Safety Data Sheet

Document group:	28-3015-6	**Version number:**	3.00
Revision date:	18/09/2014	**Supersedes date:**	13/12/2011

Transportation version number: 1.00 (17/08/2010)

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 Scotchkote WB Urethane Primer AP 670 (Part B)

Product Identification Numbers

GR-2001-3425-6

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

Identified uses

Coating.

1.3. Details of the supplier of the substance or mixture

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 1 - Skin Sens. 1; H317
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

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

Indication of danger

Harmful; Xn; R20

Irritant; Xi; R37
Sensitizing; R43
Dangerous for the environment; R52/53

For full text of R phrases, see Section 16.

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

SIGNAL WORD
WARNING!

Symbols:
GHS07 (Exclamation mark) |

Pictograms

Ingredient	CAS Nbr	% by Wt
Hexamethylene diisocyanate, oligomers	28182-81-2	40 - 50
Cyclohexanamine, N,N-dimethyl-, compounds with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohexane homopolymer	666723-27-9	35 - 45
Hexamethylene Diisocyanate	822-06-0	< 1

HAZARD STATEMENTS:

H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P261A	Avoid breathing vapours.
P280E	Wear protective gloves.

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.

40% of the mixture consists of components of unknown acute oral toxicity.
40% of the mixture consists of components of unknown acute dermal toxicity.

Contains 60% of components with unknown hazards to the aquatic environment.

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

Symbol(s)

Harmful

Contains:
Hexamethylene diisocyanate, oligomers; Cyclohexanamine, N,N-dimethyl-, compounds with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohexane homopolymer; Hexamethylene Diisocyanate

Risk phrases

R20	Harmful by inhalation.
R37	Irritating to respiratory system.
R43	May cause sensitisation by skin contact.
R52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases

S23A	Do not breathe vapour.
S24	Avoid contact with skin.
S37	Wear suitable gloves.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Special provisions concerning the labelling of certain substances

Contains isocyanates. See information supplied by manufacturer.

2.3. Other hazards

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Hexamethylene diisocyanate, oligomers	28182-81-2	NLP 500-060-2	40 - 50	Xn:R20; Xi:R37; R43 (Self Classified) Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335 (Self Classified)
Cyclohexanamine, N,N-dimethyl-, compounds with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohexane homopolymer	666723-27-9		35 - 45	R43 (Vendor) R52/53 (Self Classified) Skin Sens. 1, H317 (Vendor) Aquatic Chronic 3, H412 (Self Classified)
Dipropylene glycol dimethyl ether	111109-77-4		10 - 20	
Hexamethylene Diisocyanate	822-06-0	EINECS 212-485-8	< 1	T:R23; Xi:R36-37-38; R42-43 - Nota 2 (EU) R52 (Self Classified) Acute Tox. 2, H330; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1A, H334; Skin Sens. 1A, H317; STOT SE 3, H335 - Nota 2 (CLP)

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

Please refer to section 15 for the any applicable Notas that have been applied to the above components

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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 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 cyanide.	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.

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. 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 using non-sparking tools. 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. Clean up residue with detergent and water. 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 or professional use only. Do not use in a confined area with minimal air exchange. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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.) Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store away from acids. 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
Free isocyanates	822-06-0	Manufacturer determined	TWA:0.005 ppm;STEL:0.02 ppm	
Free isocyanates	822-06-0	Health and Safety Comm. (UK)	TWA(as NCO):0.02 mg/m3;STEL(as NCO):0.07 mg/m3	Respiratory Sensitizer

Health and Safety Comm. (UK) : 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.

8.2. Exposure controls

8.2.1. Engineering controls
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Indirect vented goggles.

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
Gloves made from the following material(s) are recommended: Butyl rubber.
Polyethylene
Polymer laminate

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
Half facepiece or full facepiece supplied-air respirator

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Appearance/Odour	Mild musty odour; Clear colour.
Odour threshold	*No data available.*
pH	*Not applicable.*
Boiling point/boiling range	>=175 ºC
Melting point	>=-15 ºC
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	65 ºC [*Test Method:*Closed Cup]
Autoignition temperature	>=165 ºC

Flammable Limits(LEL)	0.85 % volume
Flammable Limits(UEL)	*No data available.*
Vapour pressure	<=133.3 Pa [@ 20 ºC]
Relative density	1.100 [*Ref Std:*WATER=1]
Water solubility	Moderate
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*No data available.*
Vapour density	<=5.59 [*Ref Std:*AIR=1]
Decomposition temperature	*No data available.*
Viscosity	*No data available.*
Density	1.1 g/ml

9.2. Other information

Volatile organic compounds (VOC)	78 g/l [*Test Method:*Estimated] [*Details:*EU Definition (Part A and B mix)]
Percent volatile	20 % weight

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
Sparks and/or flames.

10.5 Incompatible materials
Alcohols.
Amines.
Strong acids.
Strong oxidising agents.

10.6 Hazardous decomposition products

Substance	**Condition**
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 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
May be harmful if inhaled. 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.

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

Eye contact
Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

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

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Hexamethylene diisocyanate, oligomers	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hexamethylene diisocyanate, oligomers	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.39 mg/l
Hexamethylene diisocyanate, oligomers	Ingestion	Rat	LD50 > 5,000 mg/kg
Dipropylene glycol dimethyl ether	Dermal	Rat	LD50 > 2,000 mg/kg
Dipropylene glycol dimethyl ether	Inhalation-Vapor (4 hours)	Rat	LC50 > 5.2 mg/l
Dipropylene glycol dimethyl ether	Ingestion	Rat	LD50 3,075 mg/kg
Hexamethylene Diisocyanate	Dermal	Rabbit	LD50 570 mg/kg
Hexamethylene Diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.12 mg/l
Hexamethylene Diisocyanate	Ingestion	Rat	LD50 710 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hexamethylene diisocyanate, oligomers	Rabbit	Mild irritant
Dipropylene glycol dimethyl ether	Rabbit	No significant irritation
Hexamethylene Diisocyanate	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Hexamethylene diisocyanate, oligomers	Rabbit	Moderate irritant
Dipropylene glycol dimethyl ether	Rabbit	Mild irritant
Hexamethylene Diisocyanate	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Hexamethylene diisocyanate, oligomers	Guinea pig	Sensitising
Dipropylene glycol dimethyl ether	Guinea pig	Not sensitizing
Hexamethylene Diisocyanate	Multiple animal species	Sensitising

Respiratory Sensitisation

Name	Species	Value
Hexamethylene diisocyanate, oligomers	similar compounds	Some positive data exist, but the data are not sufficient for classification
Hexamethylene Diisocyanate	Human and animal	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Hexamethylene diisocyanate, oligomers	In Vitro	Not mutagenic
Hexamethylene diisocyanate, oligomers	In vivo	Not mutagenic
Dipropylene glycol dimethyl ether	In Vitro	Not mutagenic
Dipropylene glycol dimethyl ether	In vivo	Not mutagenic
Hexamethylene Diisocyanate	In Vitro	Not mutagenic
Hexamethylene Diisocyanate	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Hexamethylene Diisocyanate	Inhalation	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Dipropylene glycol dimethyl ether	Ingestion	Not toxic to development	Rabbit	NOAEL 250 mg/kg/day	during gestation
Hexamethylene Diisocyanate	Inhalation	Not toxic to female reproduction	Rat	NOAEL 0.002 mg/l	7 weeks
Hexamethylene Diisocyanate	Inhalation	Not toxic to development	Rat	NOAEL 0.002 mg/l	7 weeks
Hexamethylene Diisocyanate	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.014 mg/l	4 weeks

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Hexamethylene diisocyanate, oligomers	Inhalation	respiratory irritation	May cause respiratory irritation		NOAEL Not available	
Hexamethylene Diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Hexamethylene Diisocyanate	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Hexamethylene diisocyanate, oligomers	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL .084 mg/l	2 weeks
Hexamethylene diisocyanate, oligomers	Inhalation	blood	All data are negative	Rat	NOAEL .084 mg/l	2 weeks
Dipropylene glycol dimethyl ether	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	28 days
Hexamethylene Diisocyanate	Inhalation	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.002 mg/l	3 weeks
Hexamethylene Diisocyanate	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.0014 mg/l	4 weeks
Hexamethylene Diisocyanate	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.0012 mg/l	2 years
Hexamethylene Diisocyanate	Inhalation	nervous system	All data are negative	Rat	NOAEL 0.002 mg/l	7 weeks
Hexamethylene Diisocyanate	Inhalation	heart	All data are negative	Rat	NOAEL 0.001 mg/l	90 days

Aspiration Hazard

Name	Value

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
Cyclohexanamine, N,N-dimethyl-, compounds with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohexane homopolymer	666723-27-9	Ricefish	Experimental	96 hours	LC50	>=42.2 mg/l
Cyclohexanamine, N,N-dimethyl-, compounds	666723-27-9	Water flea	Experimental	48 hours	EC50	>100 mg/l

with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohexane homopolymer						
Cyclohexanamine, N,N-dimethyl-, compounds with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohexane homopolymer	666723-27-9		Experimental	72 hours	EC50	>100 mg/l
Hexamethylene Diisocyanate	822-06-0	Water flea	Experimental	48 hours	EC50	27 mg/l
Hexamethylene Diisocyanate	822-06-0	Ricefish	Experimental	96 hours	LC50	71 mg/l
Hexamethylene Diisocyanate	822-06-0	Green algae	Experimental	72 hours	EC50	15 mg/l
Hexamethylene Diisocyanate	822-06-0	Water flea	Experimental	21 days	NOEC	4.2 mg/l
Hexamethylene Diisocyanate	822-06-0	Green Algae	Experimental	72 hours	NOEC	10 mg/l
Hexamethylene diisocyanate, oligomers	28182-81-2		Data not available or insufficient for classification			
Dipropylene glycol dimethyl ether	111109-77-4		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cyclohexanamine, N,N-dimethyl-, compounds with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohe	666723-27-9	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)

xane homopolymer						
Hexamethylene Diisocyanate	822-06-0	Experimental Hydrolysis		Hydrolytic half-life	5 minutes (t 1/2)	Other methods
Hexamethylene Diisocyanate	822-06-0	Experimental Biodegradation	14 days	BOD	55.5 % weight	OECD 301C - MITI test (I)
Hexamethylene diisocyanate, oligomers	28182-81-2	Modeled Biodegradation	28 days	BOD	28 % weight	OECD 301C - MITI test (I)
Dipropylene glycol dimethyl ether	111109-77-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cyclohexanamine, N,N-dimethyl-, compounds with 3-(cyclohexylamino)-1-propanesulphonic acid-blocked 1,6-diisocyanatohexane homopolymer	666723-27-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hexamethylene Diisocyanate	822-06-0	Estimated Bioconcentration		Bioaccumulation factor	158	Estimated: Bioconcentration factor
Hexamethylene diisocyanate, oligomers	28182-81-2	Modeled Bioconcentration		Bioaccumulation factor	5	Other methods
Dipropylene glycol dimethyl ether	111109-77-4	Estimated Bioconcentration		Bioaccumulation factor	3.70	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

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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)
080501* Waste isocyanates

SECTION 14: Transportation information

GR-2001-3425-6

Not hazardous for transportation

SECTION 15: Regulatory information

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

Global inventory status
Contact 3M for more information. The components of this 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

H315	Causes skin irritation.
H317	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.
H412	Harmful to aquatic life with long lasting effects.

List of relevant R-phrases

R20	Harmful by inhalation.
R23	Toxic by inhalation.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R42	May cause sensitisation by inhalation.

R43	May cause sensitisation by skin contact.
R52	Harmful to aquatic organisms.
R52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Revision information:
Revision Changes:
Section 8: Respiratory protection - recommended respirators information information was modified.
Risk phrase information was modified.
Safety phrase information was modified.
Section 8: Personal Protection - Skin/body information information was modified.
Section 2: Label ingredient information information was modified.
Section 1: Product identification numbers heading information was modified.
Section 16: List of relevant R phrase information information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 2: Indication of danger information information was modified.
Section 9: Flammability (solid, gas) information information was modified.
Copyright information was modified.
Section 8: Occupational exposure limit table information was modified.
Telephone header information was modified.
Company Telephone information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Respiratory Sensitization Table information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 11: Health Effects - Skin information information was modified.
Section 11: Health Effects - Inhalation information information was modified.
Section 5: Fire - Extinguishing media information information was modified.
Section 6: Accidental release personal information information was modified.
Section 6: Accidental release clean-up information information was modified.
Section 7: Precautions safe handling information information was modified.
Section 7: Conditions safe storage information was modified.
Section 8: Personal Protection - Eye information information was modified.
Section 8: Personal Protection - Skin/hand information information was modified.
Section 8: Personal Protection - Respiratory Information information was modified.
Section 13: 13.1. Waste disposal note information was modified.
Section 13: Standard Phrase Category Waste GHS information was modified.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.
Section 8: Respiratory protection - recommended respirators guide information was added.
Section 12: Component ecotoxicity information information was added.
Section 12: Persistence and Degradability information information was added.
Section 12:Bioccumulative potential information information was added.
Section 12: Component Ecotoxicity table Material column header information was added.
Section 12: Component Ecotoxicity table CAS No column header information was added.
Section 12: Component Ecotoxicity table Organism column header information was added.
Section 12: Component Ecotoxicity table Type column header information was added.
Section 12: Component Ecotoxicity table Exposure column header information was added.
Section 12: Component Ecotoxicity table End point column header information was added.
Section 12: Component Ecotoxicity table Result column header information was added.
Section 12: Persistence and degradability table Material column header information was added.

Section 12: Persistence and degradability table CAS No column header information was added.
Section 12: Persistence and degradability table Test Type column header information was added.
Section 12: Persistence and degradability table Duration column header information was added.
Section 12: Persistence and degradability table Test Result column header information was added.
Section 12: Persistence and degradability table Protocol column header information was added.
Section 12:Bioccumulative potential table Material column header information was added.
Section 12:Bioccumulative potential table CAS No column header information was added.
Section 12:Bioccumulative potential table CAS No column header information was added.
Section 12:Bioccumulative potential table Test Result column header information was added.
Section 12:Bioccumulative potential table Protocol column header information was added.
Section 12:Bioccumulative potential table Test Type column header information was added.
Label: Signal Word - Header information was added.
Label: Signal Word information was added.
Label: CLP Classification - Header information was added.
Label: CLP Classification information was added.
Label: CLP Classification information was added.
Label: CLP Classification - Header information was added.
Label: CLP Percent Unknown information was added.
Label: CLP Percent Unknown information was added.
Label: CLP Percent Unknown information was added.
Label: CLP Environmental Hazard Statements information was added.
Label: Graphic information was added.
Label: Graphic information was added.
Label: Symbol information was added.
Label: Symbol information was added.
Label: CLP Precautionary - Disposal information was added.
Label: CLP Precautionary - Disposal - Header information was added.
Label: CLP Precautionary - Prevention information was added.
Label: CLP Precautionary - Prevention - Header information was added.
Label: CLP Precautionary - Response information was added.
Label: CLP Precautionary - Response - Header information was added.
Label: Precautionary Statement - Header information was added.
CLP: Ingredient table information was added.
Section 8: Occupational exposure limit table information was added.
Section 2: 2.2 & 2.3. CLP REGULATION heading information was added.
Label: CLP Ingredients table Ingredient heading information was added.
Label: CLP Ingredients table CAS No heading information was added.
Label: CLP Ingredients table Percent by Wt heading information was added.
Section 12: Persistence and degradability table Study Type column header information was added.
Section 12:Bioccumulative potential table Test Type column header information was added.
Section 9: Odour Threshold information was added.
Section 9: Solubility (non-water) information was added.
Section 09: Decomposition Temperature information was added.
Section 2: H phrase reference information was added.
Section 10: Hazardous decomposition products during combustion text information was added.
Section 11: Disclosed components not in tables text information was added.
Section 12: Classification Warning information was added.
Section 11: Classification disclaimer information was added.
Section 8: 8.1.1 Biological limit values table heading information was added.
Section 8: BLV information was added.
Section 2: R phrase reference information was added.
Label: Graphic information was added.
Label: Graphic information was added.
Label: Graphic Text information was added.
Section 9: Flammability (solid, gas) information information was added.
Section 8: Eye/face protection text information was deleted.

Section 8: Respiratory protection - recommended respirators information was deleted.
Section 2: Symbol information was deleted.
Section 2: Symbols heading information was deleted.
Section 12: Acute aquatic hazard information information was deleted.
Section 12: Chronic aquatic hazard heading information was deleted.
Section 12: Acute aquatic hazard heading information was deleted.
Section 12: Chronic aquatic hazard information information was deleted.
Prints No Data if Component ecotoxicity information is not present information was deleted.
Prints No Data if Persistence and Degradability information is not present information was deleted.
Prints No Data if Bioccumulative potential information is not present information was deleted.
Section 8: mg/m³ key information was deleted.
Section 8: ppm key information was deleted.
Section 11: Aspiration Hazard Table information was deleted.
Section 11: Classification disclaimer information was deleted.
Section 11: UN GHS Classification table heading information was deleted.
Section 12: Classification Warning information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

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