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™ Scotch-Weld™ Epoxy Potting Compound/Adhesive 270 Black, Part A

Product Identification Numbers

62-3366-8530-0

7000046463

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

Identified uses

Structural adhesive.

1.3. Details of the supplier of the safety data sheet

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

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.
This material has been tested for eye damage/irritation and the test results are reflected in the assigned classification.
This material has been tested for skin corrosion/irritation and the test results are reflected in the assigned classification.

CLASSIFICATION:
Acute Toxicity, Category 4 - Acute Tox. 4; H302
Acute Toxicity, Category 3 - Acute Tox. 3; H311
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Reproductive Toxicity, Category 2 - Repr. 2; H361
Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400
Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

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

SIGNAL WORD
DANGER.

Symbols
GHS06 (Skull and crossbones) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms

Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
4-nonylphenol, branched	84852-15-3	284-325-5	40 - 60
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	229-962-1	15 - 40
benzyl alcohol	100-51-6	202-859-9	1 - 10

HAZARD STATEMENTS:

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H410	Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P273	Avoid release to the environment.
P280C	Wear protective gloves and protective clothing.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391	Collect spillage.

For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H311	Toxic in contact with skin.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.

<=125 ml Precautionary statements

Prevention:

P280C	Wear protective gloves and protective clothing.

10% of the mixture consists of components of unknown acute oral toxicity.
10% of the mixture consists of components of unknown acute dermal toxicity.

Contains 10% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4-nonylphenol, branched	(CAS-No.) 84852-15-3 (EC-No.) 284-325-5 (REACH-No.) 01-2119510715-45	40 - 60	Acute Tox. 4, H302 Skin Corr. 1B, H314 Repr. 2, H361df Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	(CAS-No.) 6864-37-5 (EC-No.) 229-962-1 (REACH-No.) 01-2119497829-12	15 - 40	Acute Tox. 2, H330 Acute Tox. 3, H311 Acute Tox. 4, H302 Skin Corr. 1A, H314 Aquatic Chronic 2, H411
Phenol, 2-nonyl-, branched	(CAS-No.) 91672-41-2 (EC-No.) 294-048-1	< 10	Substance not classified as hazardous
benzyl alcohol	(CAS-No.) 100-51-6 (EC-No.) 202-859-9	1 - 10	Acute Tox. 4, H332 Acute Tox. 4, H302
Dibenzyl Ether	(CAS-No.) 103-50-4 (EC-No.) 203-118-2	< 0.5	Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

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

Skin contact
Immediately wash with soap and water. Remove contaminated clothing. Get medical attention. Wash clothing before reuse.

Eye contact
Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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
No critical symptoms or effects. 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
Amine compounds.	During combustion.
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Oxides of nitrogen.	During combustion.
Toxic vapour, gas, particulate.	During combustion.

5.3. Advice for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

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. 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 metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections
Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling
For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. Avoid breathing 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. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) 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 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
No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

Biological limit values
No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

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:
Indirect vented goggles.

Applicable Norms/Standards
Use eye protection conforming to EN 166

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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	No data available	No data available

Applicable Norms/Standards
Use gloves tested to EN 374

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

For questions about suitability for a specific application, consult with your respirator manufacturer.

Applicable Norms/Standards
Use a respirator conforming to EN 140 or EN 136: filter type A

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless
Odor	Very Mild Odor, Pungent Odor
Odour threshold	*No data available.*
Melting point/freezing point	*No data available.*
Boiling point/boiling range	205 ºC [*Details:*CONDITIONS: @ 760mm Hg (benzyl alcohol)]
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Flash point	> 115.6 ºC [*Test Method:*Closed Cup]
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
pH	
Kinematic Viscosity	13,500 mm²/sec
Water solubility	Slight (less than 10%)
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Vapour pressure	13.3 Pa [*Details:*CONDITIONS: @ 86F (30C); 13.3mm Hg @ 212F (100C).]
Density	1 g/ml
Relative density	1 [*Ref Std:*WATER=1]
Relative Vapor Density	3.72 [*Ref Std:*AIR=1]

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	*No data available.*
Evaporation rate	*No data available.*
Molecular weight	*No data available.*

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
Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

10.5 Incompatible materials
Strong acids.
Strong oxidising agents.

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 internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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
Toxic in contact with skin.
Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain.

Eye contact
Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion
Harmful if swallowed.
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Reproductive/Developmental Toxicity:
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

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 ATE200 - 1,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE300 - 2,000 mg/kg
4-nonylphenol, branched	Dermal	Rabbit	LD50 > 2,000 mg/kg
4-nonylphenol, branched	Ingestion	Rat	LD50 1,531 mg/kg
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Dermal	Rabbit	LD50 > 200 mg/kg
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.42 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Ingestion	Rat	LD50 > 320 mg/kg
benzyl alcohol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 8.8 mg/l
benzyl alcohol	Ingestion	Rat	LD50 1,230 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	In vitro data	Irritant
4-nonylphenol, branched	Rabbit	Corrosive
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Rabbit	Corrosive
benzyl alcohol	Multiple animal species	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	similar health hazards	Severe irritant
4-nonylphenol, branched	Rabbit	Corrosive
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Rabbit	Corrosive
benzyl alcohol	Rabbit	Severe irritant

Skin Sensitisation

Name	Species	Value
4-nonylphenol, branched	Guinea pig	Not classified
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Guinea	Not classified

	pig	
benzyl alcohol	Human and animal	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
4-nonylphenol, branched	In Vitro	Not mutagenic
4-nonylphenol, branched	In vivo	Not mutagenic
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	In Vitro	Not mutagenic
benzyl alcohol	In vivo	Not mutagenic
benzyl alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
benzyl alcohol	Ingestion	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
4-nonylphenol, branched	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	28 days
4-nonylphenol, branched	Ingestion	Toxic to female reproduction	official classification	NOAEL Not available	
4-nonylphenol, branched	Ingestion	Toxic to development	official classification	NOAEL Not available	
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Ingestion	Not classified for male reproduction	Rat	NOAEL 12 mg/kg/day	3 months
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Inhalation	Not classified for male reproduction	Rat	NOAEL 0.048 mg/l	3 months
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Ingestion	Not classified for development	Rat	NOAEL 45 mg/kg/day	during gestation
benzyl alcohol	Ingestion	Not classified for development	Mouse	NOAEL 550 mg/kg/day	during organogenesis

Lactation

Name	Route	Species	Value
4-nonylphenol, branched	Ingestion	Rat	Not classified for effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	
benzyl alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
benzyl alcohol	Inhalation	respiratory irritation	Some positive data exist, but the		NOAEL Not	

			data are not sufficient for classification		available	
benzyl alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
4-nonylphenol, branched	Ingestion	endocrine system | hematopoietic system | liver	Not classified	Rat	NOAEL 400 mg/kg/day	28 days
4-nonylphenol, branched	Ingestion	kidney and/or bladder | heart | bone, teeth, nails, and/or hair | immune system | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 150 mg/kg/day	90 days
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.012 mg/l	3 months
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Inhalation	endocrine system | liver | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 0.048 mg/l	3 months
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Inhalation	skin	Not classified	Human	NOAEL Not available	occupational exposure
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.5 mg/kg/day	3 months
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Ingestion	hematopoietic system | liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 12 mg/kg/day	3 months
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Ingestion	endocrine system | kidney and/or bladder	Not classified	Rat	NOAEL 60 mg/kg/day	3 months
benzyl alcohol	Ingestion	endocrine system | muscles | kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	13 weeks
benzyl alcohol	Ingestion	nervous system | respiratory system	Not classified	Mouse	NOAEL 645 mg/kg/day	8 days

Aspiration Hazard
For the component/components, either no data is currently available or the data is 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.

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

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 #	Organism	Type	Exposure	Test endpoint	Test result
4-nonylphenol, branched	84852-15-3	Crustacea other	Experimental	96 hours	EC50	0.043 mg/l
4-nonylphenol, branched	84852-15-3	Diatom	Experimental	96 hours	EC50	0.027 mg/l
4-nonylphenol, branched	84852-15-3	Fathead minnow	Experimental	96 hours	LC50	0.128 mg/l
4-nonylphenol, branched	84852-15-3	Crustacea other	Experimental	28 days	NOEC	0.0039 mg/l
4-nonylphenol, branched	84852-15-3	Fathead minnow	Experimental	33 days	NOEC	0.0074 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Activated sludge	Experimental	30 minutes	EC20	160 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Bacteria	Experimental	17 hours	EC50	96 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Green Algae	Experimental	72 hours	EC50	7.9 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Medaka	Experimental	96 hours	LC50	22 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Water flea	Experimental	48 hours	EC50	4.6 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Green Algae	Experimental	72 hours	NOEC	0.13 mg/l
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Water flea	Experimental	21 days	NOEC	4 mg/l
benzyl alcohol	100-51-6	Activated sludge	Experimental	3 hours	EC50	1,385 mg/l
benzyl alcohol	100-51-6	Fathead minnow	Experimental	96 hours	LC50	460 mg/l
benzyl alcohol	100-51-6	Green Algae	Experimental	72 hours	EC50	770 mg/l
benzyl alcohol	100-51-6	Water flea	Experimental	48 hours	EC50	230 mg/l
benzyl alcohol	100-51-6	Green Algae	Experimental	72 hours	NOEC	310 mg/l
benzyl alcohol	100-51-6	Water flea	Experimental	21 days	NOEC	51 mg/l
Phenol, 2-nonyl-, branched	91672-41-2		Data not available or insufficient for classification			N/A
Dibenzyl Ether	103-50-4	Green Algae	Experimental	72 hours	EC50	4.1 mg/l
Dibenzyl Ether	103-50-4	Medaka	Experimental	96 hours	LC50	6.8 mg/l
Dibenzyl Ether	103-50-4	Water flea	Experimental	48 hours	EC50	0.77 mg/l
Dibenzyl Ether	103-50-4	Green Algae	Experimental	72 hours	NOEC	1 mg/l
Dibenzyl Ether	103-50-4	Water flea	Experimental	21 days	NOEC	0.098 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
4-nonylphenol, branched	84852-15-3	Estimated Photolysis		Photolytic half-life (in air)	7.5 hours (t 1/2)	Non-standard method
4-nonylphenol, branched	84852-15-3	Experimental	28 days	CO2 evolution	53 % weight	OECD 301B - Modified

		Biodegradation				sturm or CO2
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
benzyl alcohol	100-51-6	Experimental Biodegradation	14 days	BOD	94 % BOD/ThBOD	OECD 301C - MITI test (I)
Phenol, 2-nonyl-, branched	91672-41-2	Data not availbl-insufficient			N/A	
Dibenzyl Ether	103-50-4	Experimental Biodegradation	14 days	BOD	0 % weight	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
4-nonylphenol, branched	84852-15-3	Experimental BCF - Other	16 days	Bioaccumulation factor	2168	Non-standard method
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	6864-37-5	Experimental BCF-Carp	60 days	Bioaccumulation factor	60	OECD 305E - Bioaccumulation flow-through fish test
benzyl alcohol	100-51-6	Experimental Bioconcentration		Log Kow	1.10	Non-standard method
Phenol, 2-nonyl-, branched	91672-41-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Dibenzyl Ether	103-50-4	Experimental BCF-Carp	14 days	Bioaccumulation factor	<=429	Non-standard method

12.4. Mobility in soil
No test data available.

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

12.7. 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.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product 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.

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 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN2810	UN2810	UN2810
14.2 UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S.(4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE))	TOXIC LIQUID, ORGANIC, N.O.S.(4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE))	TOXIC LIQUID, ORGANIC, N.O.S.(4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE); 4-NONYL PHENOL,BRANCHED)
14.3 Transport hazard class(es)	6.1	6.1	6.1
14.4 Packing group	III	III	III
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No Data Available	No Data Available
Control Temperature	No data available.	No Data Available	No Data Available
Emergency Temperature	No data available.	No Data Available	No Data Available
ADR Tunnel Code	(E)	Not Applicable	Not Applicable
ADR Classification Code	T1	Not Applicable	Not Applicable
ADR Transport Category	2	Not Applicable	Not Applicable
ADR Multiplier	3	0	0
IMDG Segregation Code	Not applicable.	Not Applicable	NONE

Transport not Permitted	Not applicable.	X	Not Applicable

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Authorization status under REACH:
The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

Ingredient	CAS Nbr
4-nonylphenol, branched	84852-15-3

Authorization status: listed in the Candidate List of Substances of Very High Concern for Authorization

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. 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. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H361df	Suspected of damaging fertility. Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Revision information:
EU Section 09: pH information information was added.
Label: CLP Classification information was modified.
Label: CLP Precautionary - Disposal information was deleted.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Precautionary - Response information was modified.
Section 03: Composition table % Column heading information was added.
Section 3: Composition/ Information of ingredients table information was modified.
Section 03: Substance not applicable information was added.
Section 04: Information on toxicological effects information was modified.
Section 9: Evaporation Rate information information was deleted.
Section 9: Explosive properties information information was deleted.
Section 09: Kinematic Viscosity information information was added.
Section 9: Melting point information information was modified.
Section 9: Oxidising properties information information was deleted.
Section 9: pH information information was deleted.
Section 9: Property description for optional properties information was modified.
Section 9: Vapour density value information was added.
Section 9: Vapour density value information was deleted.
Section 9: Viscosity information information was deleted.
Section 11: Classification disclaimer information was modified.
Section 11: No endocrine disruptor information available warning information was added.
Section 11: Reproductive Hazards information information was deleted.
Section 11: Reproductive/developmental effects information information was added.
Section 12: 12.6. Endocrine Disrupting Properties information was added.
Section 12: 12.7. Other adverse effects information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Contact manufacturer for more detail. information was deleted.
Section 12: No Data text for mobility in soil information was added.
Section 12: No endocrine disruptor information available warning information was added.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 14 Classification Code – Main Heading information was added.
Section 14 Classification Code – Regulation Data information was added.
Section 14 Control Temperature – Main Heading information was added.
Section 14 Control Temperature – Regulation Data information was added.
Section 14 Disclaimer Information information was added.
Section 14 Emergency Temperature – Main Heading information was added.
Section 14 Emergency Temperature – Regulation Data information was added.
Section 14 Hazard Class + Sub Risk – Main Heading information was added.
Section 14 Hazard Class + Sub Risk – Regulation Data information was added.
Section 14 Hazardous/Not Hazardous for Transportation information was added.
Section 14 Multiplier – Main Heading information was added.
Section 14 Multiplier – Regulation Data information was added.
Section 14 Other Dangerous Goods – Main Heading information was added.
Section 14 Other Dangerous Goods – Regulation Data information was added.
Section 14 Packing Group – Main Heading information was added.
Section 14 Packing Group – Regulation Data information was added.
Section 14 Proper Shipping Name information was added.
Section 14 Regulations – Main Headings information was added.
Section 14 Segregation – Regulation Data information was added.
Section 14 Segregation Code – Main Heading information was added.
Section 14 Special Precautions – Main Heading information was added.
Section 14 Special Precautions – Regulation Data information was added.
Section 14 Transport Category – Main Heading information was added.
Section 14 Transport Category – Regulation Data information was added.

Section 14 Transport in bulk – Regulation Data information was added.
Section 14 Transport in bulk according to Annex II of Marpol and the IBC Code – Main Heading information was added.
Section 14 Transport Not Permitted – Main Heading information was added.
Section 14 Transport Not Permitted – Regulation Data information was added.
Section 14 Tunnel Code – Main Heading information was added.
Section 14 Tunnel Code – Regulation Data information was added.
Section 14 UN Number Column data information was added.
Section 14 UN Number information was added.
Section 15: Label remarks and EU Detergent information was deleted.
Section 15: Regulations - Inventories information was added.

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