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 Perfect-It III Fine Compound 09375

Product identification numbers

GC-8008-2825-0 GC-8008-5618-6 GC-8008-5619-4 GC-8008-5620-2 GC-8010-1451-2 GC-8010-4283-6

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

Identified uses

Industrial use.

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

2.2. Label elements

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

Symbols None.

Contains:

No ingredients are assigned to the label.

Risk phrases
R67 Vapours may cause drowsiness and dizziness.

Safety phrases
S2 Keep out of the reach of children.

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

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 - 90	
Aluminium oxide (REACH Reg. No.:01-2119529248-35)	1344-28-1	EINECS 215-691-6	10 - 20	
Distillates (petroleum), hydrotreated light	64742-47-8	EINECS 265-149-8	10 - 20	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)
Glycerol	56-81-5	EINECS 200-289-5	1 - 5	
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 - 1.0	N:R50 (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
Wash with soap and water. 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 carbon dioxide or dry chemical extinguisher for extinction.

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

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
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

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

6.3. Methods and material for containment and cleaning up
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Place in a closed 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
Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not use in a confined area or areas with little or no air movement. Store work clothes separately from other clothing, food and tobacco products. Keep out of reach of children. 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. Use personal protective equipment (eg. gloves, respirators…) as required.

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

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	
Glycerol	56-81-5	Health and Safety Comm. (UK)	TWA(as mist):10 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/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.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Skin/hand protection

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:	Thixotropic liquid.
Appearance/Odour	Paraffinic odour; White liquid
pH	7.7 - 8.5
Boiling point/boiling range	100 ºC
Melting point	*Not applicable.*

Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	*No data available.*
Autoignition temperature	*Not applicable.*
Flammable Limits(LEL)	*Not applicable.*
Flammable Limits(UEL)	*Not applicable.*
Vapour pressure	*No data available.*
Relative density	1.04 - 1.08 [*Ref Std:*WATER=1]
Water solubility	*No data available.*
Vapour density	1 [*Ref Std:*AIR=1]
Viscosity	28 - 33 Pa-s
Density	1.04 - 1.08 g/ml

9.2. Other information

Volatile organic compounds (VOC)	157.8 g/l [*Details:*EU Definition]

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

10.5 Incompatible materials
Alkali and alkaline earth metals.
Strong acids.

10.6 Hazardous decomposition products

Substance	Condition
Carbon dioxide.	Not specified.
Carbon monoxide.	Not specified.
Hydrocarbons.	Not specified.
Irritant vapours or gases.	Not specified.

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
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:
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.

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

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
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)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White mineral oil (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerol	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

Aluminium oxide		No data available
White mineral oil (petroleum)	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation
(Ethylenedioxy)dimethanol		No data available

Serious Eye Damage/Irritation

Name	Species	Value
Distillates (petroleum), hydrotreated light		Mild irritant
Aluminium oxide		No data available
White mineral oil (petroleum)	Rabbit	Mild irritant
Glycerol	Rabbit	No significant irritation
(Ethylenedioxy)dimethanol		No data available

Skin Sensitisation

Name	Species	Value
Distillates (petroleum), hydrotreated light		Not sensitizing
Aluminium oxide		No data available
White mineral oil (petroleum)	Guinea pig	Not sensitizing
Glycerol	Guinea pig	Not sensitizing
(Ethylenedioxy)dimethanol		No data available

Respiratory Sensitisation

Name	Species	Value
Distillates (petroleum), hydrotreated light		No data available
Aluminium oxide		No data available
White mineral oil (petroleum)		No data available
Glycerol		No data available
(Ethylenedioxy)dimethanol		No data available

Germ Cell Mutagenicity

Name	Route	Value
Distillates (petroleum), hydrotreated light	In Vitro	Not mutagenic
Aluminium oxide	In Vitro	Not mutagenic
White mineral oil (petroleum)	In Vitro	Not mutagenic
Glycerol		No data available
(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
Aluminium oxide	Inhalation		Not carcinogenic
White mineral oil (petroleum)	Dermal	Mouse	Not carcinogenic
White mineral oil (petroleum)	Inhalation	Multiple animal species	Not carcinogenic
Glycerol	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
(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	
Aluminium oxide		No data available			
White mineral oil	Ingestion	Not toxic to female	Rat	NOAEL	13 weeks

(petroleum)		reproduction		4,350 mg/kg/day	
White mineral oil (petroleum)	Ingestion	Not toxic to male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil (petroleum)	Ingestion	Not toxic to development	Rat	NOAEL 4,350 mg/kg/day	during gestation
Glycerol	Ingestion	Not toxic to female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not toxic to male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not toxic to development	Rat	NOAEL 2,000 mg/kg/day	2 generation
(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	
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			
Glycerol			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 classification		NOEL N/A	
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	Inhalation	hematopoietic	All data are		NOAEL 0.1	

(petroleum), hydrotreated light		system	negative		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	
Aluminium oxide	Inhalation	pneumoconiosis	May cause damage to organs though prolonged or repeated exposure		NOAEL N/A	
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	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,381 mg/kg/day	90 days
White mineral oil (petroleum)	Ingestion	liver | immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,336 mg/kg/day	90 days
Glycerol	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.91 mg/l	14 days
Glycerol	Inhalation	heart | liver | kidney and/or bladder	All data are negative	Rat	NOAEL 3.91 mg/l	14 days
Glycerol	Ingestion	endocrine system | hematopoietic system | liver | kidney and/or bladder	All data are negative	Rat	NOAEL 10,000 mg/kg/day	2 years
(Ethylenedioxy)dimethanol			No data available			

Aspiration Hazard

Name	Value
Distillates (petroleum), hydrotreated light	Aspiration hazard
Aluminium oxide	Not an aspiration hazard
White mineral oil (petroleum)	Aspiration hazard
Glycerol	Not an 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:
Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:
Not chronically toxic to aquatic life by GHS criteria.

No product test data available.
No component test data available.

12.2. Persistence and degradability
No test data available.

12.3 : Bioaccumulative potential
No test data available.

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. Proper destruction may require the use of additional fuel during incineration processes. Dispose of waste product in a permitted industrial waste 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

GC-8008-2825-0, GC-8008-5618-6, GC-8008-5619-4, GC-8008-5620-2, GC-8010-1451-2, GC-8010-4283-6

Not hazardous for transportation

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 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.

List of relevant R-phrases

R10	Flammable.
R50	Very toxic 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 8: Eye/face protection information was modified.
Section 8: Respiratory protection - recommended respirators information was modified.
Section 8: Respiratory protection - recommended respirators was modified.
Sections 3 and 9: Odor, color, grade information was modified.
Section 9: pH information was modified.
Section 1: Product use information was modified.
Section 16: List of relevant R phrase information was modified.
Section 3: Composition/ Information of ingredients table was modified.
Section 9: Relative density information was modified.
Section 9: Solubility in water text was modified.

Section 10: Materials to avoid physical property was modified.
Section 16: Regulations - Inventories - EU ONLY was modified.
Section 9: Vapour pressure value was modified.
Aspiration Hazard Table 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 5: Fire - Extinguishing media 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 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: Skin protection - recommended gloves information was added.
Section 8: Respiratory protection - recommended respirators guide was added.
Section 8: Skin protection - recommended gloves text was added.
Section 11: Carcinogenicity heading was added.
Section 11: Cancer Hazards information was added.
Section 8: Personal Protection - Respiratory Information was added.
Section 2: Label remarks was deleted.
Section 11: UN GHS Classification table heading was deleted.
Section 8: Personal Protection - Skin/hand 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.

3M United Kingdom MSDSs are available at www.3M.com/uk