-1	Laboratory Biodegradation	28 days	BOD	75 % weight	OECD 301F - Manometric respirometry
Distillates (petroleum), hydrotreated light	64742-47-8	No data available.	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
White mineral oil (petroleum)	8042-47-5	No data available.	N/A	N/A	N/A	N/A
(ethylenedioxy)dimethanol	3586-55-8	Experimental Bioconcentration		Bioaccumulation factor	10	Other methods
Aluminium oxide	1344-28-1	No data available.	N/A	N/A	N/A	N/A
Naphtha (petroleum),	64742-82-1	Laboratory BCF - Other		Bioaccumulation factor	>1000	Other methods

hydrodesulphurised heavy						
Distillates (petroleum), hydrotreated light	64742-47-8	No data available.	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. 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)
120109* Machining emulsions and solutions free of halogens

SECTION 14: Transportation information

ADR: UN1263 Paint, Class 3, III, F1, (+49 C)
IMDG: UN1263 Paint, Class 3, III, EmS: F-E, S-E
IATA: UN1263 Paint, Class 3, III

SECTION 15: Regulatory information

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

Global inventory status
Contact 3M for more information. 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 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. 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

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

List of relevant R-phrases

R10	Flammable.
R51/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R52	Harmful to aquatic organisms.
R65	Harmful: May cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Revision information:
Revision Changes:
Section 3: Composition/ Information of ingredients table was modified.
Section 9: Flammability (solid, gas) information was modified.
Section 11: Health Effects - Inhalation information was modified.
Section 7: Precautions safe handling information was modified.
Section 7: Conditions safe storage was modified.
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 14: Transportation classification was added.
Label: Signal Word - Header was added.

Label: Signal Word was added.
Label: CLP Classification - Header was added.
Label: CLP Classification was added.
Label: CLP Classification was added.
Label: CLP Classification - Header was added.
Label: CLP Percent Unknown was added.
Label: CLP Environmental Hazard Statements was added.
Label: Graphic was added.
Label: Graphic was added.
Label: Symbol was added.
Label: Symbol was added.
Label: CLP Precautionary - Disposal was added.
Label: CLP Precautionary - Disposal - Header was added.
Label: CLP Precautionary - Prevention was added.
Label: CLP Precautionary - Prevention - Header was added.
Label: CLP Precautionary - Response was added.
Label: CLP Precautionary - Response - Header was added.
Label: Precautionary Statement - Header was added.
CLP: Ingredient table was added.
Label: CLP Supplemental Hazard Statements was added.
Label: CLP Supplemental Hazard Statements - Header was added.
Label: CLP Supplemental Information - Header was added.
Section 2: Notes on labelling heading was added.
Section 15: Label remarks and EU Detergent was added.
CLP Remark(phrase) was added.
Section 2: 2.2 & 2.3. CLP REGULATION heading was added.
Label: CLP Ingredients table Ingredient heading was added.
Label: CLP Ingredients table CAS No heading was added.
Label: CLP Ingredients table Percent by Wt heading 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 was added.
Section 02: Graphic information was added.
Section 9: Flammability (solid, gas) information was added.
Section 1: Product identification numbers heading was deleted.
Section 1: Product identification numbers was deleted.
Section 2: Symbols heading was deleted.
Section 15: Symbol 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.

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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