



## 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

Industrial Cleaner Bulk

#### Product Identification Numbers

UU-0094-7280-2

7100180981

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

##### Identified uses

Hard Surface Cleaner

#### 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

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226  
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315  
Skin Sensitization, Category 1 - Skin Sens. 1; H317  
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

### CLP REGULATION (EC) No 1272/2008

#### SIGNAL WORD

DANGER.

#### Symbols:

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

#### Pictograms



#### Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
(R)-p-mentha-1,8-diene	5989-27-5	227-813-5	95 - 100

#### HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H304	May be fatal if swallowed and enters airways.
H410	Very toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

##### Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280E	Wear protective gloves.

##### Response:

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P331	Do NOT induce vomiting.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

##### Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.
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3% of the mixture consists of components of unknown acute oral toxicity.

#### Notes on labelling

Updated per Regulation (EC) No. 648/2004 on detergents.

## 2.3. Other hazards

None known.

**SECTION 3: Composition/information on ingredients**

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
(R)-p-mentha-1,8-diene	5989-27-5	227-813-5		95 - 100	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1 - Nota C Asp. Tox. 1, H304
7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5		< 5	Aquatic Acute 1, H400,M=1; 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. If you feel unwell, get medical attention.

**Skin contact**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye contact**

No need for first aid is anticipated.

**If swallowed**

Do not induce vomiting. Get immediate medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1 Information on toxicological effects

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable.

**SECTION 5: Fire-fighting measures****5.1. Extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**5.2. Special hazards arising from the substance or mixture**

Closed containers exposed to heat from fire may build pressure and explode.

**Hazardous Decomposition or By-Products****Substance**

Carbon monoxide.  
Carbon dioxide.

**Condition**

During combustion.  
During combustion.

### **5.3. Advice for fire-fighters**

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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**

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

### **6.4. Reference to other sections**

Refer to Section 8 and Section 13 for more information

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

### **7.2. Conditions for safe storage including any incompatibilities**

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents.

### **7.3. Specific end use(s)**

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

#### Biological limit values

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

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

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

#### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

None required.

##### Skin/hand protection

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

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

Material	Thickness (mm)	Breakthrough Time
Nitrile rubber.	No data available	No data available

##### *Applicable Norms/Standards*

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Nitrile

##### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours

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

##### *Applicable Norms/Standards*

Use a respirator conforming to EN 140 or EN 136: filter type A

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Clear Yellow to Amber Liquid
Appearance/Odour	Clear Yellow to Amber Liquid , Orange, Citrus
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Boiling point/boiling range	154 °C
Melting point	<i>No data available.</i>
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	46 °C [ <i>Test Method:</i> Pensky-Martens Closed Cup]
Autoignition temperature	237 °C
Flammable Limits(LEL)	0.7 % volume
Flammable Limits(UEL)	6.1 % volume
Vapour pressure	0.27 kPa [ <i>@ 20 °C</i> ]
Relative density	0.85 [ <i>Ref Std:</i> WATER=1]
Water solubility	<i>No data available.</i>
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	4.57 [ <i>Details:</i> Log Pow]
Evaporation rate	<i>No data available.</i>
Vapour density	>=1
Decomposition temperature	<i>No data available.</i>
Viscosity	<i>No data available.</i>
Density	0.85 g/ml

### 9.2. Other information

EU Volatile Organic Compounds	<i>No data available.</i>
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## 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.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

### 11.1 Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### Inhalation

May be harmful if inhaled.

#### Skin contact

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

#### Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

#### Ingestion

May be harmful if swallowed.

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:

#### 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	Inhalation-Vapour(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
(R)-p-mentha-1,8-diene	Inhalation-Vapour (4 hours)	Mouse	LC50 > 3.14 mg/l
(R)-p-mentha-1,8-diene	Dermal	Rabbit	LD50 > 5,000 mg/kg
(R)-p-mentha-1,8-diene	Ingestion	Rat	LD50 4,400 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
(R)-p-mentha-1,8-diene	Rabbit	Mild irritant

**Industrial Cleaner Bulk****Serious Eye Damage/Irritation**

Name	Species	Value
(R)-p-mentha-1,8-diene	Rabbit	Mild irritant

**Skin Sensitisation**

Name	Species	Value
(R)-p-mentha-1,8-diene	Mouse	Sensitising

**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
(R)-p-mentha-1,8-diene	In Vitro	Not mutagenic
(R)-p-mentha-1,8-diene	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
(R)-p-mentha-1,8-diene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
7-methyl-3-methyleneocta-1,6-diene	Ingestion	Multiple animal species	Carcinogenic.

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
(R)-p-mentha-1,8-diene	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	prematuring & during gestation
(R)-p-mentha-1,8-diene	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
(R)-p-mentha-1,8-diene	Ingestion	nervous system	Not classified		NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
(R)-p-mentha-1,8-diene	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
(R)-p-mentha-1,8-diene	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
(R)-p-mentha-1,8-diene	Ingestion	heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles   nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks



**Industrial Cleaner Bulk**

respiratory system

**Aspiration Hazard**

Name	Value
(R)-p-mentha-1,8-diene	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

**12.1. Toxicity**

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
(R)-p-mentha-1,8-diene	5989-27-5	Fathead minnow	Experimental	96 hours	LC50	0.702 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Green Algae	Experimental	72 hours	EC50	0.32 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Water flea	Experimental	48 hours	EC50	0.307 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Green Algae	Experimental	72 hours	Effect Concentration 10%	0.174 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Water flea	Experimental	21 days	NOEC	0.08 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Green Algae	Experimental	72 hours	EC50	0.342 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Ricefish	Experimental	96 hours	LC50	0.92 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Water flea	Experimental	48 hours	EC50	0.45 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Green algae	Experimental	72 hours	NOEC	0.23 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Water flea	Experimental	21 days	NOEC	0.12 mg/l

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
(R)-p-mentha-1,8-diene	5989-27-5	Experimental Biodegradation	14 days	BOD	98 % BOD/ThBOD	OECD 301C - MITI test (I)
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Experimental Photolysis		Photolytic half-life (in air)	1.8 hours (t 1/2)	Other methods
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Experimental Biodegradation	28 days	BOD	76 % BOD/ThBOD	OECD 301D - Closed bottle test

**12.3 : Bioaccumulative potential**

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
(R)-p-mentha-1,8-diene	5989-27-5	Estimated		Bioaccumulation	2100	Estimated: Bioconcentration

## Industrial Cleaner Bulk

		Bioconcentration		factor		factor
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Estimated Bioconcentration		Bioaccumulation factor	324	Estimated: Bioconcentration factor

### 12.4. Mobility in soil

Please contact manufacturer for more details

### 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

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. 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)

070704\* Other organic solvents, washing liquids and mother liquors

## SECTION 14: Transportation information

UU-0094-7280-2

**ADR/RID:** UN2319, TERPENE, HYDROCARBONS, N.O.S., 3., III, (D/E), ADR Classification Code: F1.

**IMDG-CODE:** UN2319, TERPENE HYDROCARBONS, N.O.S., ( D-LIMONENE ), 3., III, IMDG-Code segregation code: NONE, EMS: FE,SD.

**ICAO/IATA:** UN2319, TERPENE HYDROCARBONS, N.O.S., 3., III.

## SECTION 15: Regulatory information

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

#### Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
(R)-p-mentha-1,8-diene	5989-27-5	Gr. 3: Not classifiable	International Agency for Research on Cancer
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

### **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**

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### **Revision information:**

CLP Remark(phrase) information was added.

Section 12: Component ecotoxicity information information was modified.

Section 15: Regulations - Inventories information was deleted.

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

**3M United Kingdom MSDSs are available at [www.3M.com/uk](http://www.3M.com/uk)**