Safety Data Sheet

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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™ Weld-Thru Coating, PN 50410

Product Identification Numbers
UU-0090-2588-1

7100143689

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

Identified uses
Automotive.

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:

Aerosol, Category 1 - Aerosol 1; H222, H229
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Carcinogenicity, Category 1B - Carc. 1B; H350
Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
Aspiration Hazard, Category 1 - Asp. Tox. 1; H304
Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400
Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

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

SIGNAL WORD
DANGER.

Symbols
GHS02 (Flame) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms

Ingredient	CAS Nbr	EC No.	% by Wt
acetone	67-64-1	200-662-2	30 - 60
Petroleum gases, liquefied, sweetened	68476-86-8	270-705-8	10 - 35
ethylbenzene	100-41-4	202-849-4	<= 10
xylene	1330-20-7	215-535-7	<= 10
cumene	98-82-8	202-704-5	0.01 - 0.2
stoddard solvent	8052-41-3	232-489-3	<= 1

HAZARD STATEMENTS:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H350	May cause cancer.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure: nervous system | sensory organs.
H410	Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS
General:

P102	Keep out of reach of children.

Prevention:

P201	Obtain special instructions before use.
P210	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.
P280K	Wear protective gloves and respiratory protection.

Response:

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P331	Do NOT induce vomiting.

Storage:

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

Disposal:

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

SUPPLEMENTAL INFORMATION:

Supplemental Precautionary Statements:
Restricted to professional users.

10% of the mixture consists of components of unknown acute oral toxicity.
10% of the mixture consists of components of unknown acute dermal toxicity.
10% of the mixture consists of components of unknown acute inhalation toxicity.
Contains 10% of components with unknown hazards to the aquatic environment.

EU VOC Directive (2004/42/EC) labelling: 2004/42/EC IIB(e)(840)
750g/l

Nota K applied. Nota P applied.
Nota K applied for CAS #68476-86-8 and Nota P applied for CAS #8052-41-3.

2.3. Other hazards

May displace oxygen and cause rapid suffocation.
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
acetone	(CAS-No.) 67-64-1 (EC-No.) 200-662-2	30 - 60	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
Petroleum gases, liquefied, sweetened	(CAS-No.) 68476-86-8	10 - 35	Flam. Gas 1A, H220

	(EC-No.) 270-705-8		Liquified gas, H280 Nota K,S,U STOT SE 3, H336
Non-hazardous ingredients	Trade Secret	<= 10	Substance not classified as hazardous
ethylbenzene	(CAS-No.) 100-41-4 (EC-No.) 202-849-4	<= 10	Flam. Liq. 2, H225 Acute Tox. 4, H332 Asp. Tox. 1, H304 STOT RE 2, H373 Aquatic Chronic 3, H412
n-butyl acetate	(CAS-No.) 123-86-4 (EC-No.) 204-658-1	<= 10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066
Zinc	(CAS-No.) 7440-66-6 (EC-No.) 231-175-3	<= 10	Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=10
Aluminium	(CAS-No.) 7429-90-5 (EC-No.) 231-072-3	<= 10	Flam. Sol. 1, H228 Water-react. 2, H261 Nota T
xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7	<= 10	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315 Nota C Asp. Tox. 1, H304 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412
cumene	(CAS-No.) 98-82-8 (EC-No.) 202-704-5	0.01 - 0.2	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 Aquatic Chronic 2, H411
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	(CAS-No.) 68953-58-2 (EC-No.) 273-219-4	<= 1	Substance not classified as hazardous
Zeolites	(CAS-No.) 1318-02-1 (EC-No.) 215-283-8	<= 1	Substance with a national occupational exposure limit
Solvent naphtha (petroleum), light arom.	(CAS-No.) 64742-95-6 (EC-No.) 265-199-0	<= 1	Asp. Tox. 1, H304 Nota P Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 3, H412
zinc oxide	(CAS-No.) 1314-13-2 (EC-No.) 215-222-5	<= 1	Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
stoddard solvent	(CAS-No.) 8052-41-3 (EC-No.) 232-489-3	<= 1	Asp. Tox. 1, H304 STOT RE 1, H372 Nota P Skin Irrit. 2, H315 Aquatic Chronic 3, H412
toluene	(CAS-No.) 108-88-3 (EC-No.) 203-625-9	<= 1	Flam. Liq. 2, H225 Asp. Tox. 1, H304

			Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 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

Inhalation
Remove person to fresh air. Get medical attention.

Skin contact
Wash with soap and water. 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
Do not induce vomiting. Get immediate 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). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Aspiration pneumonitis (coughing, gasping, choking, burning of the mouth, and difficulty breathing). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details.

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	Condition
Carbon monoxide	During combustion.
Carbon dioxide.	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. 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. 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
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 that is resistant to polar solvents. 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 detergent and water. 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
Do not use in a confined area with minimal air exchange. Keep out of reach of children. 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 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 50ºC/122ºF. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

7.3. Specific end use(s)
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
ethylbenzene	100-41-4	UK HSC	TWA:441 mg/m3(100	SKIN

			ppm);STEL:552 mg/m3(125 ppm)	
toluene	108-88-3	UK HSC	TWA: 191 mg/m³ (50 ppm); STEL: 384 mg/m³ (100 ppm)	SKIN
n-butyl acetate	123-86-4	UK HSC	TWA:724 mg/m3(150 ppm);STEL:966 mg/m3(200 ppm)	
DUST, INERT OR NUISANCE	1314-13-2	UK HSC	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
Aluminium oxides	1318-02-1	UK HSC	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
xylene	1330-20-7	UK HSC	TWA:220 mg/m3(50 ppm);STEL:441 mg/m3(100 ppm)	SKIN
acetone	67-64-1	UK HSC	TWA:1210 mg/m³(500 ppm);STEL:3620 mg/m³(1500 ppm)	
Aluminium	7429-90-5	UK HSC	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
cumene	98-82-8	UK HSC	TWA:125 mg/m³(25 ppm);STEL:250 mg/m³(50 ppm)	SKIN

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
xylene	1330-20-7	UK EH40 BMGVs	Methyl hippuric acid	Creatinine in urine	EOS	650 mmol/mol	

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)
EOS: End of shift.

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. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Applicable Norms/Standards
Use eye protection conforming to EN 166

Skin/hand protection
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended:

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

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
Organic vapour respirators may have short service life.

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:	Aerosol
Colour	Grey
Odor	Solvent
Odour threshold	*No data available.*
Melting point/freezing point	*Not applicable.*
Boiling point/boiling range	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	0.7 %
Flammable Limits(UEL)	12.8 %
Flash point	-104.4 ºC [*Test Method:*Pensky-Martens Closed Cup] [*Details:*Based on propellant]
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
pH	*substance/mixture is non-soluble (in water)*
Kinematic Viscosity	*No data available.*
Water solubility	Appreciable
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Vapour pressure	10,665.8 - 11,999 Pa
Density	0.952 g/ml
Relative density	0.952 [*Ref Std:*WATER=1]
Relative Vapour Density	Negligible [*Details:*Heavier than air]

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	*No data available.*
Evaporation rate	*No data available.*
Percent volatile	82.6 % 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.

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

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
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 additional health effects (see below).

Skin contact

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

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

Ingestion
Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:
Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. 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. Single exposure, above recommended guidelines, may cause: Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause target organ effects:
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.

Carcinogenicity:
Contains a chemical or chemicals which can cause cancer.

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-Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
acetone	Inhalation-Vapour (4 hours)	Rat	LC50 76 mg/l
acetone	Ingestion	Rat	LD50 5,800 mg/kg
Petroleum gases, liquefied, sweetened	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
ethylbenzene	Inhalation-Vapour (4 hours)	Rat	LC50 17.4 mg/l

ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
n-butyl acetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
n-butyl acetate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 1.4 mg/l
n-butyl acetate	Inhalation-Vapour (4 hours)	Rat	LC50 > 20 mg/l
n-butyl acetate	Ingestion	Rat	LD50 > 8,800 mg/kg
Aluminium	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium	Ingestion		LD50 estimated to be > 5,000 mg/kg
Zinc	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Aluminium	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.888 mg/l
xylene	Inhalation-Vapour (4 hours)	Rat	LC50 29 mg/l
xylene	Ingestion	Rat	LD50 3,523 mg/kg
Zinc	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.41 mg/l
Zinc	Ingestion	Rat	LD50 > 2,000 mg/kg
stoddard solvent	Inhalation-Vapour		LC50 estimated to be 20 - 50 mg/l
stoddard solvent	Dermal	Rabbit	LD50 > 3,000 mg/kg
stoddard solvent	Ingestion	Rat	LD50 > 5,000 mg/kg
toluene	Dermal	Rat	LD50 12,000 mg/kg
toluene	Inhalation-Vapour (4 hours)	Rat	LC50 30 mg/l
toluene	Ingestion	Rat	LD50 5,550 mg/kg
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Dermal		LD50 estimated to be > 5,000 mg/kg
zinc oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Solvent naphtha (petroleum), light arom.	Dermal	Rabbit	LD50 > 2,000 mg/kg
Zeolites	Dermal	Rabbit	LD50 > 2,000 mg/kg
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 12.6 mg/l
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Ingestion	Rat	LD50 > 5,000 mg/kg
Solvent naphtha (petroleum), light arom.	Inhalation-Vapour (4 hours)	Rat	LC50 > 5.2 mg/l
Solvent naphtha (petroleum), light arom.	Ingestion	Rat	LD50 > 5,000 mg/kg
Zeolites	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.57 mg/l
Zeolites	Ingestion	Rat	LD50 > 5,000 mg/kg
zinc oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
zinc oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
cumene	Dermal	Rabbit	LD50 > 3,160 mg/kg
cumene	Inhalation-Vapour (4 hours)	Rat	LC50 39.4 mg/l
cumene	Ingestion	Rat	LD50 1,400 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
acetone	Mouse	Minimal irritation
Petroleum gases, liquefied, sweetened	Professional judgement	No significant irritation
ethylbenzene	Rabbit	Mild irritant
n-butyl acetate	Rabbit	Minimal irritation
Aluminium	Rabbit	No significant irritation
xylene	Rabbit	Mild irritant
stoddard solvent	Rabbit	Irritant
toluene	Rabbit	Irritant
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Rat	No significant irritation
Solvent naphtha (petroleum), light arom.	Rabbit	Irritant
Zeolites	Rabbit	No significant irritation
zinc oxide	Human and animal	No significant irritation
cumene	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
acetone	Rabbit	Severe irritant
Petroleum gases, liquefied, sweetened	Professional judgement	No significant irritation
ethylbenzene	Rabbit	Moderate irritant
n-butyl acetate	Rabbit	Moderate irritant
Aluminium	Rabbit	No significant irritation
xylene	Rabbit	Mild irritant
Zinc	Rabbit	No significant irritation
stoddard solvent	Rabbit	No significant irritation
toluene	Rabbit	Moderate irritant
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Rabbit	No significant irritation
Solvent naphtha (petroleum), light arom.	Rabbit	Mild irritant
Zeolites	Rabbit	Mild irritant
zinc oxide	Rabbit	Mild irritant
cumene	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
ethylbenzene	Human	Not classified
n-butyl acetate	Multiple animal species	Not classified
Aluminium	Guinea pig	Not classified
stoddard solvent	Guinea pig	Not classified
toluene	Guinea pig	Not classified
Solvent naphtha (petroleum), light arom.	Guinea pig	Not classified
zinc oxide	Guinea pig	Not classified
cumene	Guinea pig	Not classified

Respiratory Sensitisation

Name	Species	Value
Aluminium	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
acetone	In vivo	Not mutagenic
acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Petroleum gases, liquefied, sweetened	In Vitro	Not mutagenic
ethylbenzene	In vivo	Not mutagenic
ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
n-butyl acetate	In Vitro	Not mutagenic
Aluminium	In Vitro	Not mutagenic
xylene	In Vitro	Not mutagenic
xylene	In vivo	Not mutagenic
stoddard solvent	In vivo	Not mutagenic
stoddard solvent	In Vitro	Some positive data exist, but the data are not sufficient for classification
toluene	In Vitro	Not mutagenic
toluene	In vivo	Not mutagenic
zinc oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
zinc oxide	In vivo	Some positive data exist, but the data are not sufficient for classification
cumene	In Vitro	Not mutagenic
cumene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
acetone	Not specified.	Multiple animal species	Not carcinogenic
ethylbenzene	Inhalation	Multiple animal species	Carcinogenic.
xylene	Dermal	Rat	Not carcinogenic
xylene	Ingestion	Multiple animal species	Not carcinogenic
xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
stoddard solvent	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
stoddard solvent	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification
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
Solvent naphtha (petroleum), light arom.	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
cumene	Inhalation	Multiple animal species	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks
acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis
ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	premating & during gestation
n-butyl acetate	Inhalation	Not classified for female reproduction	Rat	NOAEL 7.1 mg/l	premating & during gestation
n-butyl acetate	Inhalation	Not classified for development	Rat	NOAEL 7.1 mg/l	premating & during gestation
xylene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
xylene	Ingestion	Not classified for development	Mouse	NOAEL Not available	during organogenesis
xylene	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	during gestation
stoddard solvent	Inhalation	Not classified for development	Rat	NOAEL 2.4 mg/l	during organogenesis
toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
Solvent naphtha (petroleum), light arom.	Inhalation	Not classified for female reproduction	Rat	NOAEL 1,500 ppm	2 generation
Solvent naphtha (petroleum), light arom.	Inhalation	Not classified for male reproduction	Rat	NOAEL 1,500 ppm	2 generation
Solvent naphtha (petroleum), light arom.	Inhalation	Not classified for development	Rat	NOAEL 500 ppm	2 generation
zinc oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
cumene	Inhalation	Not classified for development	Rabbit	NOAEL 11.3 mg/l	during organogenesis

Lactation

Name	Route	Species	Value
xylene	Ingestion	Mouse	Not classified for effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 hours
acetone	Inhalation	liver	Not classified	Guinea	NOAEL Not	

				pig	available	
acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Petroleum gases, liquefied, sweetened	Inhalation	cardiac sensitisation	Causes damage to organs	similar compounds	NOAEL Not available	
Petroleum gases, liquefied, sweetened	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Petroleum gases, liquefied, sweetened	Inhalation	respiratory irritation	Not classified		NOAEL Not available	
ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
ethylbenzene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
n-butyl acetate	Inhalation	respiratory system	May cause damage to organs	Rat	LOAEL 2.6 mg/l	4 hours
n-butyl acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
n-butyl acetate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	not available
n-butyl acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
xylene	Inhalation	eyes	Not classified	Rat	NOAEL 3.5 mg/l	not available
xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
xylene	Ingestion	eyes	Not classified	Rat	NOAEL 250 mg/kg	not applicable
stoddard solvent	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
stoddard solvent	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
stoddard solvent	Inhalation	nervous system	Not classified	Dog	NOAEL 6.5 mg/l	4 hours
stoddard solvent	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not 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	Not classified	Mouse	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

Solvent naphtha (petroleum), light arom.	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Solvent naphtha (petroleum), light arom.	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professional judgement	NOAEL Not available	
Solvent naphtha (petroleum), light arom.	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
cumene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
cumene	Inhalation	respiratory irritation	May cause respiratory irritation	Human	LOAEL 0.2 mg/l	occupational exposure
cumene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
acetone	Dermal	eyes	Not classified	Guinea pig	NOAEL Not available	3 weeks
acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
acetone	Inhalation	heart | liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
acetone	Ingestion	skin | bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Petroleum gases, liquefied, sweetened	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL Not available	
ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
ethylbenzene	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 3.4 mg/l	28 days
ethylbenzene	Inhalation	auditory system	Not classified	Rat	NOAEL 2.4 mg/l	5 days

ethylbenzene	Inhalation	endocrine system	Not classified	Mouse	NOAEL 3.3 mg/l	103 weeks
ethylbenzene	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 3.3 mg/l	2 years
ethylbenzene	Inhalation	bone, teeth, nails, and/or hair | muscles	Not classified	Multiple animal species	NOAEL 4.2 mg/l	90 days
ethylbenzene	Inhalation	heart | immune system | respiratory system	Not classified	Multiple animal species	NOAEL 3.3 mg/l	2 years
ethylbenzene	Ingestion	liver | kidney and/or bladder	Not classified	Rat	NOAEL 680 mg/kg/day	6 months
n-butyl acetate	Inhalation	olfactory system	Not classified	Rat	NOAEL 2.4 mg/l	14 weeks
n-butyl acetate	Inhalation	liver | kidney and/or bladder	Not classified	Rabbit	NOAEL 7.26 mg/l	13 days
Aluminium	Inhalation	nervous system | respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
xylene	Inhalation	auditory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
xylene	Inhalation	heart | endocrine system | gastrointestinal tract | hematopoietic system | muscles | kidney and/or bladder | respiratory system	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
xylene	Ingestion	auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
xylene	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
xylene	Ingestion	liver	Not classified	Multiple animal species	NOAEL Not available	
xylene	Ingestion	heart | skin | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | immune system | nervous system | respiratory system	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
stoddard solvent	Inhalation	nervous system	Not classified	Rat	LOAEL 4.6 mg/l	6 months
stoddard solvent	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.9 mg/l	13 weeks
stoddard solvent	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.6 mg/l	90 days
stoddard solvent	Inhalation	bone, teeth, nails, and/or hair | blood | liver | muscles	Not classified	Rat	NOAEL 5.6 mg/l	12 weeks
stoddard solvent	Inhalation	heart	Not classified	Multiple animal species	NOAEL 1.3 mg/l	90 days
toluene	Inhalation	auditory system | eyes | olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
toluene	Inhalation	nervous system	May cause damage to organs	Human	NOAEL Not	poisoning

			though prolonged or repeated exposure		available	and/or abuse
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	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
toluene	Inhalation	hematopoietic system | vascular system	Not classified	Human	NOAEL Not available	occupational exposure
toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
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	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	liver | kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
zinc oxide	Ingestion	nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	10 days
zinc oxide	Ingestion	endocrine system | hematopoietic system | kidney and/or bladder	Not classified	Other	NOAEL 500 mg/kg/day	6 months
cumene	Inhalation	auditory system | endocrine system | hematopoietic system | liver | nervous system | eyes	Not classified	Rat	NOAEL 59 mg/l	13 weeks
cumene	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4.9 mg/l	13 weeks
cumene	Inhalation	respiratory system	Not classified	Rat	NOAEL 59 mg/l	13 weeks
cumene	Ingestion	kidney and/or bladder | heart | endocrine system | hematopoietic system | liver | respiratory system	Not classified	Rat	NOAEL 769 mg/kg/day	6 months

Aspiration Hazard

Name	Value
ethylbenzene	Aspiration hazard
xylene	Aspiration hazard
stoddard solvent	Aspiration hazard
toluene	Aspiration hazard
Solvent naphtha (petroleum), light arom.	Aspiration hazard
cumene	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.

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
acetone	67-64-1	Algae or other aquatic plants	Experimental	96 hours	EC50	11,493 mg/l
acetone	67-64-1	Invertebrate	Experimental	24 hours	LC50	2,100 mg/l
acetone	67-64-1	Rainbow trout	Experimental	96 hours	LC50	5,540 mg/l
acetone	67-64-1	Water flea	Experimental	21 days	NOEC	1,000 mg/l
acetone	67-64-1	Bacteria	Experimental	16 hours	NOEC	1,700 mg/l
acetone	67-64-1	Redworm	Experimental	48 hours	LC50	>100
Petroleum gases, liquefied, sweetened	68476-86-8	N/A	Data not available or insufficient for classification	N/A	N/A	n/a
Aluminium	7429-90-5	Fish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Aluminium	7429-90-5	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Aluminium	7429-90-5	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Aluminium	7429-90-5	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	100 mg/l
Aluminium	7429-90-5	Water flea	Experimental	21 days	NOEC	0.076 mg/l
ethylbenzene	100-41-4	Activated sludge	Experimental	49 hours	EC50	130 mg/l
ethylbenzene	100-41-4	Atlantic Silverside	Experimental	96 hours	LC50	5.1 mg/l
ethylbenzene	100-41-4	Green algae	Experimental	96 hours	EC50	3.6 mg/l
ethylbenzene	100-41-4	Mysid Shrimp	Experimental	96 hours	LC50	2.6 mg/l
ethylbenzene	100-41-4	Rainbow trout	Experimental	96 hours	LC50	4.2 mg/l
ethylbenzene	100-41-4	Water flea	Experimental	48 hours	EC50	1.8 mg/l
ethylbenzene	100-41-4	Water flea	Experimental	7 days	NOEC	0.96 mg/l
n-butyl acetate	123-86-4	Green algae	Analogous Compound	72 hours	ErC50	397 mg/l
n-butyl acetate	123-86-4	Fathead minnow	Experimental	96 hours	LC50	18 mg/l
n-butyl acetate	123-86-4	Water flea	Experimental	48 hours	EC50	44 mg/l

n-butyl acetate	123-86-4	Green algae	Analogous Compound	72 hours	NOEC	196 mg/l
n-butyl acetate	123-86-4	Water flea	Analogous Compound	21 days	NOEC	23.2 mg/l
n-butyl acetate	123-86-4	Ciliated protozoa	Experimental	40 hours	IC50	356 mg/l
n-butyl acetate	123-86-4	Lettuce	Experimental	14 days	EC50	>1,000 mg/kg (Dry Weight)
xylene	1330-20-7	Activated sludge	Estimated	3 hours	NOEC	157 mg/l
xylene	1330-20-7	Green algae	Estimated	72 hours	EC50	4.36 mg/l
xylene	1330-20-7	Rainbow trout	Estimated	96 hours	LC50	2.6 mg/l
xylene	1330-20-7	Water flea	Estimated	48 hours	EC50	3.82 mg/l
xylene	1330-20-7	Green algae	Estimated	72 hours	NOEC	0.44 mg/l
xylene	1330-20-7	Water flea	Estimated	7 days	NOEC	0.96 mg/l
xylene	1330-20-7	Rainbow trout	Experimental	56 days	NOEC	>1.3 mg/l
Zinc	7440-66-6	Bacteria	Estimated	30 minutes	EC10	0.3 mg/l
Zinc	7440-66-6	Green algae	Estimated	72 hours	EC50	0.042 mg/l
Zinc	7440-66-6	Rainbow trout	Estimated	96 hours	LC50	0.169 mg/l
Zinc	7440-66-6	Water flea	Estimated	48 hours	EC50	0.06 mg/l
Zinc	7440-66-6	Green algae	Estimated	72 hours	NOEC	0.005 mg/l
Zinc	7440-66-6	Water flea	Estimated	7 days	NOEC	0.013 mg/l
cumene	98-82-8	Activated sludge	Experimental	3 hours	EC10	>2,000 mg/l
cumene	98-82-8	Green algae	Experimental	72 hours	EC50	2.6 mg/l
cumene	98-82-8	Mysid Shrimp	Experimental	96 hours	EC50	1.2 mg/l
cumene	98-82-8	Rainbow trout	Experimental	96 hours	LC50	2.7 mg/l
cumene	98-82-8	Water flea	Experimental	48 hours	EC50	2.14 mg/l
cumene	98-82-8	Green algae	Experimental	72 hours	NOEC	0.22 mg/l
cumene	98-82-8	Water flea	Experimental	21 days	NOEC	0.35 mg/l
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Activated sludge	Estimated	3 hours	EC50	>300 mg/l
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Green algae	Estimated	72 hours	EC50	>100 mg/l
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl,	68953-58-2	Water flea	Estimated	48 hours	EC50	>100 mg/l

salts with bentonite						
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Zebra Fish	Estimated	96 hours	LC50	>100 mg/l
Solvent naphtha (petroleum), light arom.	64742-95-6	Fathead minnow	Estimated	96 hours	LL50	8.2 mg/l
Solvent naphtha (petroleum), light arom.	64742-95-6	Green algae	Estimated	72 hours	EL50	7.9 mg/l
Solvent naphtha (petroleum), light arom.	64742-95-6	Water flea	Estimated	48 hours	EL50	3.2 mg/l
Solvent naphtha (petroleum), light arom.	64742-95-6	Green algae	Estimated	72 hours	NOEL	0.22 mg/l
Solvent naphtha (petroleum), light arom.	64742-95-6	Water flea	Experimental	21 days	NOEL	2.6 mg/l
stoddard solvent	8052-41-3	Green algae	Estimated	96 hours	EL50	2.5 mg/l
stoddard solvent	8052-41-3	Invertebrate	Estimated	96 hours	LC50	3.5 mg/l
stoddard solvent	8052-41-3	Rainbow trout	Estimated	96 hours	LL50	41.4 mg/l
stoddard solvent	8052-41-3	Green algae	Estimated	96 hours	NOEL	0.76 mg/l
stoddard solvent	8052-41-3	Water flea	Estimated	21 days	NOEC	0.28 mg/l
toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
toluene	108-88-3	Activated sludge	Experimental	12 hours	IC50	292 mg/l
toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry Weight)
Zeolites	1318-02-1	African clawed frog	Analogous Compound	96 hours	LC50	1,800 mg/l
Zeolites	1318-02-1	Fathead minnow	Analogous Compound	96 hours	LC50	>680 mg/l

Zeolites	1318-02-1	Green algae	Analogous Compound	72 hours	EC50	130 mg/l
Zeolites	1318-02-1	Sediment organism	Analogous Compound	22 days	EC50	364.9 mg/l
Zeolites	1318-02-1	Water flea	Analogous Compound	48 hours	EC50	>100 mg/l
Zeolites	1318-02-1	Fathead minnow	Analogous Compound	30 days	NOEC	86.7 mg/l
Zeolites	1318-02-1	Green algae	Analogous Compound	72 hours	NOEC	18 mg/l
Zeolites	1318-02-1	Water flea	Analogous Compound	21 days	NOEC	32 mg/l
Zeolites	1318-02-1	Bacteria	Experimental	16 hours	EC50	950 mg/l
Zeolites	1318-02-1	Radish	Experimental	23 days	EC50	4,000 mg/kg (Dry Weight)
zinc oxide	1314-13-2	Activated sludge	Estimated	3 hours	EC50	6.5 mg/l
zinc oxide	1314-13-2	Green algae	Estimated	72 hours	EC50	0.052 mg/l
zinc oxide	1314-13-2	Rainbow trout	Estimated	96 hours	LC50	0.21 mg/l
zinc oxide	1314-13-2	Water flea	Estimated	48 hours	EC50	0.07 mg/l
zinc oxide	1314-13-2	Green algae	Estimated	72 hours	NOEC	0.006 mg/l
zinc oxide	1314-13-2	Water flea	Estimated	7 days	NOEC	0.02 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
acetone	67-64-1	Experimental Biodegradation	28 days	BOD	78 %BOD/ThOD	OECD 301D - Closed bottle test
acetone	67-64-1	Experimental Photolysis		Photolytic half-life (in air)	147 days (t 1/2)	
Petroleum gases, liquefied, sweetened	68476-86-8	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Aluminium	7429-90-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
ethylbenzene	100-41-4	Experimental Biodegradation	28 days	CO2 evolution	70-80 %CO2 evolution/THCO2 evolution	ISO 14593 Inorg C Headspace
ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	
n-butyl acetate	123-86-4	Experimental Biodegradation	28 days	BOD	83 %BOD/ThOD	OECD 301D - Closed bottle test
n-butyl acetate	123-86-4	Experimental Photolysis		Photolytic half-life (in air)	6.3 days (t 1/2)	
n-butyl acetate	123-86-4	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	3.1 years (t 1/2)	
xylene	1330-20-7	Experimental Biodegradation	28 days	BOD	90-98 %BOD/ThOD	OECD 301F - Manometric respirometry
xylene	1330-20-7	Experimental Photolysis		Photolytic half-life (in air)	1.4 days (t 1/2)	
Zinc	7440-66-6	Data not availbl-insufficient	N/A	N/A	N/A	N/A
cumene	98-82-8	Experimental Biodegradation	14 days	BOD	33 %BOD/ThOD	OECD 301C - MITI test (I)
cumene	98-82-8	Experimental Photolysis		Photolytic half-life (in air)	4.5 days (t 1/2)	
Quaternary ammonium compounds, bis(hydrogenated	68953-58-2	Estimated Biodegradation	28 days	BOD	3 %BOD/ThOD	OECD 301D - Closed bottle test

tallow alkyl)dimethyl, salts with bentonite						
Solvent naphtha (petroleum), light arom.	64742-95-6	Estimated Biodegradation	28 days	BOD	78 %BOD/COD	OECD 301F - Manometric respirometry
stoddard solvent	8052-41-3	Experimental Biodegradation	28 days	CO2 evolution	>63 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
stoddard solvent	8052-41-3	Experimental Photolysis		Photolytic half-life (in air)	6.49 days (t 1/2)	
toluene	108-88-3	Experimental Biodegradation	20 days	BOD	80 %BOD/ThOD	APHA Std Meth Water/Wastewater
toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	
Zeolites	1318-02-1	Analogous Compound Hydrolysis		Hydrolytic half-life	60 days (t 1/2)	
zinc oxide	1314-13-2	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
acetone	67-64-1	Experimental BCF - Other		Bioaccumulation factor	0.65	
acetone	67-64-1	Experimental Bioconcentration		Log Kow	-0.24	
Petroleum gases, liquefied, sweetened	68476-86-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Petroleum gases, liquefied, sweetened	68476-86-8	Estimated Bioconcentration		Log Kow	2.8	
Aluminium	7429-90-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
ethylbenzene	100-41-4	Experimental BCF - Fish	42 days	Bioaccumulation factor	1	
n-butyl acetate	123-86-4	Experimental Bioconcentration		Log Kow	2.3	OECD 117 log Kow HPLC method
xylene	1330-20-7	Experimental BCF - Fish	56 days	Bioaccumulation factor	25.9	
Zinc	7440-66-6	Estimated BCF - Fish	56 days	Bioaccumulation factor	242	
cumene	98-82-8	Modeled Bioconcentration		Bioaccumulation factor	140	Catalogic™
cumene	98-82-8	Experimental Bioconcentration		Log Kow	3.55	OECD 107 log Kow shke flsk mtd
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent naphtha (petroleum), light arom.	64742-95-6	Estimated BCF - Fish	42 days	Bioaccumulation factor	598	OECD305-Bioconcentration
stoddard solvent	8052-41-3	Estimated Bioconcentration		Log Kow	6.4	
toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation factor	90	
toluene	108-88-3	Experimental Bioconcentration		Log Kow	2.73	
Zeolites	1318-02-1	Data not available or insufficient for	N/A	N/A	N/A	N/A

		classification				
zinc oxide	1314-13-2	Experimental BCF - Fish	56 days	Bioaccumulation factor	≤217	OECD305-Bioconcentration

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
acetone	67-64-1	Modeled Mobility in Soil	Koc	9.7 l/kg	Episuite™
n-butyl acetate	123-86-4	Modeled Mobility in Soil	Koc	135 l/kg	Episuite™
cumene	98-82-8	Modeled Mobility in Soil	Koc	700	Episuite™
toluene	108-88-3	Experimental Mobility in Soil	Koc	37-160 l/kg	

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.

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

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

EU waste code (product as sold)
08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances
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

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS, FLAMMABLE	AEROSOLS(ZINC)

14.3 Transport hazard class(es)	2.1	2.1	2.1
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	5F	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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
cumene	98-82-8	Carc. 1B	Annex VI-18th ATP according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
cumene	98-82-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
toluene	108-88-3	Gr. 3: Not classifiable	International Agency for Research on Cancer
xylene	1330-20-7	Gr. 3: Not classifiable	International Agency for Research on Cancer
Zeolites	1318-02-1	Gr. 3: Not classifiable	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.

Ingredient	CAS Nbr
toluene	108-88-3

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. 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
E1 Hazardous to the Aquatic environment	100	200
P3a FLAMMABLE AEROSOLS	150 (net)	500 (net)

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
acetone	67-64-1	10	50
Aluminium	7429-90-5	50	200
cumene	98-82-8	10	50
ethylbenzene	100-41-4	10	50
n-butyl acetate	123-86-4	10	50
Petroleum gases, liquefied, sweetened	68476-86-8	10	50
toluene	108-88-3	10	50
xylene	1330-20-7	10	50
Zinc	7440-66-6	50	200

Zinc	7440-66-6	100	200
zinc oxide	1314-13-2	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

EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H229	Pressurised container: may burst if heated.
H261	In contact with water releases flammable gas.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure: nervous system | sensory organs.
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 modified.
GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was modified.
GB Section 15: Carcinogenicity information information was modified.
Label: CLP Classification information was modified.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Precautionary - Response information was added.
Label: CLP Target Organ Hazard Statement information was modified.
Section 02: Label Elements: GB Percent Unknown information was modified.
Section 02: SDS Elements: CLP Supplemental Precautionary Statements information was added.
Section 3: Composition/ Information of ingredients table information was modified.
Section 4: First aid for ingestion (swallowing) information information was modified.
Section 4: First aid for skin contact information information was modified.
Section 8: Eye/face protection information information was modified.

Section 8: Occupational exposure limit table information was modified.
Section 9: Density information information was modified.
Section 9: Flash point information information was modified.
Section 9: Relative density information information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Aspiration Hazard Table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Health Effects - Ingestion information information was modified.
Section 11: Health Effects - Skin information information was modified.
Section 11: Prolonged or repeated exposure may cause standard phrases information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Reproductive/developmental effects information information was added.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Single exposure may cause standard phrases 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: Component ecotoxicity information information was modified.
Section 12: Mobility in soil information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 15: Regulations - Inventories information was modified.
Section 15: Restrictions on manufacture ingredients information information was added.
Section 15: Seveso Hazard Category Text information was added.
Section 15: Seveso Substance Text 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.

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.