Safety Data Sheet

Document group:	31-5491-1	**Version number:**	7.00
Revision date:	04/09/2019	**Supersedes date:**	12/07/2019

Transportation version number: 11.00 (06/08/2018)

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
3M(TM) Scotch-Weld(TM) Acrylic Adhesive DP8405NS, Green

Product Identification Numbers
62-2856-1445-9 62-2856-3630-4

7100009688 7100011056

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

Identified uses
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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the MSDSs for components of this product are:

31-5470-5, 31-5479-6

TRANSPORTATION INFORMATION

62-2856-1445-9

ADR/RID: UN1133, ADHESIVES, LIMITED QUANTITY, 3., II , (E), ADR Classification Code: F1.
IMDG-CODE: UN1133, ADHESIVES, 3., II , IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FE,SD.

ICAO/IATA: UN1133, ADHESIVES, 3., II .

62-2856-3630-4

ADR/RID: UN1133, ADHESIVES, LIMITED QUANTITY, 3., II , (E), ADR Classification Code: F1.
IMDG-CODE: UN1133, ADHESIVES, 3., II , IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FE,SD.
ICAO/IATA: UN1133, ADHESIVES, 3., II .

KIT LABEL

2.1. Classification of the substance or mixture
CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:
Flammable Liquid, Category 2 - Flam. Liq. 2; H225
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

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

SIGNAL WORD
DANGER.

Symbols:
GHS02 (Flame) |GHS07 (Exclamation mark) |GHS09 (Environment) |

Pictograms

Contains:
Tert-butyl 3,5,5-trimethylperoxyhexanoate; Methyl methacrylate; 2-hydroxyethyl methacrylate

HAZARD STATEMENTS:

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261A	Avoid breathing vapours.
P280E	Wear protective gloves.

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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Disposal:

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

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

<=125 ml Hazard statements

H317	May cause an allergic skin reaction.

<=125 ml Precautionary statements

Prevention:

P280E	Wear protective gloves.

Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Refer to Safety Data Sheet for component % unknown values (www.3M.com/msds).

Revision information:
Label: CLP Classification information was modified.
Label: CLP Environmental Hazard Statements information was modified.

Safety Data Sheet

Document group:	31-5479-6	**Version number:**	7.00
Revision date:	04/09/2019	**Supersedes date:**	14/06/2019

Transportation version number: 1.00 (29/08/2013)

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(TM) Scotch-Weld(TM) Acrylic Adhesive DP8405NS, Green, Part B

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

Identified uses
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

CLASSIFICATION:
Flammable Liquid, Category 2 - Flam. Liq. 2; H225
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335

For full text of H phrases, see Section 16.

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

SIGNAL WORD

DANGER.

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

Pictograms

Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
Methyl methacrylate	80-62-6	201-297-1	45 - 65
2-Hydroxyethyl methacrylate	868-77-9	212-782-2	0.1 - 10

HAZARD STATEMENTS:

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

PRECAUTIONARY STATEMENTS

Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261A	Avoid breathing vapours.
P280E	Wear protective gloves.

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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

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

<=125 ml Hazard statements

H317	May cause an allergic skin reaction.

<=125 ml Precautionary statements

Prevention:

P280E	Wear protective gloves.

Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Contains 4% of components with unknown hazards to the aquatic environment.

Notes on labelling

Nota L applied to CAS # 64742-55-8.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Methyl methacrylate	80-62-6	201-297-1	01-2119452498-28	45 - 65	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 - Nota D
Acrylonitrile - butadiene polymer	9003-18-3			1 - 20	Substance not classified as hazardous
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret			1 - 20	Substance with a Community level exposure limit in the workplace
2-Hydroxyethyl methacrylate	868-77-9	212-782-2	01-2119490169-29	0.1 - 10	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 - Nota D
BIS-MEPP (polymer)	41637-38-1			0.1 - 10	Substance not classified as hazardous
Dispersing Agent (NJTS Reg. No. 04499600-6929)	Trade Secret			0.1 - 5	Substance not classified as hazardous
Phosphate Esters of PPG Methacrylate	95175-93-2			< 3	Skin Irrit. 2, H315; Eye Dam. 1, H318
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	265-158-7		< 1	Nota L Asp. Tox. 1, H304
Naphthenic acids, copper salts	1338-02-9	215-657-0		< 0.2	Flam. Liq. 3, H226; Acute Tox. 4, H302; Aquatic Acute 1, H400,M=10; 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 and wash before reuse. If signs/symptoms develop, get medical attention.

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
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 such as dry chemical or carbon dioxide to extinguish.

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
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	During combustion.
Oxides of nitrogen.	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. When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus,tunic and trousers (leggings),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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) 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 physical, health, or environmental 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 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
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

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
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	CAS Nbr	Agency	Limit type	Additional comments
Methyl methacrylate	80-62-6	UK HSC	TWA:208 mg/m3(50 ppm);STEL:416 mg/m3(100 ppm)	
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	UK HSC	TWA(as inhalable dust):10 mg/m3;TWA(as respirable dust):2 mg/m3	

UK HSC : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

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

Derived no effect level (DNEL)

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
2-Hydroxyethyl methacrylate		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	1.3 mg/kg bw/d
2-Hydroxyethyl methacrylate		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	4.9 mg/m³

Predicted no effect concentrations (PNEC)

Ingredient	Degradation Product	Compartment	PNEC
2-Hydroxyethyl methacrylate		Agricultural soil	0.476 mg/kg d.w.
2-Hydroxyethyl methacrylate		Freshwater	0.482 mg/l
2-Hydroxyethyl methacrylate		Freshwater sediments	3.79 mg/kg d.w.
2-Hydroxyethyl methacrylate		Intermittent releases to water	1 mg/l
2-Hydroxyethyl methacrylate		Marine water	0.482 mg/l
2-Hydroxyethyl methacrylate		Marine water sediments	3.79 mg/kg d.w.
2-Hydroxyethyl methacrylate		Sewage Treatment Plant	10 mg/l

Recommended monitoring procedures: Information on recommended monitoring procedures can be obtained from UK HSC

8.2. Exposure controls

In addition, refer to the annex for more information.

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. Use explosion-proof ventilation 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
Butyl rubber.	0.5	> 8 hours

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing.

Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

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 and particulates

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 types A & P

8.2.3. Environmental exposure controls
Refer to Annex

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid.
Colour	White
Specific Physical Form:	Paste
Odor	Methacrylate
Odour threshold	*No data available.*
pH	*Not applicable.*
Boiling point/boiling range	>=37.8 ºC
Melting point	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	>=10 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	1.07 [*Ref Std:*WATER=1]
Water solubility	Nil
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*No data available.*
Vapour density	*No data available.*
Decomposition temperature	*No data available.*
Viscosity	50,000 - 80,000 mPa-s
Density	1.07 g/ml

9.2. Other information

EU Volatile Organic Compounds	*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.
Sparks and/or flames.

10.5 Incompatible materials
Amines.
Strong acids.
Strong bases.
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 3M assessments.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact
Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

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

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell.

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	Inhalation-Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Methyl methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Methyl methacrylate	Inhalation-Vapour (4 hours)	Rat	LC50 29 mg/l
Methyl methacrylate	Ingestion	Rat	LD50 7,900 mg/kg
Acrylonitrile - butadiene polymer	Dermal	Rabbit	LD50 > 15,000 mg/kg
Acrylonitrile - butadiene polymer	Ingestion	Rat	LD50 > 30,000 mg/kg
BIS-MEPP (polymer)	Dermal	Rat	LD50 > 2,000 mg/kg
BIS-MEPP (polymer)	Ingestion	Rat	LD50 > 35,000 mg/kg
Fillers (NJTS Reg. No. 04499600-6923)	Dermal		LD50 estimated to be > 5,000 mg/kg
Fillers (NJTS Reg. No. 04499600-6923)	Ingestion	Human	LD50 > 15,000 mg/kg
2-Hydroxyethyl methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
2-Hydroxyethyl methacrylate	Ingestion	Rat	LD50 5,564 mg/kg
Phosphate Esters of PPG Methacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Phosphate Esters of PPG Methacrylate	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
Naphthenic acids, copper salts	Dermal	similar compounds	LD50 > 2,000 mg/kg
Naphthenic acids, copper salts	Ingestion	similar compounds	LD50 >300, < 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl methacrylate	Human and animal	Mild irritant
Acrylonitrile - butadiene polymer	Professional judgement	No significant irritation
BIS-MEPP (polymer)	Rabbit	Minimal irritation
Fillers (NJTS Reg. No. 04499600-6923)	Professional judgement	No significant irritation
2-Hydroxyethyl methacrylate	Rabbit	Minimal irritation
Phosphate Esters of PPG Methacrylate	Not available	Irritant
Naphthenic acids, copper salts	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Methyl methacrylate	Rabbit	Moderate irritant
Acrylonitrile - butadiene polymer	Professional judgement	No significant irritation
BIS-MEPP (polymer)	Rabbit	No significant irritation
Fillers (NJTS Reg. No. 04499600-6923)	Professional judgement	No significant irritation
2-Hydroxyethyl methacrylate	Rabbit	Moderate irritant
Phosphate Esters of PPG Methacrylate	Not available	Corrosive
Naphthenic acids, copper salts	In vitro data	No significant irritation

Skin Sensitisation

Name	Species	Value
Methyl methacrylate	Human and animal	Sensitising
BIS-MEPP (polymer)	Guinea pig	Not classified
2-Hydroxyethyl methacrylate	Human and animal	Sensitising
Naphthenic acids, copper salts	Guinea pig	Not classified

Respiratory Sensitisation

Name	Species	Value
Methyl methacrylate	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Methyl methacrylate	In vivo	Not mutagenic
Methyl methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
BIS-MEPP (polymer)	In Vitro	Not mutagenic
2-Hydroxyethyl methacrylate	In vivo	Not mutagenic
2-Hydroxyethyl methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Methyl methacrylate	Ingestion	Rat	Not carcinogenic
Methyl methacrylate	Inhalation	Human and animal	Not carcinogenic
Fillers (NJTS Reg. No. 04499600-6923)	Inhalation	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure

					Duration
Methyl methacrylate	Inhalation	Not classified for male reproduction	Mouse	NOAEL 36.9 mg/l	
Methyl methacrylate	Inhalation	Not classified for development	Rat	NOAEL 8.3 mg/l	during organogenesis
2-Hydroxyethyl methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-Hydroxyethyl methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	49 days
2-Hydroxyethyl methacrylate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
Phosphate Esters of PPG Methacrylate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl methacrylate	Dermal	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Methyl methacrylate	Inhalation	olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Methyl methacrylate	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	14 weeks
Methyl methacrylate	Inhalation	liver	Not classified	Mouse	NOAEL 12.3 mg/l	14 weeks
Methyl methacrylate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Fillers (NJTS Reg. No. 04499600-6923)	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Fillers (NJTS Reg. No. 04499600-6923)	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	

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.

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
Methyl methacrylate	80-62-6	Green Algae	Experimental	72 hours	EC50	>110 mg/l
Methyl methacrylate	80-62-6	Rainbow trout	Experimental	96 hours	LC50	>79 mg/l
Methyl methacrylate	80-62-6	Water flea	Experimental	48 hours	EC50	69 mg/l
Methyl methacrylate	80-62-6	Green algae	Experimental	72 hours	NOEC	110 mg/l
Methyl methacrylate	80-62-6	Water flea	Experimental	21 days	NOEC	37 mg/l
Acrylonitrile - butadiene polymer	9003-18-3		Data not available or insufficient for classification			
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	Water flea	Experimental	48 hours	LC50	>1,100 mg/l
BIS-MEPP (polymer)	41637-38-1	Green Algae	Estimated	72 hours	Effect Level 50%	>100 mg/l
BIS-MEPP (polymer)	41637-38-1	Water flea	Estimated	48 hours	Effect Level 50%	>100 mg/l
BIS-MEPP (polymer)	41637-38-1	Zebra Fish	Estimated	96 hours	Lethal Level 50%	>100 mg/l
2-Hydroxyethyl methacrylate	868-77-9	Fathead minnow	Experimental	96 hours	LC50	227 mg/l
2-Hydroxyethyl methacrylate	868-77-9	Green algae	Experimental	72 hours	EC50	710 mg/l
2-Hydroxyethyl methacrylate	868-77-9	Water flea	Experimental	48 hours	EC50	380 mg/l
2-Hydroxyethyl methacrylate	868-77-9	Green Algae	Experimental	72 hours	NOEC	160 mg/l
2-Hydroxyethyl methacrylate	868-77-9	Water flea	Experimental	21 days	NOEC	24.1 mg/l
Dispersing Agent (NJTS Reg. No. 04499600-6929)	Trade Secret	Green algae	Experimental	72 hours	EC50	>100 mg/l
Dispersing Agent (NJTS Reg. No. 04499600-6929)	Trade Secret	Ricefish	Experimental	96 hours	LC50	>100 mg/l
Dispersing Agent (NJTS Reg. No. 04499600-6929)	Trade Secret	Green algae	Experimental	72 hours	NOEC	100 mg/l
Phosphate Esters of PPG Methacrylate	95175-93-2		Data not available or insufficient for classification			
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Fathead minnow	Estimated	96 hours	Lethal Level 50%	>100 mg/l
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Water flea	Estimated	48 hours	Effect Level 50%	>100 mg/l
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Green Algae	Estimated	72 hours	No obs Effect Level	100 mg/l
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Water flea	Estimated	21 days	NOEC	10 mg/l
Naphthenic acids, copper salts	1338-02-9	Green Algae	Estimated	72 hours	EC50	0.629 mg/l
Naphthenic acids, copper salts	1338-02-9	Water flea	Estimated	48 hours	EC50	0.0756 mg/l
Naphthenic acids, copper salts	1338-02-9	Zebra Fish	Estimated	96 hours	LC50	0.0702 mg/l
Naphthenic acids, copper salts	1338-02-9	Algae or other aquatic plants	Estimated	hours	NOEC	0.132 mg/l
Naphthenic acids, copper salts	1338-02-9	Fathead minnow	Estimated	32 days	Effect Concentration 10%	0.0354 mg/l

Naphthenic acids, copper salts	1338-02-9	Water flea	Estimated	21 days	NOEC	0.0756 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Methyl methacrylate	80-62-6	Experimental Biodegradation	14 days	BOD	94 % BOD/ThBOD	OECD 301C - MITI test (I)
Acrylonitrile - butadiene polymer	9003-18-3	Data not availbl-insufficient			N/A	
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	Data not availbl-insufficient			N/A	
BIS-MEPP (polymer)	41637-38-1	Experimental Biodegradation	28 days	Percent degraded	24 %degraded	Other methods
2-Hydroxyethyl methacrylate	868-77-9	Experimental Biodegradation	14 days	BOD	95 % BOD/ThBOD	OECD 301C - MITI test (I)
Dispersing Agent (NJTS Reg. No. 04499600-6929)	Trade Secret	Experimental Biodegradation	24 days	CO2 evolution	91 % weight	OECD 301B - Modified sturm or CO2
Phosphate Esters of PPG Methacrylate	95175-93-2	Data not availbl-insufficient			N/A	
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Estimated Biodegradation	28 days	CO2 evolution	22 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Naphthenic acids, copper salts	1338-02-9	Data not availbl-insufficient			N/A	

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Methyl methacrylate	80-62-6	Experimental Bioconcentration		Log Kow	1.38	Other methods
Acrylonitrile - butadiene polymer	9003-18-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
BIS-MEPP (polymer)	41637-38-1	Estimated Bioconcentration		Bioaccumulation factor	6.6	Other methods
2-Hydroxyethyl methacrylate	868-77-9	Experimental Bioconcentration		Log Kow	0.42	Other methods
Dispersing Agent (NJTS Reg. No. 04499600-6929)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Phosphate Esters of PPG Methacrylate	95175-93-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Naphthenic acids, copper salts	1338-02-9	Estimated BCF-Carp	42 days	Bioaccumulation factor	≤27	OECD 305E - Bioaccumulation flow-through fish test

12.4. Mobility in soil
Please contact manufacturer for more details

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. 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 uncured product in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 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

ADR: UN1133; Adhesives; 3; II; (D/E); F1.
IATA: UN1133 Adhesives; 3; II.
IMDG: UN1133; Adhesives; 3; II; Marine Pollutant: Copper Salt; EMS: FE,SD.

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
Methyl methacrylate	80-62-6	Gr. 3: Not classifiable	International Agency for Research on Cancer

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Revision information:
Label: CLP Classification information was modified.
Label: CLP Environmental Hazard Statements information was deleted.
Label: CLP Precautionary - Disposal information was deleted.
Label: CLP Precautionary - Response information was modified.
Label: Graphic information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 09: Color information was added.
Section 09: Odor information was added.
Sections 3 and 9: Odour, colour, grade information information was deleted.
Section 12: Component ecotoxicity information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 15: Regulations - Inventories information was deleted.

Annex

1. Title	
Substance identification	2-Hydroxyethyl methacrylate; EC No. 212-782-2; CAS Nbr 868-77-9;
Exposure Scenario Name	Industrial Use of Adhesives and Sealants
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 05 -Mixing or blending in batch processes PROC 13 -Treatment of articles by dipping and pouring ERC 05 -Use at industrial site leading to inclusion into/onto article
Processes, tasks and activities covered	Manual application of product. Mixing operations (open systems).
2. Operational conditions and risk management measures	
Operating Conditions	**Physical state:**Liquid. **General operating conditions:** Duration of use: 8 hours/day; Frequency of exposure at workplace [for one worker]: 5 days/week; Indoor use;
Risk management measures	Under the operational conditions described above the following risk management measures apply: **General risk management measures:** **Human health:** Goggles - Chemical resistant; **Environmental:** None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

1. Title	
Substance identification	2-Hydroxyethyl methacrylate;

	EC No. 212-782-2; CAS Nbr 868-77-9;
Exposure Scenario Name	Professional Use of Adhesives and Sealants
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 05 -Mixing or blending in batch processes PROC 13 -Treatment of articles by dipping and pouring ERC 08c -Widespread use leading to inclusion into/onto article (indoor)
Processes, tasks and activities covered	Manual application of product. Mixing operations (open systems).
2. Operational conditions and risk management measures	
Operating Conditions	**Physical state:**Liquid. **General operating conditions:** Duration of use: 15 min - 1 hour task; Frequency of exposure at workplace [for one worker]: 5 days/week; Indoor use; **Task: PROC05**; Indoors with good general ventilation;
Risk management measures	Under the operational conditions described above the following risk management measures apply: **General risk management measures:** **Human health:** Local exhaust ventilation; Protective Gloves - Chemical resistant. Refer to Section 8 of the SDS for specific glove material.; **Environmental:** None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

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

Safety Data Sheet

Document group:	31-5470-5	**Version number:**	9.02
Revision date:	27/10/2017	**Supersedes date:**	18/04/2017

Transportation version number: 1.00 (27/08/2013)

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(TM) Scotch-Weld(TM) Acrylic Adhesive DP8405NS, Green, Part A

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

Identified uses
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

CLASSIFICATION:
Skin Sensitization, Category 1B - Skin Sens. 1B; H317
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

For full text of H phrases, see Section 16.

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

SIGNAL WORD
WARNING.

Symbols:

GHS07 (Exclamation mark) |GHS09 (Environment) |

Pictograms

Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	236-050-7	0.1 - 10

HAZARD STATEMENTS:

H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P280E	Wear protective gloves.
P273	Avoid release to the environment.

Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Disposal:

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

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

<=125 ml Hazard statements

H317	May cause an allergic skin reaction.

<=125 ml Precautionary statements

Prevention:

P280E	Wear protective gloves.

Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Contains 36% of components with unknown hazards to the aquatic environment.

Notes on labelling

The organic peroxide classification from CAS# 13122-18-4 does not apply to the material. The calculated available oxygen content is less than 1%.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Oxydipropyl dibenzoate	27138-31-4	248-258-5		45 - 65	Aquatic Chronic 3, H412
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	25101-28-4			10 - 30	Substance not classified as hazardous
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret			1 - 15	Substance not classified as hazardous
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	236-050-7		0.1 - 10	Org. Perox. CD, H242; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1 Skin Sens. 1B, H317

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 and wash before reuse. If signs/symptoms develop, get medical attention.

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

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

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
Part of the oxygen for combustion is supplied by the peroxide itself.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide.	During combustion.
Carbon dioxide.	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 closed container approved for transportation by appropriate authorities. 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
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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Keep cool. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

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
None required.

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

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

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 types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Paste
Appearance/Odour	Blue, ester odour
Odour threshold	*No data available.*
pH	*Not applicable.*
Boiling point/boiling range	>=65.6 ºC
Melting point	*Not applicable.*
Flammability (solid, gas)	Not applicable.

Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	> 93.3 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	1.08 [*Ref Std:*WATER=1]
Water solubility	Nil
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*No data available.*
Decomposition temperature	*No data available.*
Viscosity	20,000 - 25,000 mPa-s
Density	1.08 g/ml

9.2. Other information

EU Volatile Organic Compounds	*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.
Sparks and/or flames.

10.5 Incompatible materials
Amines.
Strong acids.
Strong bases.
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 3M assessments.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

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

Skin contact
Contact with the skin during product use is not expected to result in significant irritation. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

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

Ingestion
May be harmful if swallowed.

Toxicological Data
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
Oxydipropyl dibenzoate	Dermal	Rat	LD50 > 2,000 mg/kg
Oxydipropyl dibenzoate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 200 mg/l
Oxydipropyl dibenzoate	Ingestion	Rat	LD50 3,295 mg/kg
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	Dermal		LD50 estimated to be > 5,000 mg/kg
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Catalyst (NJTS Reg. No. 04499600-6922)	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
Catalyst (NJTS Reg. No. 04499600-6922)	Ingestion	Rat	LD50 > 2,000 mg/kg
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Dermal	Rat	LD50 > 2,000 mg/kg
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.8 mg/l
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Ingestion	Rat	LD50 12,905 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Oxydipropyl dibenzoate	Rabbit	No significant irritation
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Oxydipropyl dibenzoate	Rabbit	No significant irritation

Tert-butyl 3,5,5-trimethylperoxyhexanoate	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Oxydipropyl dibenzoate	Guinea pig	Not classified
Catalyst (NJTS Reg. No. 04499600-6922)	Mouse	Not classified
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Guinea pig	Sensitising

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
Oxydipropyl dibenzoate	In Vitro	Not mutagenic
Catalyst (NJTS Reg. No. 04499600-6922)	In Vitro	Not mutagenic

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Oxydipropyl dibenzoate	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Catalyst (NJTS Reg. No. 04499600-6922)	Ingestion	nervous system	Not classified	Rat	NOAEL 2,000 mg/kg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Oxydipropyl dibenzoate	Ingestion	hematopoietic system | liver	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 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.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient

classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Oxydipropyl dibenzoate	27138-31-4	Fathead minnow	Experimental	96 hours	LC50	3.7 mg/l
Oxydipropyl dibenzoate	27138-31-4	Water flea	Experimental	48 hours	Effect Level 50%	19.31 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green Algae	Experimental	72 hours	Effect Level 50%	4.9 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green Algae	Experimental	72 hours	Effect Concentration 10%	0.89 mg/l
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	25101-28-4		Data not available or insufficient for classification			
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret		Data not available or insufficient for classification			
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Green Algae	Experimental		EC50	0.51 mg/l
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Water flea	Experimental		EC50	>100 mg/l
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Rainbow trout	Experimental		LC50	7 mg/l
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Green Algae	Experimental		NOEC	0.125 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Oxydipropyl dibenzoate	27138-31-4	Experimental Biodegradation	28 days	CO2 evolution	85 % weight	OECD 301B - Modified sturm or CO2
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	25101-28-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Estimated Biodegradation	28	BOD	14 % BOD/ThBOD	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Oxydipropyl dibenzoate	27138-31-4	Estimated Bioconcentration		Bioaccumulation factor	8	Estimated: Bioconcentration factor
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	25101-28-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	Estimated Bioconcentration		Bioaccumulation factor	4.8	Estimated: Bioconcentration factor
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Estimated Bioconcentration		Bioaccumulation factor	363	Estimated: Bioconcentration factor

12.4. Mobility in soil
Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
See Section 11.1 Information on toxicological effects

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

ADR: UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID, N.O.S. (TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE); 9; III; (-); M6.
IMDG: UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID, N.O.S. (TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE); 9; III; FA, SF.
IATA: UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID, N.O.S. (TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE); 9; III.
Exemption: For vessels containing a net quantity of 5 l or a net mass of 5 kg or less per single or inner packaging , special provision 375 (ADR), exemption per 2.10.2.7 (IMDG) or special provision A197 (IATA) may be applied, if applicable

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 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

H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
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.
H412	Harmful to aquatic life with long lasting effects.

Revision information:
CLP: Ingredient table information was modified.
Section 5: Fire - Advice for fire fighters information information was modified.
Section 9: Property description for optional properties information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 13: Standard Phrase Category Waste GHS information was modified.
Section 14: Transportation classification information was modified.

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