

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.

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

1.1. Product identifier

3M[™] Scotch-Weld[™] Urethane Adhesive DP604NS Black

Product Identification Numbers

62-2648-5031-4

7100148738

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 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:

18-0723-9, 18-0718-9

TRANSPORTATION INFORMATION

62-2648-5031-4

Component 1

ADR/RID: UN3082, NOT RESTRICTED AS PER SPECIAL PROVISION 375, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXEMPTION, (DIETHYLTOLUENEDIAMINE), III, --.

IMDG-CODE: UN3082, NOT RESTRICTED AS PER IMDG CODE 2.10.2.7, MARINE POLLUTANT EXCEPTION, (DIETHYLTOLUENEDIAMINE), III, IMDG-Code segregation code: NONE, EMS: --.

ICAO/IATA: UN3082, NOT RESTRICTED AS PER SPECIAL PROVISION A197, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXCEPTION, (DIETHYLTOLUENEDIAMINE), III.

Component 2

ADR/RID: UN3082, NOT RESTRICTED AS PER SPECIAL PROVISION 375, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXEMPTION, (DICYCLOHEXYLMETHANE 4,4-DIISOCYANATE), III, --.

IMDG-CODE: UN3082, NOT RESTRICTED AS PER IMDG CODE 2.10.2.7, MARINE POLLUTANT EXCEPTION, (DICYCLOHEXYLMETHANE 4,4-DIISOCYANATE), III, IMDG-Code segregation code: NONE, EMS: --. **ICAO/IATA:** UN3082, NOT RESTRICTED AS PER SPECIAL PROVISION A197, ENVIRONMENTALLY HAZARDOUS SUBSTANCE EXCEPTION, (DICYCLOHEXYLMETHANE 4,4-DIISOCYANATE), III.

Refer to section 14 of the kit components for transport information.

KIT LABEL

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

CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318
Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Carcinogenicity, Category 2 - Carc. 2; H351
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
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

GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |





Contains:

m-Xylene-.alpha.alpha'.-diamine; 4,4'-Diisocyanatodiphenylmethane Polymer; 4,4'-methylenedi(cyclohexyl isocyanate); diethylmethylbenzenediamine

HAZARD STATEMENTS:

H315 Causes skin irritation. H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure:

endocrine system

liver |

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P260A Do not breathe vapours.

P280I Wear protective gloves, eye/face protection, and respiratory protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

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

<=125 ml Hazard statements

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

<=125 ml Precautionary statements

Prevention:

P260A Do not breathe vapours.

P280I Wear protective gloves, eye/face protection, and respiratory protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

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

Information required per Regulation (EU) 2020/1149 as regards diisocyanates:

As from 24 August 2023 adequate training is required before industrial or professional use. Further information can be found at feica.eu/Puinfo

Revision information:

3M™ Scotch-Weld™ Urethane Adhesive DP604NS Black
Section 02: Regulation (EU) 2020/1149 Statement information was added.



Safety Data Sheet

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Document group: 18-0723-9 **Version number:** 9.02

Revision date: 03/11/2023 **Supersedes date:** 28/01/2022

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M(TM) Scotch-Weld(TM) Urethane Adhesive DP604NS Black and Urethane Adhesive 604NS Black, Part A

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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

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.

CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334 Skin Sensitization, Category 1 - Skin Sens. 1; H317

Carcinogenicity, Category 2 - Carc. 2; H351

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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD

DANGER.

Symbols

GHS07 (Exclamation mark) |GHS08 (Health Hazard) |

Pictograms





Ingredient	CAS Nbr	EC No.	% by Wt
4,4'-methylenedi(cyclohexyl isocyanate)	5124-30-1	225-863-2	15 - 40
4,4'-Diisocyanatodiphenylmethane Polymer	25686-28-6	500-040-3	1 - 10

HAZARD STATEMENTS:

H315	Causes skin irritation.
H319	Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction. Suspected of causing cancer. H351 H335 May cause respiratory irritation.

PRECAUTIONARY STATEMENTS

Prevention:

P261A Avoid breathing vapours.

P280K Wear protective gloves and respiratory protection.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. P304 + P340

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if P305 + P351 + P338

present and easy to do. Continue rinsing.

P333 + P313If skin irritation or rash occurs: Get medical advice/attention.

P342 + P311If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

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

<=125 ml Hazard statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

<=125 ml Precautionary statements

Prevention:

3M(TM) Scotch-Weld(TM) Urethane Adhesive DP604NS Black and Urethane Adhesive 604NS Black, Part A

P261A Avoid breathing vapours.

P280K Wear protective gloves and respiratory protection.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

34% of the mixture consists of components of unknown acute inhalation toxicity. Contains 59% of components with unknown hazards to the aquatic environment.

Information required per Regulation (EU) 2020/1149, amendment to REACH Regualtion (1907/2006) as amended for Great Britain, as regards diisocyanates:

As from 24 August 2023 adequate training is required before industrial or professional use. Further information can be found at feica.eu/Puinfo

2.3. Other hazards

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates. This material does not contain any substances that are assessed to be a PBT or vPvB

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], as amended for GB
Methyloxirane, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatocyclohexane]	(CAS-No.) 67837-35-8	40 - 70	Substance not classified as hazardous
4,4'-methylenedi(cyclohexyl isocyanate)	(CAS-No.) 5124-30-1 (EC-No.) 225-863-2	15 - 40	Acute Tox. 2, H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 Nota 2
4,4'-Diisocyanatodiphenylmethane Polymer	(CAS-No.) 25686-28-6 (EC-No.) 500-040-3	1 - 10	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
Carbon black	(CAS-No.) 1333-86-4 (EC-No.) 215-609-9	0.05 - 0.5	Substance with a national occupational exposure limit

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

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
4,4'-Diisocyanatodiphenylmethane Polymer		(C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319 (C >= 0.1%) Resp. Sens. 1, H334 (C >= 5%) STOT SE 3, H335
4,4'-methylenedi(cyclohexyl isocyanate)		(C >= 0.5%) Resp. Sens. 1, H334 (C >= 0.5%) Skin Sens. 1, H317

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

The most important symptoms and effects based on the GB CLP classification include:

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision).

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

Aldehydes. During combustion.

Condition

3M(TM) Scotch-Weld(TM) Urethane Adhesive DP604NS Black and Urethane Adhesive 604NS Black, Part A

IsocyanatesDuring combustion.Carbon monoxideDuring combustion.Carbon dioxide.During combustion.Hydrogen cyanide.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. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. 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. 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 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.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases.

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
Carbon black	1333-86-4	UK HSC	TWA: 3.5 mg/m ³ ; STEL: 7	
			mg/m³	
Free isocyanates	5124-30-1	UK HSC	TWA(as NCO):0.02	Respiratory Sensitizer
			mg/m3;STEL(as NCO):0.07	
			mg/m3	

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments
Free isocyanates	5124- 30-1	UK EH40 BMGVs	Isocyanate- derived diamine	Creatinine in urine	EPE	1 umol/mol	

UK EH40 BMGVs: UK. EH40 Biological Monitoring Guidance Values (BMGVs)

EPE: At the end of the period of exposure.

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:

Safety glasses with side shields.

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.

Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Butyl rubber.	No data available	No data available
Fluoroelastomer	No data available	No data available
Nitrile rubber.	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 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 stateLiquid.Specific Physical Form:Viscous liquidColourBlack

Odor Black
Low Odor

Odour thresholdNo data available.Melting point/freezing pointNo data available.Boiling point/boiling range>=204.4 °CFlammability (solid, gas)Not applicable.Flammable Limits(LEL)No data available.

Flammable Limits(LEL)

Flammable Limits(UEL)

No data available.

No data available.

Flash point >=143.3 °C [Test Method: Tagliabue closed cup]
Autoignition temperature No data available.

Decomposition temperatureNo data available.

pH
substance/mixture is non-soluble (in water)

Kinematic Viscosity1,894 mm²/secWater solubilityNegligibleSolubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.

Vapour pressure

No data available.

<=0 Pa [@ 20 °C]

Density1.056 g/ml [Ref Std:WATER=1]Relative density1.056 [Ref Std:WATER=1]Relative Vapour Density>=1 [Ref Std:AIR=1]

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate <=1 [Details: Gels with exposure to humidity.]

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

Water

Strong acids.

Strong bases.

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

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 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 hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

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. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

Skin contact

Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain. 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:

Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

Additional information:

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates.

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
4,4'-methylenedi(cyclohexyl isocyanate)	Dermal	Rat	LD50 > 7,000 mg/kg
4,4'-methylenedi(cyclohexyl isocyanate)	Inhalation- Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
4,4'-methylenedi(cyclohexyl isocyanate)	Ingestion	Rat	LD50 18,200 mg/kg
4,4'-Diisocyanatodiphenylmethane Polymer	Dermal	Rabbit	LD50 > 5,000 mg/kg
4,4'-Diisocyanatodiphenylmethane Polymer	Inhalation- Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
4,4'-Diisocyanatodiphenylmethane Polymer	Ingestion	Rat	LD50 31,600 mg/kg
Carbon black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon black	Ingestion	Rat	LD50 > 8,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
4,4'-methylenedi(cyclohexyl isocyanate)	Rabbit	Irritant
4,4'-Diisocyanatodiphenylmethane Polymer	official classificat	Irritant
	ion	
Carbon black	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
4,4'-methylenedi(cyclohexyl isocyanate)	Rabbit	Mild irritant
4,4'-Diisocyanatodiphenylmethane Polymer	official classificat	Severe irritant
Carbon blook	1011 Dobbit	No gignificant imitation
Carbon black	Rabbit	No significant irritation

Skin Sensitisation

SAIN SCHSHISHION		
Name	Species	Value
4,4'-methylenedi(cyclohexyl isocyanate)	Human and animal	Sensitising
4,4'-Diisocyanatodiphenylmethane Polymer	official classificat ion	Sensitising

Respiratory Sensitisation

Name	Species	Value
4,4'-methylenedi(cyclohexyl isocyanate)	Professio	Sensitising

	nal judgemen t	
4,4'-Diisocyanatodiphenylmethane Polymer	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
4,4'-methylenedi(cyclohexyl isocyanate)	In Vitro	Not mutagenic
4,4'-Diisocyanatodiphenylmethane Polymer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Carbon black	In Vitro	Not mutagenic
Carbon black	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
4,4'-Diisocyanatodiphenylmethane Polymer		Rat	Some positive data exist, but the data are not
			sufficient for classification
Carbon black	Dermal	Mouse	Not carcinogenic
Carbon black	Ingestion	Mouse	Not carcinogenic
Carbon black	Inhalation	Rat	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
4,4'-methylenedi(cyclohexyl isocyanate)	Inhalation	Not classified for female reproduction	Rat	NOAEL 6 mg/m³	premating into lactation
4,4'-methylenedi(cyclohexyl isocyanate)	Inhalation	Not classified for male reproduction	Rat	NOAEL 6 mg/m³	28 days
4,4'-methylenedi(cyclohexyl isocyanate)	Inhalation	Not classified for development	Rat	NOAEL 6 mg/m³	during gestation
4,4'-Diisocyanatodiphenylmethane Polymer	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
4,4'- methylenedi(cyclohexyl isocyanate)	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	NOAEL not available	
4,4'- Diisocyanatodiphenylmeth ane Polymer	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
4,4'- methylenedi(cyclohexyl isocyanate)	Inhalation	respiratory system	Not classified	Rat	NOAEL 3 mg/m³	90 days
4,4'- methylenedi(cyclohexyl isocyanate)	Inhalation	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system	Not classified	Rat	NOAEL 18 mg/m³	90 days

4,4'- Dissocyanatodiphenylmeth	Inhalation	muscles nervous system eyes kidney and/or bladder vascular system respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
ane Polymer						
Carbon black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure

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 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
Methyloxirane, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatocyclohex ane]		N/A	Data not available or insufficient for classification	N/A	N/A	N/A
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Water flea	Estimated	48 hours	EC50	7.07 mg/l
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Activated sludge	Experimental	3 hours	EC50	19 mg/l
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Green algae	Experimental	72 hours	EC50	>5 mg/l
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Zebra Fish	Experimental	96 hours	LC50	1.2 mg/l
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Green algae	Experimental	72 hours	EC10	1.2 mg/l
4,4'- Diisocyanatodiphe nylmethane Polymer	25686-28-6	Green algae	Estimated	72 hours	EC50	>1,640 mg/l
4,4'- Diisocyanatodiphe nylmethane	25686-28-6	Medaka	Estimated	96 hours	LC50	>3,000 mg/l

Polymer						
4,4'- Diisocyanatodiphe nylmethane Polymer	25686-28-6	Water flea	Estimated	24 hours	EC50	>1,000 mg/l
4,4'- Diisocyanatodiphe nylmethane Polymer	25686-28-6	Green algae	Estimated	72 hours	NOEC	1,640 mg/l
4,4'- Diisocyanatodiphe nylmethane Polymer	25686-28-6	Water flea	Estimated	21 days	NOEC	>=10 mg/l
Carbon black	1333-86-4	Activated sludge	Experimental	3 hours	EC50	>=100 mg/l
Carbon black	1333-86-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Methyloxirane, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'- methylenebis[4-isocyanatocyclohex ane]		Data not availbl- insufficient	N/A	N/A	N/A	N/A
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Experimental Biodegradation	28 days	BOD	0 %BOD/ThOD	OECD 301F - Manometric respirometry
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Experimental Hydrolysis		Hydrolytic half-life	1.97 hours (t 1/2)	
4,4'- Diisocyanatodiphe nylmethane Polymer	25686-28-6	Estimated Hydrolysis		Hydrolytic half-life	20 hours (t 1/2)	
Carbon black	1333-86-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Methyloxirane, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatocyclohex ane]		Data not available or insufficient for classification	N/A	N/A	N/A	N/A
4,4'- methylenedi(cycloh exyl isocyanate)	5124-30-1	Estimated Bioconcentration		Log Kow	2.03	
4,4'- Diisocyanatodiphe nylmethane Polymer	25686-28-6	Estimated BCF - Fish	28 days	Bioaccumulation factor	200	OECD305-Bioconcentration
Carbon black	1333-86-4	Data not available or insufficient for	N/A	N/A	N/A	N/A

classification		

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. Other adverse effects

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

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	Not applicable.	Not applicable.	Not applicable.
14.2 UN proper shipping name	Not applicable.	Not applicable.	Not applicable.
14.3 Transport hazard class(es)	Not applicable.	Not applicable.	Not applicable.
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not applicable.	Not applicable	Not applicable.
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	No data available.	No data available.	No data available.

Dagg. 12 of 1

according to Annex II of Marpol 73/78 and IBC Code			
Control Temperature	Not applicable.	Not applicable.	Not applicable.
Emergency Temperature	Not applicable.	Not applicable.	Not applicable.
ADR Classification Code	M6	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

Ca	rcin	oge	nicit	V
		- 8 -		J

- • • •	Ingredient	CAS Nbr	Classification	Regulation
	4,4'-Diisocyanatodiphenylmethane Polymer	25686-28-6	Carc. 2	3M classified according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
	Carbon black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

<u>Ingredient</u>	CAS Nbr
4,4'-methylenedi(cyclohexyl isocyanate)	5124-30-1

Restriction status: listed in UK REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 as amended for Great Britain for Conditions of

Restriction

Global inventory status

Contact 3M for more 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.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier	Upper-tier requirements
		requirements	
4,4'-methylenedi(cyclohexyl	5124-30-1	50	200
isocyanate)			

Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information

List of relevant H statements

H315 H317	Causes skin irritation. May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Revision information:

GB Section 02: CLP Ingredient table information was added.

GB Section 02: Other hazards phrase information was added.

GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was added.

GB Section 04: Information on toxicological effects information was added.

GB Section 12: Classification Warning information was added.

GB Section 15: Carcinogenicity information information was added.

GB Section 15: Chemical Safety Assessment information was added.

GBSDS Section 14 Transport in bulk - Main Heading information was added.

GBSDS Section 14 UN Number information was added.

CLP: Ingredient table information was deleted.

Label: CLP Percent Unknown information was deleted.

Section 02: Label Elements: GB Percent Unknown information was added.

Section 2: Other hazards phrase information was deleted.

Section 3: Composition/Information of ingredients table information was added.

Section 3: Composition/Information of ingredients table information was deleted.

Section 03: SCL table information was added.

Section 03: SCL table information was deleted.

Section 04: First Aid - Symptoms and Effects (CLP) information was deleted.

- Section 04: Information on toxicological effects information was deleted.
- Section 7: Precautions safe handling information information was modified.
- Section 8: Eye/face protection information information was modified.
- Section 8: Occupational exposure limit table information was modified.
- Section 09: Kinematic Viscosity information information was modified.
- Section 9: Vapour density value information was modified.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Aspiration Hazard Table information was deleted.
- Section 11: Aspiration Hazard text information was added.
- Section 11: Carcinogenicity Table information was modified.
- Section 11: Classification disclaimer information was deleted.
- Section 11: GB Classification disclaimer information was added.
- Section 11: GB No endocrine disruptor information available warning information was added.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Health Effects Ingestion information information was modified.
- Section 11: No endocrine disruptor information available warning information was deleted.
- Section 11: Reproductive Toxicity Table information was modified.
- Section 11: Reproductive/developmental effects information information was deleted.
- Section 11: Serious Eve Damage/Irritation Table information was modified.
- Section 11: Skin Corrosion/Irritation 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: 12.6. Endocrine Disrupting Properties information was deleted.
- Section 12: 12.6. Other adverse effects information was added.
- Section 12: 12.7. Other adverse effects information was deleted.
- Section 12: Classification Warning information was deleted.
- Section 12: Component ecotoxicity information information was modified.
- Section 12: Mobility in soil information information was deleted.
- Prints No Data if Adverse effects information is not present 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: No endocrine disruptor information available warning information was deleted.
- 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 Classification Code Regulation Data information was modified.
- Section 14 Control Temperature Regulation Data information was modified.
- Section 14 Emergency Temperature Regulation Data information was modified.
- Section 14 Hazard Class + Sub Risk Regulation Data information was modified.
- Section 14 Hazardous/Not Hazardous for Transportation information was modified.
- Section 14 Other Dangerous Goods Regulation Data information was modified.
- Section 14 Packing Group Regulation Data information was modified.
- Section 14 Proper Shipping Name information was modified.
- Section 14 Segregation Regulation Data information was modified.
- Section 14 Marine transport in bulk according to IMO instruments Main Heading information was deleted.
- Section 14 UN Number Column data information was modified.
- Section 14 UN Number information was deleted.
- Section 14: Transportation classification information was deleted.
- Section 15: Carcinogenicity information information was deleted.
- Section 15: Chemical Safety Assessment information was deleted.
- Section 15: Restrictions on manufacture ingredients information information was modified.
- Section 15: Seveso Substance Text information was added.
- Section 15: Seveso Substance Text information was deleted.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was added.

3M(TM) Scotch-Weld(TM) Urethane Adhesive DP604NS Black and Urethane Adhesive 604NS Black, Part A

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was deleted.

Section 16: Web address information was added.

Section 16: Web address information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M SDSs for Great Britain are available at www.3M.com/uk

For Northern Ireland documents, please contact your 3M representative to obtain a copy.



Safety Data Sheet

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 17/08/2023
 Supersedes date:
 09/04/2021

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M(TM) Scotch-Weld(TM) Urethane Adhesive DP604NS Black and Urethane Adhesive 604NS Black, Part B

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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

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.

CLASSIFICATION:

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318

Skin Sensitization, Category 1 - Skin Sens. 1; H317

Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

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

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD

DANGER.

Symbols

GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms



Ingredient	CAS Nbr	EC No.	% by Wt
Polyether Polyol	9082-00-2		60 - 90
diethylmethylbenzenediamine	68479-98-1	270-877-4	5 - 20
Polyol	Trade Secret		1 - 10
m-xylene-alpha, alpha'-diamine	1477-55-0	216-032-5	< 5

HAZARD STATEMENTS:

H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure: endocrine system | liver.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P260A Do not breathe vapours.

P273 Avoid release to the environment.

P280B Wear protective gloves and eye/face protection.

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.

P310 Immediately call a POISON CENTRE or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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

<=125 ml Hazard statements

H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

<=125 ml Precautionary statements

3M(TM) Scotch-Weld(TM) Urethane Adhesive DP604NS Black and Urethane Adhesive 604NS Black, Part B

Prevention:

P280B Wear protective gloves and eye/face protection.

Response:

P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Immediately call a POISON CENTRE or doctor/physician. P310 P333 + P313If skin irritation or rash occurs: Get medical advice/attention.

Contains 73% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines. This material does not contain any substances that are assessed to be a PBT or vPvB

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	0/0	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Polyether Polyol	(CAS-No.) 9082-00-2	60 - 90	Substance not classified as hazardous
diethylmethylbenzenediamine	(CAS-No.) 68479-98-1 (EC-No.) 270-877-4	5 - 20	Acute Tox. 4, H312 Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1 Nota C
Polyol	Trade Secret	1 - 10	Substance not classified as hazardous
m-xylene-alpha, alpha'-diamine	(CAS-No.) 1477-55-0 (EC-No.) 216-032-5	< 5	Acute Tox. 4, H332 Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

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

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

Skin contact

3M(TM) Scotch-Weld(TM) Urethane Adhesive DP604NS Black and Urethane Adhesive 604NS Black, Part B

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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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

The most important symptoms and effects based on the GB CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Target organ effects. See Section 11 for additional details.

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

<u>Substance</u>	<u>Condition</u>
Aldehydes.	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 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

For industrial/occupational use only. Not for consumer sale or use. 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.)

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:

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face 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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo 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: Viscous.

Colour Dark Amber, Green, Light Amber

OdorSlight AmmoniacalOdour thresholdNo data available.Melting point/freezing pointNo data available.

Boiling point/boiling range >=210 °C
Flammability (solid, gas) Not applicable.
Flammable Limits(LEL) Not applicable.
Flammable Limits(UEL) Not applicable.

Flash point >=143.3 °C [Test Method: Tagliabue closed cup]

Autoignition temperatureNot applicable.Decomposition temperatureNo data available.

oH substance/mixture is non-soluble (in water)

Kinematic Viscosity1,546 mm²/secWater solubilityNegligibleSolubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.Vapour pressureNot applicable.

Density1.035 g/mlRelative density1.035 [Ref Std:WATER=1]Relative Vapour Density>=1 [Ref Std:AIR=1]

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate <=1 [*Ref Std*:WATER=1]

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 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 hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

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

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

Eye contact

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion

May be 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:

Prolonged or repeated exposure may cause target organ effects:

Liver effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Endocrine effects: Signs/symptoms may include disruption of gonadal, thyroid, adrenal, or pancreatic function, changes in hormone production, alterations in circulating hormone levels, and/or changes in tissue response to hormones.

Additional information:

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines. Increased numbers of tumors in the liver, thyroid, and possibly the mammary glands were observed in rats given DETDA (CAS No. 68479-98-1) in their diet for two years.

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

Acute Toxicity		T ~ .	I v
Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Polyether Polyol	Dermal	similar compoun ds	LD50 > 2,000 mg/kg
Polyether Polyol	Inhalation- Dust/Mist (4 hours)	similar compoun ds	LC50 > 3.2 mg/l
Polyether Polyol	Ingestion	similar compoun ds	LD50 > 5,000 mg/kg
diethylmethylbenzenediamine	Dermal	Rat	LD50 > 2,000 mg/kg
diethylmethylbenzenediamine	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.61 mg/l
diethylmethylbenzenediamine	Ingestion	Rat	LD50 472 mg/kg
Polyol	Dermal	Rat	LD50 > 2,000 mg/kg
Polyol	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
Polyol	Ingestion	Rat	LD50 4,600 mg/kg
m-xylene-alpha, alpha'-diamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
m-xylene-alpha, alpha'-diamine	Inhalation- Dust/Mist (4 hours)	Rat	LC50 1.2 mg/l
m-xylene-alpha, alpha'-diamine	Ingestion	Rat	LD50 980 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Skin Corrosion/irritation	Skiii Corrosion/irritation							
Name	Species	Value						
Polyether Polyol	similar	Minimal irritation						
	compoun							
	ds							
diethylmethylbenzenediamine	Rabbit	No significant irritation						
Polyol	Rabbit	No significant irritation						
m-xylene-alpha, alpha'-diamine	Rat	Corrosive						

Serious Eye Damage/Irritation

Name	Species	Value
Polyether Polyol	similar	Mild irritant
	compoun	
	ds	
diethylmethylbenzenediamine	Rabbit	Severe irritant
Polyol	Rabbit	Mild irritant
m-xylene-alpha, alpha'-diamine	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Polyether Polyol	similar	Not classified
	compoun	
	ds	
diethylmethylbenzenediamine	Human	Not classified
m-xylene-alpha, alpha'-diamine	Guinea	Sensitising
	pig	

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Germ Cen Mutagementy							
Name	Route	Value					
Polyether Polyol	In Vitro	Not mutagenic					
diethylmethylbenzenediamine	In Vitro	Some positive data exist, but the data are not					
, ,		sufficient for classification					
diethylmethylbenzenediamine	In vivo	Some positive data exist, but the data are not					
		sufficient for classification					
m-xylene-alpha, alpha'-diamine	In Vitro	Not mutagenic					
m-xylene-alpha, alpha'-diamine	In vivo	Not mutagenic					

Carcinogenicity

Name	Route	Species	Value
diethylmethylbenzenediamine	Ingestion	Rat	Some positive data exist, but the data are not
			sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
m-xylene-alpha, alpha'-diamine	Ingestion	Not classified for female reproduction	Rat	NOAEL 450 mg/kg/day	1 generation
m-xylene-alpha, alpha'-diamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 450 mg/kg	1 generation
m-xylene-alpha, alpha'-diamine	Ingestion	Not classified for development	Rat	NOAEL 450 mg/kg/day	1 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

specific Target Organ Toxicity - single exposure								
Name Route Targe		Target Organ(s)	Value	Species	Test result	Exposure		
						Duration		
m-xylene-alpha, alpha'-	Inhalation	respiratory irritation	Some positive data exist, but the	Not	NOAEL Not			
diamine			data are not sufficient for	available	avaliable			
			classification					

Specific Target Organ Toxicity - repeated exposure

Name Route Target Organ(s	s) Value	Species Test result	Exposure
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						Duration
diethylmethylbenzenediam ine	Ingestion	liver	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/kg/day	24 months
diethylmethylbenzenediam ine	Ingestion	endocrine system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 1.4 mg/kg/day	24 months
diethylmethylbenzenediam ine	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2.8 mg/kg/day	24 months
diethylmethylbenzenediam ine	Ingestion	eyes	Not classified	Rat	NOAEL 1.4 mg/kg/day	24 months
diethylmethylbenzenediam ine	Ingestion	heart skin bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system respiratory system	Not classified	Rat	NOAEL 3.5 mg/kg/day	24 months
m-xylene-alpha, alpha'- diamine	Ingestion	endocrine system blood bone marrow	Not classified	Rat	NOAEL 600 mg/kg/day	28 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 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	Туре	Exposure	Test endpoint	Test result
Polyether Polyol	9082-00-2	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
diethylmethylbenze nediamine	68479-98-1	Bacteria	Experimental	16 hours	EC10	170 mg/l
diethylmethylbenze nediamine	68479-98-1	Green algae	Experimental	72 hours	EC50	104 mg/l
diethylmethylbenze nediamine	68479-98-1	Water flea	Experimental	48 hours	EC50	0.5 mg/l
diethylmethylbenze nediamine	68479-98-1	Green algae	Experimental	72 hours	NOEC	32 mg/l
Polyol	Trade Secret	Golden Orfe	Experimental	96 hours	LC50	>1,000 mg/l
Polyol	Trade Secret	Green algae	Experimental	72 hours	ErC50	>100 mg/l
Polyol	Trade Secret	Water flea	Experimental	48 hours	EC50	>100 mg/l
Polyol	Trade Secret	Green algae	Experimental	72 hours	NOEC	>100 mg/l

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m-xylene-alpha, alpha'-diamine	1477-55-0	Activated sludge	Experimental	30 minutes	EC50	>1,000 mg/l
m-xylene-alpha, alpha'-diamine	1477-55-0	Bacteria	Experimental	16 hours	EC10	24 mg/l
m-xylene-alpha, alpha'-diamine	1477-55-0	Green algae	Experimental	72 hours	ErC50	28 mg/l
m-xylene-alpha, alpha'-diamine	1477-55-0	Medaka	Experimental	96 hours	LC50	87.6 mg/l
m-xylene-alpha, alpha'-diamine	1477-55-0	Water flea	Experimental	48 hours	EC50	15.2 mg/l
m-xylene-alpha, alpha'-diamine	1477-55-0	Green algae	Experimental	72 hours	NOEC	9.8 mg/l
m-xylene-alpha, alpha'-diamine	1477-55-0	Water flea	Experimental	21 days	NOEC	4.7 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Polyether Polyol	9082-00-2	Modeled Biodegradation	28 days	BOD	20 %BOD/ThOD	Catalogic™
diethylmethylbenze nediamine	68479-98-1	Experimental Biodegradation	28 days	BOD	<1 %BOD/ThOD	OECD 301D - Closed bottle test
Polyol	Trade Secret	Experimental Biodegradation	28 days	CO2 evolution	38 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
m-xylene-alpha, alpha'-diamine	1477-55-0	Experimental Biodegradation	28 days	CO2 evolution	49 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
m-xylene-alpha, alpha'-diamine	1477-55-0	Experimental Aquatic Inherent Biodegrad.	28 days	BOD	22 %BOD/ThOD	OECD 302C - Modified MITI (II)

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Polyether Polyol	9082-00-2	Modeled Bioconcentration		Bioaccumulation factor	2	Catalogic TM
Polyether Polyol	9082-00-2	Modeled Bioconcentration		Log Kow	-2.6	Episuite TM
diethylmethylbenze nediamine	68479-98-1	Experimental Bioconcentration		Log Kow	1.4	
Polyol	Trade Secret	Experimental BCF - Fish	42 days	Bioaccumulation factor	≤7	
m-xylene-alpha, alpha'-diamine	1477-55-0	Experimental BCF - Fish	42 days	Bioaccumulation factor	<2.7	OECD305-Bioconcentration
m-xylene-alpha, alpha'-diamine	1477-55-0	Extrapolated Bioconcentration		Log Kow	0.18	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Polyether Polyol	9082-00-2	Modeled Mobility in Soil	Koc	13 l/kg	Episuite TM
m-xylene-alpha, alpha'-diamine	1477-55-0	Modeled Mobility in Soil	Koc	<1 l/kg	ACD/Labs ChemSketch™

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

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

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	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(DIETHYLTOLUENE DIAMINE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(DIETHYLTOLUENE DIAMINE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(DIETHYLTOLUENEDIAMIN E)
14.3 Transport hazard class(es)	9	9	9
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.

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ADR Classification Code	M6	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

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 Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. 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.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of		
	Lower-tier requirements	Upper-tier requirements	
E2 Hazardous to the Aquatic	200	500	
environment			

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
diethylmethylbenzenediamine	68479-98-1	100	200

Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information

List of relevant H statements

H302 Harmful if swallowed.

H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure: endocrine system liver.
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:

- GB Section 02: CLP Ingredient table information was added.
- GB Section 02: Other hazards phrase information was added.
- GB Section 04: First Aid Symptoms and Effects (GB CLP) information was added.
- GB Section 04: Information on toxicological effects information was added.
- GB Section 12: Classification Warning information was added.
- GB Section 15: Chemical Safety Assessment information was added.
- GBSDS Section 14 Transport in bulk Main Heading information was added.
- GBSDS Section 14 UN Number information was added.
- CLP: Ingredient table information was deleted.
- Label: CLP Percent Unknown information was deleted.
- Section 02: Label Elements: GB Percent Unknown information was added.
- Section 2: Other hazards phrase information was deleted.
- Section 3: Composition/Information of ingredients table information was added.
- Section 3: Composition/Information of ingredients table information was deleted.
- Section 04: First Aid Symptoms and Effects (CLP) information was deleted.
- Section 04: Information on toxicological effects information was deleted.
- Section 8: glove data value information was deleted.
- Section 8: glove data value information was modified.
- Section 8: Personal Protection Skin/body information information was added.
- Section 8: Personal Protection Skin/hand information information was modified.
- Section 8: Skin protection protective clothing information information was added.
- Section 09: Kinematic Viscosity information information was modified.
- Section 9: Vapour density value information was modified.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Classification disclaimer information was deleted.
- Section 11: GB Classification disclaimer information was added.
- Section 11: GB No endocrine disruptor information available warning information was added.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: No endocrine disruptor information available warning information was deleted.
- Section 11: Reproductive Toxicity Table information was modified.
- Section 11: Serious Eye Damage/Irritation Table information was modified.
- Section 11: Skin Corrosion/Irritation Table information was modified.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Target Organs Repeated Table information was added.
- Section 11: Target Organs Repeated Table information was deleted.
- Section 11: Target Organs Single Table information was modified.
- Section 12: 12.6. Endocrine Disrupting Properties information was deleted.
- Section 12: 12.6. Other adverse effects information was added.
- Section 12: 12.7. Other adverse effects information was deleted.
- Section 12: Classification Warning information was deleted.
- Section 12: Component ecotoxicity information information was modified.

Section 12: Mobility in soil information information was modified.

Prints No Data if Adverse effects information is not present information was deleted.

Section 12: No endocrine disruptor information available warning information was added.

Section 12: No endocrine disruptor information available warning information was deleted.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 14 Classification Code – Regulation Data information was modified.

Section 14 Control Temperature – Regulation Data information was modified.

Section 14 Emergency Temperature – Regulation Data information was modified.

Section 14 Hazard Class + Sub Risk – Regulation Data information was modified.

Section 14 Hazardous/Not Hazardous for Transportation information was modified.

Section 14 Multiplier – Main Heading information was deleted.

Section 14 Multiplier – Regulation Data information was deleted.

Section 14 Other Dangerous Goods – Regulation Data information was modified.

Section 14 Packing Group – Regulation Data information was modified.

Section 14 Proper Shipping Name information was modified.

Section 14 Segregation – Regulation Data information was modified.

Section 14 Transport Category – Main Heading information was deleted.

Section 14 Transport Category – Regulation Data information was deleted.

Section 14 Transport in bulk – Regulation Data information was modified.

Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was deleted.

Section 14 Transport Not Permitted – Main Heading information was deleted.

Section 14 Transport Not Permitted – Regulation Data information was deleted.

Section 14 Tunnel Code – Main Heading information was deleted.

Section 14 Tunnel Code – Regulation Data information was deleted.

Section 14 UN Number Column data information was modified.

Section 14 UN Number information was deleted.

Section 14: Transportation classification information was deleted.

Section 15: Chemical Safety Assessment information was deleted.

Section 15: Regulations - Inventories information was added.

Section 15: Seveso Hazard Category Text information was added.

Section 15: Seveso Substance Text information was added.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was added.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was deleted.

Section 16: Web address information was added.

Section 16: Web address information was deleted.

Section 2: No PBT/vPvB information available warning information was added.

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. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M SDSs for Great Britain are available at www.3M.com/uk

For Northern Ireland documents, please contact your 3M representative to obtain a copy.