



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 Cavity Wax Spray, Transparent 08909

Product Identification Numbers

UU-0109-4950-9

7100232702

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

Identified uses

Protective Coatings for vehicle's exterior or interior body work

1.3. Details of the supplier of the safety data sheet

Address: 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone: +353 1 280 3555
E Mail: tox.uk@mmm.com
Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

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

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319

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 (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols

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

Pictograms



Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics		919-857-5	20 - 55
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics		927-241-2	< 12
pentane	109-66-0	203-692-4	< 12

HAZARD STATEMENTS:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

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.

Response:

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P331	Do NOT induce vomiting.

Storage:

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

Supplemental Hazard Statements:

EUH066

Repeated exposure may cause skin dryness or cracking.

EUH208

Contains Sulphonic acids, petroleum, calcium salts. May produce an allergic reaction.

Contains 64% of components with unknown hazards to the aquatic environment.

Nota L applied.

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]
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(EC-No.) 919-857-5 (REACH-No.) 01-2119463258-33	20 - 55	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 EUH066
butane	(CAS-No.) 106-97-8 (EC-No.) 203-448-7 (REACH-No.) 01-2119474691-32	7 - 30	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (REACH-No.) 01-2119486944-21	7 - 30	Flam. Gas 1A, H220 Liquified gas, H280 Nota U
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	(CAS-No.) 154518-38-4	< 1.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Distillates (petroleum), heavy hydrocracked	(CAS-No.) 64741-76-0 (EC-No.) 265-077-7	< 1.5	Nota L Asp. Tox. 1, H304
Sulphonic acids, petroleum, sodium salts	(CAS-No.) 68608-26-4 (EC-No.) 271-781-5	< 1.5	Eye Irrit. 2, H319
Lauric acid	(CAS-No.) 143-07-7 (EC-No.) 205-582-1	< 1.5	Eye Dam. 1, H318
ALCOHOLS, C11-14-ISO, C13-RICH	(CAS-No.) 68526-86-3 (EC-No.) 271-235-6	< 1.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	(EC-No.) 927-241-2 (REACH-No.) 01-	< 12	Aquatic Chronic 3, H412 Flam. Liq. 3, H226

	2119471843-32		Asp. Tox. 1, H304 STOT SE 3, H336 EUH066
pentane	(CAS-No.) 109-66-0 (EC-No.) 203-692-4	< 12	Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 EUH066 Aquatic Chronic 2, H411 Nota C
isobutane	(CAS-No.) 75-28-5 (EC-No.) 200-857-2 (REACH-No.) 01-2119485395-27	< 12	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(EC-No.) 919-857-5 (REACH-No.) 01-2119463258-33	< 7	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 EUH066
Sulphonic acids, petroleum, calcium salts	(CAS-No.) 61789-86-4 (EC-No.) 263-093-9 (REACH-No.) 01-2119488992-18	< 5	Skin Sens. 1B, H317
Distillates (petroleum), hydrotreated heavy naphthenic	(CAS-No.) 64742-52-5 (EC-No.) 265-155-0	< 5	Nota L

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.
Please see section 16 for the full text of any H statements referred to in this section

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
Sulphonic acids, petroleum, calcium salts	(CAS-No.) 61789-86-4 (EC-No.) 263-093-9 (REACH-No.) 01-2119488992-18	(C >= 10%) Skin Sens. 1B, H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. 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. Remove contact lenses if easy to do. Continue rinsing. 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 CLP classification include:

Toxic by eye contact. 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).

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.

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.

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. 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/occupational use only. Not for consumer sale or use. Do not use in a confined area with minimal air

exchange. 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.) Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. 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	Ireland OELs	STEL(15 minutes):1000 ppm	
pentane	109-66-0	Ireland OELs	TWA(8 hours):3000 mg/m3(1000 ppm);TWA(8 hours):1000 ppm(3000 mg/m3)	
isobutane	75-28-5	Ireland OELs	STEL(15 minutes):1000 ppm	

Ireland OELs : Ireland. OELs

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.

Recommended monitoring procedures:Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

8.2. Exposure controls

8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. Local exhaust ventilation with a minimum capture velocity of 100 linear feet per minute (0.5 m/sec) should be provided for applications at or above the boiling temperature. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety glasses with side shields.

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. 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

Half facepiece or full facepiece supplied-air respirator

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

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	Beige
Odor	Turpentine
Odour threshold	No data available.
Melting point/freezing point	No data available.
Boiling point/boiling range	-44.5 °C [Details:Propane liquified]
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	0.6 % volume
Flammable Limits(UEL)	10.9 % volume
Flash point	-97 °C [Test Method:Closed Cup]
Autoignition temperature	Not applicable.
Decomposition temperature	No data available.
pH	substance/mixture is non-soluble (in water)
Kinematic Viscosity	No data available.
Water solubility	Negligible
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	830 Pa [@ 20 °C] [Details:Propane liquified]
Density	0.72 g/cm3 [@ 20 °C]
Relative density	No data available.

Relative Vapour Density

No data available.

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

No data available.

Percent volatile

76.4 %

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

Carbon monoxide

Not specified.

Carbon dioxide.

Not specified.

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 internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Signs and Symptoms of Exposure

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

Inhalation

May be harmful if inhaled. 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. Allergic Skin Reaction (non-photo induced) in sensitive people: Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision. Contact with the eyes during product use is not expected to result in significant irritation.

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.

Additional Health Effects:**Single exposure may cause target organ effects:**

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

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 >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Inhalation-Vapour	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
propane	Inhalation-Gas (4 hours)	Rat	LC50 > 200,000 ppm
butane	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
isobutane	Inhalation-Gas (4 hours)	Rat	LC50 276,000 ppm
pentane	Dermal	Rabbit	LD50 3,000 mg/kg
pentane	Inhalation-Vapour (4 hours)	Rat	LC50 > 18 mg/l
pentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation-Vapour	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Inhalation-Vapour	Professional judgement	LC50 estimated to be 20 - 50 mg/l

		nt	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Distillates (petroleum), hydrotreated heavy naphthenic	Dermal	Rabbit	LD50 > 2,000 mg/kg
Distillates (petroleum), hydrotreated heavy naphthenic	Ingestion	Rat	LD50 > 5,000 mg/kg
Sulphonic acids, petroleum, calcium salts	Dermal	Rat	LD50 > 5,000 mg/kg
Sulphonic acids, petroleum, calcium salts	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.9 mg/l
Sulphonic acids, petroleum, calcium salts	Ingestion	Rat	LD50 > 5,000 mg/kg
Sulphonic acids, petroleum, sodium salts	Inhalation-Vapour	Professional judgement	LC50 estimated to be > 50 mg/l
ALCOHOLS, C11-14-ISO, C13-RICH	Dermal	Rat	LD50 > 2,000 mg/kg
ALCOHOLS, C11-14-ISO, C13-RICH	Ingestion	Rat	LD50 > 2,000 mg/kg
Lauric acid	Ingestion	Rat	LD50 > 10,000 mg/kg
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	Ingestion	Rat	LD50 > 2,000 mg/kg
Distillates (petroleum), heavy hydrocracked	Dermal	similar compounds	LC50 > 5,000 mg/kg
Distillates (petroleum), heavy hydrocracked	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 5.53 mg/l
Distillates (petroleum), heavy hydrocracked	Ingestion	similar compounds	LD50 > 5,000 mg/kg
Lauric acid	Dermal	similar compounds	LD50 > 2,000 mg/kg
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	Dermal	similar compounds	LD50 > 2,000 mg/kg
Sulphonic acids, petroleum, sodium salts	Dermal	similar compounds	LD50 > 5,000 mg/kg
Sulphonic acids, petroleum, sodium salts	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 1.9 mg/l
Sulphonic acids, petroleum, sodium salts	Ingestion	similar compounds	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Rabbit	Mild irritant
propane	Rabbit	Minimal irritation
butane	Professional judgement	No significant irritation
isobutane	Professional judgement	No significant irritation
pentane	Rabbit	Minimal irritation
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Rabbit	Mild irritant
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Rabbit	Mild irritant
Distillates (petroleum), hydrotreated heavy naphthenic	Rabbit	Minimal irritation
Sulphonic acids, petroleum, calcium salts	Rabbit	Minimal irritation
ALCOHOLS, C11-14-ISO, C13-RICH	Rabbit	Irritant
Distillates (petroleum), heavy hydrocracked	similar	No significant irritation

	compound ds	
Lauric acid	Rabbit	Mild irritant
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	Rabbit	Irritant
Sulphonic acids, petroleum, sodium salts	similar compound ds	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Rabbit	Mild irritant
propane	Rabbit	Mild irritant
butane	Rabbit	No significant irritation
isobutane	Professio nal judgemen t	No significant irritation
pentane	Rabbit	Mild irritant
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Mild irritant
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Rabbit	Mild irritant
Distillates (petroleum), hydrotreated heavy naphthenic	Rabbit	Mild irritant
Sulphonic acids, petroleum, calcium salts	Rabbit	Mild irritant
ALCOHOLS, C11-14-ISO, C13-RICH	Rabbit	Severe irritant
Distillates (petroleum), heavy hydrocracked	similar compound ds	No significant irritation
Lauric acid	Rabbit	Corrosive
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	Rabbit	Corrosive
Sulphonic acids, petroleum, sodium salts	Rabbit	Moderate irritant

Skin Sensitisation

Name	Species	Value
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Guinea pig	Not classified
pentane	Guinea pig	Not classified
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Guinea pig	Not classified
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Guinea pig	Not classified
Distillates (petroleum), hydrotreated heavy naphthenic	Guinea pig	Not classified
Sulphonic acids, petroleum, calcium salts	Human and animal	Sensitising
ALCOHOLS, C11-14-ISO, C13-RICH	similar compound ds	Not classified
Distillates (petroleum), heavy hydrocracked	similar compound ds	Not classified
Lauric acid	Guinea pig	Not classified
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	similar compound ds	Not classified
Sulphonic acids, petroleum, sodium salts	similar compound ds	Some positive data exist, but the data are not sufficient for classification

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	In vivo	Not mutagenic
propane	In Vitro	Not mutagenic
butane	In Vitro	Not mutagenic
isobutane	In Vitro	Not mutagenic
pentane	In vivo	Not mutagenic
pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	In vivo	Not mutagenic
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	In vivo	Not mutagenic
Sulphonic acids, petroleum, calcium salts	In Vitro	Not mutagenic
Sulphonic acids, petroleum, calcium salts	In vivo	Not mutagenic
ALCOHOLS, C11-14-ISO, C13-RICH	In Vitro	Not mutagenic
Distillates (petroleum), heavy hydrocracked	In Vitro	Not mutagenic
Lauric acid	In Vitro	Not mutagenic
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	In Vitro	Some positive data exist, but the data are not sufficient for classification
Sulphonic acids, petroleum, sodium salts	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not specified.	Not available	Not carcinogenic
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not available	Not carcinogenic
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not specified.	Not available	Not carcinogenic
Distillates (petroleum), hydrotreated heavy naphthenic	Ingestion	Rat	Not carcinogenic
Distillates (petroleum), hydrotreated heavy naphthenic	Dermal	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
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	28 days
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	during gestation
pentane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
pentane	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	1 generation
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	28 days
Hydrocarbons, C9-C11, n-alkanes,	Not	Not classified for development	Rat	NOAEL Not	during

isoalkanes, cyclics, < 2% aromatics	specified.			available	gestation
Sulphonic acids, petroleum, calcium salts	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	premating into lactation
Sulphonic acids, petroleum, calcium salts	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	70 days
Sulphonic acids, petroleum, calcium salts	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	premating into lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
propane	Inhalation	cardiac sensitisation	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	Not classified	Human	NOAEL Not available	
butane	Inhalation	cardiac sensitisation	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	Not classified	Dog	NOAEL 5,000 ppm	25 minutes
butane	Inhalation	respiratory irritation	Not classified	Rabbit	NOAEL Not available	
isobutane	Inhalation	cardiac sensitisation	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	Not classified	Mouse	NOAEL Not available	
pentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
pentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
pentane	Inhalation	cardiac sensitisation	Not classified	Dog	NOAEL Not available	not available
pentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	not available
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Distillates (petroleum), hydrotreated heavy naphthenic	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
ALCOHOLS, C11-14-ISO, C13-RICH	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Lauric acid	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Phosphoric acid, C11-14-isoalkyl esters, C13-rich	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
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Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
butane	Inhalation	kidney and/or bladder blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
isobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
pentane	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
pentane	Inhalation	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 20 mg/l	13 weeks
pentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
Sulphonic acids, petroleum, calcium salts	Dermal	skin hematopoietic system nervous system kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Sulphonic acids, petroleum, calcium salts	Inhalation	respiratory system hematopoietic system nervous system	Not classified	Rat	NOAEL 0.25 mg/l	28 days
Sulphonic acids, petroleum, calcium salts	Ingestion	gastrointestinal tract hematopoietic system nervous system eyes kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
ALCOHOLS, C11-14-ISO, C13-RICH	Ingestion	heart endocrine system hematopoietic system liver kidney and/or bladder respiratory system immune system nervous system eyes	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days

Aspiration Hazard

Name	Value
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Aspiration hazard
pentane	Aspiration hazard
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	Aspiration hazard
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Aspiration hazard
Distillates (petroleum), heavy hydrocracked	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 EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	919-857-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
butane	106-97-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
propane	74-98-6	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Green algae	Experimental	72 hours	EC50	3.2 mg/l
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Rainbow trout	Experimental	96 hours	LC50	0.42 mg/l
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Water flea	Experimental	48 hours	EL50	0.71 mg/l
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Water flea	Analogous Compound	21 days	EC10	0.009 mg/l
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Green algae	Experimental	72 hours	NOEC	2.2 mg/l
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Activated sludge	Analogous Compound	30 minutes	EC50	>1,000 mg/l
Distillates (petroleum), heavy hydrocracked	64741-76-0	Fathead minnow	Analogous Compound	96 hours	No tox obs at lmt of water sol	>100 mg/l
Distillates (petroleum), heavy hydrocracked	64741-76-0	Water flea	Analogous Compound	48 hours	No tox obs at lmt of water sol	>100 mg/l
Distillates (petroleum), heavy hydrocracked	64741-76-0	Green algae	Analogous Compound	72 hours	NOEL	>=100 mg/l
Distillates (petroleum), heavy hydrocracked	64741-76-0	Water flea	Analogous Compound	21 days	NOEL	>=1 mg/l
Distillates (petroleum), heavy hydrocracked	64741-76-0	Bacteria	Analogous Compound	6 hours	EC20	>1,000 mg/l
Lauric acid	143-07-7	Bacteria	Experimental	30 minutes	EC10	>1,000 mg/l
Lauric acid	143-07-7	Green algae	Experimental	72 hours	ErC50	>6.2 mg/l
Lauric acid	143-07-7	Medaka	Experimental	96 hours	LC50	5 mg/l
Lauric acid	143-07-7	Water flea	Experimental	48 hours	EC50	3.6 mg/l
Lauric acid	143-07-7	Water flea	Estimated	21 days	NOEL	1.294 mg/l
Lauric acid	143-07-7	Zebra Fish	Estimated	28 days	NOEC	2 mg/l
Lauric acid	143-07-7	Green algae	Experimental	72 hours	NOEC	3.4 mg/l
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	154518-38-4	Green algae	Analogous Compound	72 hours	ErC50	150 mg/l
Phosphoric acid, C11-14-isoalkyl esters, C13-	154518-38-4	Rainbow trout	Analogous Compound	96 hours	LC50	24 mg/l

rich						
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	154518-38-4	Water flea	Analogous Compound	48 hours	EC50	6.31 mg/l
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	154518-38-4	Green algae	Analogous Compound	72 hours	NOEC	10 mg/l
Sulphonic acids, petroleum, sodium salts	68608-26-4	Activated sludge	Experimental	8 hours	EC50	>=3,200 mg/l
Sulphonic acids, petroleum, sodium salts	68608-26-4	Green algae	Experimental	72 hours	EL50	>100 mg/l
Sulphonic acids, petroleum, sodium salts	68608-26-4	Rainbow trout	Experimental	96 hours	LL50	>100 mg/l
Sulphonic acids, petroleum, sodium salts	68608-26-4	Water flea	Experimental	48 hours	EL50	>100 mg/l
Sulphonic acids, petroleum, sodium salts	68608-26-4	Green algae	Experimental	72 hours	NOEL	100 mg/l
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	927-241-2	Green algae	Experimental	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	927-241-2	Rainbow trout	Experimental	96 hours	LL50	10 mg/l
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	927-241-2	Water flea	Experimental	48 hours	EL50	22-46 mg/l
isobutane	75-28-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
pentane	109-66-0	Green algae	Experimental	72 hours	EC50	10.7 mg/l
pentane	109-66-0	Rainbow trout	Experimental	96 hours	LC50	4.26 mg/l
pentane	109-66-0	Water flea	Experimental	48 hours	EC50	2.7 mg/l
pentane	109-66-0	Green algae	Experimental	72 hours	NOEC	2.04 mg/l
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	919-857-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Green algae	Estimated	96 hours	EC50	>100 mg/l
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Water flea	Estimated	48 hours	EC50	>100 mg/l
Sulphonic acids, petroleum, calcium salts	61789-86-4	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Sulphonic acids, petroleum, calcium salts	61789-86-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	919-857-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
butane	106-97-8	Experimental Photolysis		Photolytic half-life (in air)	12.3 days (t 1/2)	
propane	74-98-6	Experimental Photolysis		Photolytic half-life (in air)	27.5 days (t 1/2)	
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Experimental Biodegradation	28 days	BOD	60.6 %BOD/Th OD	OECD 301F - Manometric respirometry

Distillates (petroleum), heavy hydrocracked	64741-76-0	Analogous Compound Biodegradation	28 days	BOD	31 %BOD/ThO D	OECD 301F - Manometric respirometry
Lauric acid	143-07-7	Experimental Biodegradation	30 days	BOD	86 %BOD/ThO D	OECD 301D - Closed bottle test
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	154518-38-4	Experimental Biodegradation	28 days	CO2 evolution	20 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	154518-38-4	Experimental Aquatic Inherent Biodegrad.	40 days	BOD	76 %BOD/ThO D	OECD 302C - Modified MITI (II)
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	154518-38-4	Analogous Compound Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	
Sulphonic acids, petroleum, sodium salts	68608-26-4	Estimated Biodegradation	28 days	BOD	8 %BOD/ThO D	OECD 301D - Closed bottle test
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	927-241-2	Experimental Biodegradation	28 days	BOD	89 %BOD/ThO D	OECD 301F - Manometric respirometry
isobutane	75-28-5	Experimental Photolysis		Photolytic half-life (in air)	13.4 days (t 1/2)	
pentane	109-66-0	Experimental Biodegradation	28 days	BOD	87 %BOD/ThO D	OECD 301F - Manometric respirometry
pentane	109-66-0	Experimental Photolysis		Photolytic half-life (in air)	8.07 days (t 1/2)	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	919-857-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Sulphonic acids, petroleum, calcium salts	61789-86-4	Estimated Biodegradation	28 days	BOD	8.6 %BOD/CO D	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	919-857-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
butane	106-97-8	Experimental Bioconcentration		Log Kow	2.89	
propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Experimental BCF - Fish	10 days	Bioaccumulation factor	54.3	OECD305-Bioconcentration
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Experimental Bioconcentration		Log Kow	4.8	OECD 117 log Kow HPLC method
Distillates (petroleum), heavy hydrocracked	64741-76-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Lauric acid	143-07-7	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	288	similar to OECD 305
Lauric acid	143-07-7	Experimental Bioconcentration		Log Kow	4.6	
Phosphoric acid, C11-14-isoalkyl esters, C13-rich	154518-38-4	Experimental Bioconcentration		Log Kow	2.18	OECD 107 log Kow shke flsk mtd
Sulphonic acids, petroleum, sodium salts	68608-26-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	927-241-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
isobutane	75-28-5	Experimental Bioconcentration		Log Kow	2.76	

pentane	109-66-0	Estimated Bioconcentration		Bioaccumulation factor	26	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	919-857-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Sulphonic acids, petroleum, calcium salts	61789-86-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
ALCOHOLS, C11-14-ISO, C13-RICH	68526-86-3	Analogous Compound Mobility in Soil	Koc	1,122 l/kg	OECD 121 Estim. of Koc by HPLC
Lauric acid	143-07-7	Modeled Mobility in Soil	Koc	58 l/kg	ACD/Labs ChemSketch™
pentane	109-66-0	Estimated Mobility in Soil	Koc	72 l/kg	Episuite™

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. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Incinerate 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)

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 or ID number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS, FLAMMABLE	AEROSOLS(NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY)
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 Marine Transport in bulk according to IMO instruments	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****Global inventory status**

Contact 3M for more information.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
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
butane	106-97-8	10	50
isobutane	75-28-5	10	50
pentane	109-66-0	10	50
propane	74-98-6	10	50

Regulation (EU) No 649/2012

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.

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.
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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

CLP: Ingredient table information was modified.

CLP Remark(phrase) information was added.

Contains statement for sensitizers information was added.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was modified.

Label: CLP Percent Unknown information was deleted.

Label: CLP Percent Unknown information was modified.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Precautionary - Response information was added.

Label: CLP Precautionary - Storage information was modified.
Label: CLP Target Organ Hazard Statement information was deleted.
Label: Graphic information was modified.
List of sensitizers information was added.
Section 3: Composition/ Information of ingredients table information was modified.
Section 03: SCL table information was added.
Section 04: First Aid - Symptoms and Effects (CLP) information was modified.
Section 4: First aid for eye contact information information was modified.
Section 4: First aid for ingestion (swallowing) information information was modified.
Section 8: Eye/face protection information information was modified.
Section 8: glove data value information was deleted.
Section 8: glove data value information was modified.
Section 8: Occupational exposure limit table information was modified.
OEL Reg Agency Desc information was modified.
Section 8: Personal Protection - Skin/hand information information was modified.
Section 8: Respiratory protection - recommended respirators information information was modified.
Section 9: Boiling point information information was modified.
Section 9: Density information information was modified.
Section 9: Flammable limits (LEL) information information was modified.
Section 9: Flash point information information was modified.
Section 9: Relative density information information was modified.
Section 9: Vapour density value information was modified.
Section 9: Vapour pressure value information was modified.
Section 10: Materials to avoid physical property 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 - Eye information 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 deleted.
Section 11: Reproductive Toxicity Table information was modified.
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 added.
Section 11: Target Organs - Repeated Table information was deleted.
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: Biocumulative potential information information was modified.
Section 14 Classification Code – Regulation Data information was modified.
Section 14 Control Temperature – Regulation Data information was modified.
Section 14 Emergency Temperature – Regulation Data information was modified.
Section 14 Multiplier – Main Heading information was deleted.
Section 14 Multiplier – Regulation Data information was deleted.
Section 14 Other Dangerous Goods – Regulation Data information was modified.
Section 14 Packing Group – Regulation Data information was modified.
Section 14 Segregation – Regulation Data information was modified.
Section 14 Transport Category – Main Heading information was deleted.
Section 14 Transport Category – Regulation Data information was deleted.
Section 14 Transport in bulk – Regulation Data information was modified.
Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was modified.

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

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

Section 14 Tunnel Code – Main Heading information was deleted.

Section 14 Tunnel Code – Regulation Data information was deleted.

Section 14 UN Number information was modified.

Section 15: Regulations - Inventories information was added.

Section 15: Seveso Hazard Category Text information was added.

Section 15: Seveso Substance Text information was added.

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

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

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