

Safety Data Sheet

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

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

1.1. Product identifier

3M 05917 Polyolefin Adhesion Promoter Aerosol

Product Identification Numbers

YP-2080-6025-8

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

Identified uses

Automotive. Primer and adhesion promoter for plastic surfaces of instruments, electrical equipment and metal protection and/or cleaning.

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:

Aerosol, Category 1 - Aerosol 1; H222, H229

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

Reproductive Toxicity, Category 2 - Repr. 2; H361

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

Specific Target Organ Toxicity-Repeated Exposure, Category 1 - STOT RE 1; H372

For full text of H phrases, see Section 16.

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

Indication of danger

Extremely flammable; F+; R12

Toxic for reproduction; Repr. Cat. 3; R63

Irritant; Xi; R38 Harmful; Xn; R48/20

R67

For full text of R phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER!

Symbols:

GHS02 (Flame) |GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

Pictograms







Ingredient CAS Nbr % by Wt Toluene 108-88-3 60 - 90

HAZARD STATEMENTS:

H222 Extremely flammable aerosol. H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H229 Pressurised container, may burst if heated.

H372 Causes damage to organs through prolonged or repeated exposure: nervous system sensory

organs

PRECAUTIONARY STATEMENTS

Prevention:

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.
P260E Do not breathe vapour or spray.

P280E Wear protective gloves.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.

2% of the mixture consists of components of unknown acute oral toxicity.

Contains 2% of components with unknown hazards to the aquatic environment.

Notes on labelling

-

Updated per Regulation (EC) No. 648/2004 on detergents. H304 is not required on the label because the product is an aerosol.

Ingredients required per 648/2004 (not required on industrial label): <5%: Halogenated hydrocarbons.

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

Symbol(s)





Extremely Flammable

Contains: Toluene

Risk phrases

R12 Extremely flammable. R38 Irritating to skin.

Vapours may cause drowsiness and dizziness. R67

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63 Possible risk of harm to the unborn child.

Safety phrases

Keep away from sources of ignition - No Smoking. S16

S23C Do not breathe vapour or spray. Use only in well ventilated areas. S51

S36/37 Wear suitable protective clothing and gloves.

S2 Keep out of the reach of children.

Special provisions concerning the labelling of certain substances

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.

Notes on labelling

R65 is not required on the label because the product is an aerosol.

Updated per Regulation (EC) 648/2004 on detergents.

Ingredients required per 648/2004 (not required on industrial label): <5%: Halogenated hydrocarbons.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Toluene	108-88-3	EINECS 203-	60 - 90	Repr.Cat.3:R63; F:R11;
		625-9		Xn:R48/20; Xn:R65; Xi:R38;
				R67 - Nota 4 (EU)
				Flam. Liq. 2, H225; Asp. Tox. 1,
				H304; Skin Irrit. 2, H315; Repr.
				2, H361d; STOT SE 3, H336;
				STOT RE 1, H372 (CLP)

Propane	74-98-6	EINECS 200-	10 - 30	F+:R12 (EU)
		827-9		
				Flam. Gas 1, H220; Liquified
				gas, H280 - Nota U (CLP)
Butane	106-97-8	EINECS 203-	3 - 7	F+:R12 - Nota C (EU)
		448-7		
				Flam. Gas 1, H220; Liquified
				gas, H280 - Nota C,U (CLP)
Isobutane	75-28-5	EINECS 200-	1 - 5	F+:R12 - Nota C (EU)
		857-2		
				Flam. Gas 1, H220; Liquified
				gas, H280 - Nota C,U (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. 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

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

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

Carbon monoxide. Carbon dioxide. Irritant vapours or gases.

Condition

During combustion.
During combustion.
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

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.

6.3. Methods and material for containment and cleaning up

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR-AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after 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. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from heat. 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

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
Butane	106-97-8	UK HSC	TWA:1450 mg/m ³ (600	
			ppm);STEL:1810 mg/m ³ (750	
			ppm)	
Toluene	108-88-3	UK HSC	TWA: 191 mg/m ³ (50 ppm);	Skin Notation
			STEL: 384 mg/m ³ (100 ppm)	
Propane	74-98-6	UK HSC	Limit value not established:	asphyxiant

UK HSC: UK Health and Safety Commission

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

CEIL: Ceiling

Biological limit values

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

8.2. Exposure controls

8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. 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:

Material	Thickness (mm)	Breakthrough Time
Fluoroelastomer	No data available	No data available
Polyvinyl alcohol (PVA).	No data available	No data available
Polymer laminate	No data available	No data available

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

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

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.
Specific Physical Form: Aerosol

Appearance/Odour Clear aerosol with a sweet, spicy odour.

Odour thresholdNo data available.pHNot applicable.Boiling point/boiling rangeNot applicable.Melting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point -4 °C [Test Method:Closed Cup]

Autoignition temperatureNo data available.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.Vapour pressureNo data available.

Relative density 0.76 [*Ref Std*:WATER=1]

No data available. Water solubility Solubility- non-water No data available. Partition coefficient: n-octanol/water No data available. **Evaporation rate** No data available. Vapour density No data available. **Decomposition temperature** No data available. Not applicable. Viscosity 0.76 g/cm3 **Density**

9.2. Other information

Percent volatile 97.8 % 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

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

Substance Condition

None known.

Dogg, 7 of

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

Intentional concentration and inhalation may be harmful or fatal. Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause target organ effects after inhalation.

Skin contact

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

Eve contact

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

Ingestion

May be harmful if swallowed.

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause target organ effects after ingestion.

Target Organ Effects:

Single exposure may cause:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause:

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data

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

Dance 9 of

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000
			mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-	Rat	LC50 30 mg/l
	Vapor (4		
	hours)		
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
Propane	Inhalation-	Rat	LC50 > 200,000 ppm
	Gas (4		
	hours)		
Isobutane	Inhalation-	Rat	LC50 276,000 ppm
	Gas (4		
	hours)		
Butane	Inhalation-	Rat	LC50 277,000 ppm
	Gas (4		
	hours)		

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Toluene	Rabbit	Irritant
Propane	Rabbit	Minimal irritation
Isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Butane	Professio	No significant irritation
	nal	
	judgemen	
	t	

Serious Eye Damage/Irritation

Name	Species	Value
Toluene	Rabbit	Moderate irritant
Propane	Rabbit	Mild irritant
Isobutane	Professio	No significant irritation
	nal	
	judgemen	
	t	
Butane	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Toluene	Guinea	Not sensitizing
	pig	

Respiratory Sensitisation

Name Species Value	Value
--------------------	-------

Germ Cell Mutagenicity

our media management		
Name	Route	Value
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Propane	In Vitro	Not mutagenic
Isobutane	In Vitro	Not mutagenic
Butane	In Vitro	Not mutagenic

Carcinogenicity

Carcinogenicity			
Name	Route	Species	Value
Toluene	Dermal	Mouse	Some positive data exist, but the data are not
			sufficient for classification

Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	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
Toluene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion			LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	
Toluene	Inhalation	central nervous	May cause drowsiness or	Human	NOAEL Not		
		system depression	dizziness		available		
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available		
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification		NOAEL 0.004 mg/l	3 hours	
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse	
Propane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available		
Propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available		
Propane	Inhalation	respiratory irritation	All data are negative	Human	NOAEL Not available		
Isobutane	Inhalation	cardiac sensitization	Causes damage to organs	Multiple animal species	NOAEL Not available		
Isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available		
Isobutane	Inhalation	respiratory irritation	All data are negative	Mouse	NOAEL Not available		
Butane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available		
Butane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available		
Butane	Inhalation	heart	data are not sufficient for classification		NOAEL 5,000 ppm	25 minutes	
Butane	Inhalation	respiratory irritation	All data are negative	Rabbit	NOAEL Not available		

Specific Target Organ Toxicity - repeated exposure

~	Specific Target Organ Toxicity - repeated exposure						
	Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
-	Toluene	Inhalation	auditory system	Causes damage to organs through	Human	NOAEL Not	poisoning
			nervous system	prolonged or repeated exposure		available	and/or abuse

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		eyes olfactory				
		system				
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system vascular system	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	occupational exposure
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification species		NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Some positive data exist, but the Mouse NOA		NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	1 112 1 111 1			28 days
Toluene	Ingestion	immune system	r		NOAEL 105 mg/kg/day	4 weeks
Isobutane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification Some positive data exist, but the Rat NOAEL 4,500 ppm			13 weeks
Butane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 4,489 ppm	90 days
Butane	Inhalation	blood	All data are negative	Rat	NOAEL 4,489 ppm	90 days

Aspiration Hazard

Name	Value
Toluene	Aspiration hazard

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
Toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	LC50	3.78 mg/l
Toluene	108-88-3	Sheepshead Minnow	Experimental	28 days	NOEC	3.2 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
Propane	74-98-6		Data not available or insufficient for classification			
Butane	106-97-8		Data not available or insufficient for classification			
Isobutane	75-28-5		Data not available or insufficient for classification			% weight

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Toluene	108-88-3	Experimental		Half-life (t 1/2)	5.38 days (t	Other methods
		Photolysis			1/2)	
Toluene	108-88-3	Experimental	14 days	BOD	100 % weight	OECD 301C - MITI
		Biodegradation				test (I)
Propane	74-98-6	Experimental		Photolytic half-	27.5 days (t	Other methods
		Photolysis		life (in air)	1/2)	
Butane	106-97-8	Experimental		Photolytic half-	6.3 days (t 1/2)	Other methods
		Photolysis		life (in air)		
Isobutane	75-28-5	Experimental		Photolytic half-	13.7 days (t	Other methods
		Photolysis		life (in air)	1/2)	

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Toluene	108-88-3	Experimental Bioaccumulati on		Log Kow	2.73	Other methods
Propane	74-98-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Butane	106-97-8	Experimental Bioconcentrati on		Log Kow	2.88	Other methods
Isobutane	75-28-5	Experimental Bioconcentrati on		Bioaccumulati on factor	1.97	Other methods

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. Facility must be capable of handling aerosol cans. 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)

16 05 04* Gases in pressure containers (including halons) containing dangerous substances

EU waste code (product container after use)

15 01 04 Metallic packaging

SECTION 14: Transportation information

YP-2080-6025-8

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.1, (E), ADR Classification Code: 5F.

IMDG-CODE: UN1950, AEROSOLS, 2.1, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FD,SU.

ICAO/IATA: UN1950, AEROSOLS, FLAMMABLE, 2.1.

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient Classification Regulation Gr. 3: Not classifiable Toluene International Agency for Research on Cancer

Global inventory status

Contact 3M for more information.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container. may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure

List of relevant R-phrases

R11 Highly flammable. R12 Extremely flammable. R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63 Possible risk of harm to the unborn child.
R65 Harmful: May cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.

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Revision information:

Revision Changes:

Section 8: Personal Protection - Skin/body information information was modified.

Section 1: Product identification numbers heading information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Copyright information was modified.

Label: CLP Classification information was modified.

Label: CLP Precautionary - Prevention information was modified.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

CLP Remark(phrase) information was modified.

Telephone header information was modified.

Company Telephone information was modified.

Section 11: Aspiration Hazard Table information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Serious Eve Damage/Irritation Table information was modified.

Section 11: Skin 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: Health Effects - Inhalation information information was modified.

Section 7: Conditions safe storage information was modified.

Section 8: Personal Protection - Eye information information was modified.

Section 15: Label remarks and EU Detergent information was added.

Section 8: Occupational exposure limit table information was added.

Section 8: Personal Protection - Skin/hand information 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.

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Section 8: glove data - Material heading information was added.

Section 8: glove data - Thickness heading information was added.

Section 8: glove data - Breakthrough Time heading information was added.

Section 8: glove data value information was added.

Section 8: Skin protection - recommended gloves information information was deleted.

Label: CLP Supplemental Information - Header information was deleted.

Label: CLP Supplemental Precautionary Statements - Header information was deleted.

Label: CLP Supplemental Precautionary Statements information was deleted.

Section 11: Classification disclaimer information was deleted.

Section 11: Respiratory Sensitization Table information was deleted.

Section 12: Classification Warning information was deleted.

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