



Safety Data Sheet

Copyright, 2020, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document Group:	41-1489-8	Version Number:	1.01
Issue Date:	25/03/2020	Supersedes Date:	29/10/2019

The safety data sheet has been prepared in accordance with the Circular no. 32/2017/TT-BCT, specifying and providing guidelines for implementation of certain articles of the law on chemicals and the government's degree no. 113/2017/ND-CP dated October 09, 2017 specifying and providing guidelines for implementation of certain articles of the law on chemicals, by the Ministry of Industry and Trade.

SECTION 1: Identification

1.1. Product identifier

3M 1 Step Finish Compound

1.1.1 CAS Number Not Applicable

1.1.2 UN Number None assigned

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Castrol Cobranded product range of pro-care

1.3. Supplier's details

ADDRESS:	3M Vietnam Limited 20/F Mapletree Business Center 1060 Nguyen Van Linh Street, Tan Phong Ward, District 7, Ho Chi Minh City, Vietnam
Telephone:	+84 28 5416 0429
E Mail:	NULL

Website: https://www.3m.com.vn/3M/vi_VN/company-vn/

1.4. Emergency telephone number

+84 28 5416 0429

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Skin Corrosion/Irritation: Category 3.

Acute Aquatic Toxicity: Category 2.

Chronic Aquatic Toxicity: Category 2.

2.2. Label elements

3M 1 Step Finish Compound

Signal word

Warning

Symbols

Environment |

Pictograms



Hazard Statements

H316

Causes mild skin irritation.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:

P273

Avoid release to the environment.

Response:

P332 + P313

If skin irritation occurs: Get medical advice/attention.

Disposal:

P501

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

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	40 - 70
Aluminum Oxide (non-fibrous)	1344-28-1	10 - 30
N-Decane	124-18-5	10 - 30
Castor Oil	8001-79-4	1 - 5
Isodecane	34464-38-5	1 - 5
Diethanolamine	111-42-2	0 - 1

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.

3M 1 Step Finish Compound

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. Suitable extinguishing media

Material will not burn.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Irritant Vapors or Gases	During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters 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 vapors, in accordance with good industrial hygiene practice. 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 dikes 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 detergent and water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

3M 1 Step Finish Compound

Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/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 (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Diethanolamine	111-42-2	ACGIH	TWA(inhalable fraction and vapor):1 mg/m3	A3: Confirmed animal carcin., Danger of cutaneous absorption
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin

ACGIH : American Conference of Governmental Industrial Hygienists

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

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/vapors/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: Neoprene

Nitrile Rubber

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 vapors 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:	Slurry
Color	White
Odor	Fragrant
Odor threshold	<i>Not Applicable</i>
pH	7.5 - 8.5
Melting point/Freezing point	<i>Not Applicable</i>
Boiling point/Initial boiling point/Boiling range	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	<i>No Data Available</i>
Density	0.95 g/ml
Relative Density	0.9 - 1.1 [Ref Std: WATER=1]
Water solubility	Moderate
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>Not Applicable</i>
Viscosity	70,000 - 100,000 mPa-s

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 polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

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 labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

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

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. May cause additional health effects (see below).

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 diarrhea.

Additional Health Effects:

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
N-Decane	Dermal	Rat	LD50 > 2,000 mg/kg
N-Decane	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 15.9 mg/l
N-Decane	Ingestion	Rat	LD50 > 5,000 mg/kg
Aluminum Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Castor Oil	Dermal		LD50 estimated to be > 5,000
Castor Oil	Ingestion		LD50 estimated to be > 5,000
Diethanolamine	Dermal	Rabbit	LD50 8,180 mg/kg
Diethanolamine	Ingestion	Rat	LD50 1,410 mg/kg

ATE = acute toxicity estimate

3M 1 Step Finish Compound**Skin Corrosion/Irritation**

Name	Species	Value
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Castor Oil	Human	Minimal irritation
Diethanolamine	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Castor Oil	Rabbit	Mild irritant
Diethanolamine	Rabbit	Severe irritant

Skin Sensitization

Name	Species	Value
Castor Oil	Human	Not classified
Diethanolamine	Human and animal	Not classified

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Aluminum Oxide (non-fibrous)	In Vitro	Not mutagenic
Castor Oil	In Vitro	Not mutagenic
Castor Oil	In vivo	Not mutagenic
Diethanolamine	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic
Diethanolamine	Dermal	Mouse	Carcinogenic

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Diethanolamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 97 mg/kg/day	13 weeks
Diethanolamine	Dermal	Not classified for development	Rabbit	NOAEL 100 mg/kg/day	during organogenesis
Diethanolamine	Ingestion	Not classified for development	Rat	NOAEL 50 mg/kg/day	during organogenesis

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Diethanolamine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL not available	
Diethanolamine	Ingestion	kidney and/or bladder	May cause damage to organs	Rat	NOAEL 200 mg/kg	not applicable

3M 1 Step Finish Compound

Diethanolamine	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 200 mg/kg	not applicable
Diethanolamine	Ingestion	liver	Not classified	Rat	NOAEL 1,600 mg/kg	not applicable

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Castor Oil	Ingestion	heart hematopoietic system liver	Not classified	Rat	NOAEL 4,800 mg/kg/day	13 weeks
Castor Oil	Ingestion	kidney and/or bladder	Not classified	Mouse	NOAEL 13,000 mg/kg/day	13 weeks
Diethanolamine	Dermal	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 32 mg/kg/day	13 weeks
Diethanolamine	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8 mg/kg/day	2 years
Diethanolamine	Dermal	liver	Not classified	Rat	NOAEL 500 mg/kg/day	13 weeks
Diethanolamine	Inhalation	liver kidney and/or bladder	Not classified	Rat	NOAEL 0.03 mg/l	13 weeks
Diethanolamine	Ingestion	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 14 mg/kg/day	13 weeks
Diethanolamine	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 57 mg/kg/day	13 weeks
Diethanolamine	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL not available	13 weeks
Diethanolamine	Ingestion	liver	Not classified	Rat	NOAEL 436 mg/kg/day	13 weeks

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

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 labeling, 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 2: Toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects

3M 1 Step Finish Compound

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Aluminum Oxide (non-fibrous)	1344-28-1		Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Water flea	Experimental	48 hours	Lethal Concentration 50%	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	No obs Effect Conc	>100 mg/l
N-Decane	124-18-5	Rainbow Trout	Estimated	96 hours	Lethal Level 50%	>10 mg/l
N-Decane	124-18-5	Scud	Experimental	96 hours	Lethal Level 50%	>1,000 mg/l
N-Decane	124-18-5	Sheepshead Minnow	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
N-Decane	124-18-5	Green algae	Experimental	72 hours	No obs Effect Conc	100 mg/l
Castor Oil	8001-79-4	Zebra Fish	Estimated	96 hours	Lethal Concentration 50%	>100 mg/l
Isodecane	34464-38-5	Fathead Minnow	Estimated	96 hours	Lethal Concentration 50%	0.9 mg/l
Diethanolamine	111-42-2	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	100 mg/l
Diethanolamine	111-42-2	Green algae	Experimental	72 hours	Effect Concentration 50%	9.5 mg/l
Diethanolamine	111-42-2	Water flea	Experimental	48 hours	Lethal Concentration 50%	2.15 mg/l
Diethanolamine	111-42-2	Green algae	Experimental	72 hours	No obs Effect Conc	0.6 mg/l
Diethanolamine	111-42-2	Water flea	Experimental	21 days	No obs Effect Conc	0.78 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Aluminum Oxide (non-fibrous)	1344-28-1	Data not available- insufficient			N/A	
N-Decane	124-18-5	Experimental Photolysis		Photolytic half-life (in air)	2.4 days (t 1/2)	Other methods
N-Decane	124-18-5	Estimated	28 days	Biological	80 %	OECD 301F -

3M 1 Step Finish Compound

		Biodegradation		Oxygen Demand	BOD/ThBOD	Manometric Respiro
Castor Oil	8001-79-4	Estimated Biodegradation	28 days	Biological Oxygen Demand	64 % weight	OECD 301D - Closed Bottle Test
Isodecane	34464-38-5	Estimated Photolysis		Photolytic half-life (in air)	2.45 days (t _{1/2})	Other methods
Diethanolamine	111-42-2	Experimental Biodegradation	10 days	Biological Oxygen Demand	72 % weight	OECD 301D - Closed Bottle Test

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Aluminum Oxide (non-fibrous)	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
N-Decane	124-18-5	Estimated Bioconcentration		Bioaccumulation Factor	390	Est: Bioconcentration factor
Castor Oil	8001-79-4	Estimated Bioconcentration		Bioaccumulation Factor	7.4	Est: Bioconcentration factor
Isodecane	34464-38-5	Estimated Bioconcentration		Bioaccumulation Factor	1257	Est: Bioconcentration factor
Diethanolamine	111-42-2	Experimental Bioconcentration		Log of Octanol/H ₂ O part. coeff	-2.18	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available

SECTION 13: Disposal considerations**13.1. Disposal methods**

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.

SECTION 14: Transport Information

Not hazardous for transportation.

Marine Transport (IMDG)

3M 1 Step Finish Compound

UN Number:None assigned.
Proper Shipping Name:None assigned.
Technical Name:None assigned.
Hazard Class/Division:None assigned.
Subsidiary Risk:None assigned.
Packing Group:None assigned.
Limited Quantity:None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Air Transport (IATA)

UN Number:None assigned.
Proper Shipping Name:None assigned.
Technical Name:None assigned.
Hazard Class/Division:None assigned.
Subsidiary Risk:None assigned.
Packing Group:None assigned.
Limited Quantity:None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

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.

SECTION 16: Other information

Revision information:

Section 01: Product name information was modified.
Section 07: Precautions safe handling information information was modified.
Section 08: Occupational exposure limit table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 16: UK disclaimer information was deleted.
Vietnam Section 1: 1.1.1. CAS Number Heading information was added.
Vietnam Section 1: 1.1.1. CAS Number information was added.
Vietnam Section 1:1.1.2 UN Number Heading information was added.
Vietnam Section 1:1.1.2 UN Number information was added.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our

3M 1 Step Finish Compound

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 Vietnam SDSs are available at https://www.3m.com.vn/3M/vi_VN/company-vn/