



## Safety Data Sheet

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<b>Document group:</b>	08-0531-7	<b>Version number:</b>	5.00
<b>Issue Date:</b>	11/06/2023	<b>Supersedes date:</b>	24/02/2019

This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Black Super Weatherstrip and Gasket Adhesive, 08008, 08008B, 08581

#### Product Identification Numbers

60-4550-5560-2

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Automotive., Adhesive

For Industrial or Professional use only

#### 1.3. Supplier's details

**Address:** 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland  
**Telephone:** (09) 477 4040  
**E Mail:** innovation@nz.mmm.com  
**Website:** 3m.co.nz

#### 1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

### SECTION 2: Hazard identification

Classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996 and the Hazardous Substances (Hazard Classification) Notice 2020.

Refer to Section 14 of this Safety Data Sheet for product Dangerous Goods Classification.

#### 2.1. Classification of the substance or mixture

Flammable Liquids: Category 2

Skin irritation: Category 2

Eye irritation: Category 2

Skin sensitisation: Category 1

Carcinogenicity: Category 2

Reproductive Toxicity: Category 1

Specific target organ toxicity – repeated exposure: Category 1

Specific target organ toxicity – single exposure: Category 3 narcotic effects

Hazardous to the aquatic environment chronic: Category 2

## 2.2. Label elements

### SIGNAL WORD

Danger

### Symbols:

Flame | Exclamation mark | Health Hazard | Environment |

### Pictograms



### HAZARD STATEMENTS:

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure: nervous system.
H411	Toxic to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENTS

#### General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

#### Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280K	Wear protective gloves and respiratory protection.

#### Response

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin
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P304 + P340  
P305 + P351 + P338

with water or shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313  
P312

IF exposed or concerned: Get medical advice/attention.

Call a POISON CENTRE or doctor/physician if you feel unwell.

P333 + P313

If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313

IF eye irritation persists: Get medical advice/attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

P370 + P378

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

P391

Collect spillage.

### Storage

P403 + P233

Store in a well-ventilated place. Keep container tightly closed.

P403 + P235

Store in a well-ventilated place. Keep cool.

P405

Store locked up.

### Disposal

P501

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

### 2.3. Other hazards

Aspiration classification does not apply due to the viscosity of the product.

## SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
Naphtha (petroleum), solvent-refined light	64741-84-0	15 - 40
Hexane	110-54-3	7 - 30
Butanone	78-93-3	10 - 30
Polychloroprene	9010-98-4	10 - 30
Phenolic Polymer	Trade Secret	10 - 30
Heptane	142-82-5	1 - 10
Methylcyclopentane	96-37-7	1 - 10
Toluene	108-88-3	< 10
Magnesium oxide	1309-48-4	3 - 7
2-Methylpentane	107-83-5	1 - 5
3-Methylpentane	96-14-0	1 - 5
Cyclohexane	110-82-7	< 5
Zinc oxide	1314-13-2	< 2
Carbon black	1333-86-4	< 1
Ethylbenzene	100-41-4	< 1
Methyl isobutyl ketone	108-10-1	< 1
Styrenated phenol	61788-44-1	< 0.5
O-xylene	95-47-6	< 0.3
p-Tert-Butylphenol	98-54-4	< 0.2

## 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**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

A product risk assessment is recommended to determine if eye wash facilities may be required when using this product in the workplace.

**If swallowed**

Rinse mouth. If you feel unwell, get 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:

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

Not applicable

## **SECTION 5: Fire-fighting measures**

**5.1. Suitable 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.

**5.3. Special protective actions 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.

**5.4. Hazchem code: -3YE**

## **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 vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors 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. 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 in accordance with applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

Refer to Section 15 - Controls for more information

### 7.1. Precautions for safe handling

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. 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 vapor 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 oxidising agents.

### 7.3. Certified handler

Not required

## 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.

<b>Ingredient</b>	<b>CAS Nbr</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional comments</b>
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin., Ototoxicant
Ethylbenzene	100-41-4	New Zealand WES	TWA(8 hours):88 mg/m3(20 ppm);STEL(15 minutes):176 mg/m3(40 ppm)	Skin
2-Methylpentane	107-83-5	ACGIH	TWA:500 ppm;STEL:1000 ppm	
Hexane (isomers other than n-hexane)	107-83-5	New Zealand WES	TWA(8 hours): 1760 mg/m3 (500 ppm); STEL(15 minutes): 3500 mg/m3 (1000 ppm)	
Methyl isobutyl ketone	108-10-1	ACGIH	TWA:20 ppm;STEL:75 ppm	A3: Confirmed animal carcinogen.
Methyl isobutyl ketone	108-10-1	New Zealand WES	TWA(8 hours): 205 mg/m3 (50 ppm); STEL(15 minutes): 307 mg/m3 (75 ppm)	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcinogen, Ototoxicant
Toluene	108-88-3	New Zealand	TWA(8 hours):75 mg/m3(20 ppm)	Skin

		WES	ppm);STEL(15 minutes):377 mg/m3(100 ppm) TWA:50 ppm	
Hexane	110-54-3	ACGIH		Danger of cutaneous absorption
Hexane	110-54-3	New Zealand WES	TWA(8 hours): 72 mg/m3 (20 ppm)	
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Cyclohexane	110-82-7	New Zealand WES	TWA(8 hours):350 mg/m3(100 ppm);STEL(15 minutes):1050 mg/m3(300 ppm)	
Magnesium oxide	1309-48-4	ACGIH	TWA(inhalable fraction):10 mg/m3	A4: Not class. as human carcinogen
Magnesium oxide	1309-48-4	New Zealand WES	TWA(as fume)(8 hours):10 mg/m3	
Zinc oxide	1314-13-2	ACGIH	TWA(respirable fraction):2 mg/m3;STEL(respirable fraction):10 mg/m3	
Zinc oxide	1314-13-2	New Zealand WES	TWA(respirable)(8 hours):0.1 mg/m3;TWA(8 hours):2 mg/m3;STEL(respirable)(15 minutes):0.5 mg/m3;STEL(15 minutes):5 mg/m3	
Carbon black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	A3: Confirmed animal carcinogen.
Carbon black	1333-86-4	New Zealand WES	TWA(8 hours): 3 mg/m3	Suspected human carcinogen.
Heptane	142-82-5	ACGIH	TWA:400 ppm;STEL:500 ppm	
Heptane	142-82-5	New Zealand WES	TWA(8 hours):1640 mg/m3(400 ppm);STEL(15 minutes):2050 mg/m3(500 ppm)	
Naphtha	64741-84-0	New Zealand WES	TWA(8 hours):1600 mg/m3(400 ppm)	
Butanone	78-93-3	ACGIH	TWA:200 ppm;STEL:300 ppm	
Butanone	78-93-3	New Zealand WES	TWA(8 hours): 445 mg/m3 (150 ppm); STEL(15 minutes): 890 mg/m3 (300 ppm)	
Benzene, dimethyl-	95-47-6	ACGIH	TWA:20 ppm;STEL:150 ppm	A4: Not class. as human carcinogen
O-xylene	95-47-6	ACGIH	TWA:20 ppm	A4: Not class. as human carcinogen
O-xylene	95-47-6	New Zealand WES	TWA(8 hours):217 mg/m3(50 ppm)	
3-Methylpentane	96-14-0	ACGIH	TWA:500 ppm;STEL:1000 ppm	
Hexane (isomers other than n-hexane)	96-14-0	New Zealand WES	TWA(8 hours): 1760 mg/m3 (500 ppm); STEL(15 minutes): 3500 mg/m3 (1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

New Zealand WES : New Zealand Workplace Exposure Standards.

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

ppm: parts per million

mg/m³: milligrams per cubic metre  
CELL: Ceiling

## 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

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.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

#### 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: Polymer laminate

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

#### Respiratory protection

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

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

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

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	Liquid.
<b>Colour</b>	Black
<b>Odour</b>	Solvent
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	<i>Not applicable.</i>
<b>Melting point/Freezing point</b>	<i>No data available.</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	64.4 - 87.2 °C

Flash point	-21.1 °C [ <i>Test Method</i> :Tagliabue closed cup]
Evaporation rate	>=3.6 [ <i>Ref Std</i> :ETHER=1]
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	1 % volume
Flammable Limits(UEL)	11.5 % volume
Vapour pressure	15,998.6 Pa [@ 20 °C ]
Vapor Density and/or Relative Vapor Density	3 [ <i>Ref Std</i> :AIR=1]
Density	0.9 g/ml
Relative density	0.9 [ <i>Ref Std</i> :WATER=1]
Water solubility	Slight (less than 10%)
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity/Kinematic Viscosity	7,500 - 9,500 mPa-s
Volatile organic compounds (VOC)	64.4 % weight [ <i>Test Method</i> :calculated per CARB title 2]
Percent volatile	64.4 % weight
VOC less H2O & exempt solvents	579.7 g/l [ <i>Test Method</i> :calculated SCAQMD rule 443.1]

## 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

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	Not specified.
Carbon dioxide.	Not specified.
Toxic vapour, gas, particulate.	Not specified.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 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**

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**

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

Allergic skin reaction (non-photo induced): 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.

#### **Ingestion**

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:**

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

##### **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. Peripheral neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy. 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**

<b>Name</b>	<b>Route</b>	<b>Species</b>	<b>Value</b>
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Naphtha (petroleum), solvent-refined light	Dermal	Rat	LD50 > 2,800 mg/kg
Naphtha (petroleum), solvent-refined light	Inhalation-Vapor (4 hours)	Rat	LC50 > 25.2 mg/l
Naphtha (petroleum), solvent-refined light	Ingestion	Rat	LD50 > 5,840 mg/kg
Butanone	Dermal	Rabbit	LD50 > 8,050 mg/kg
Butanone	Inhalation-Vapor (4	Rat	LC50 34.5 mg/l

	hours)		
Butanone	Ingestion	Rat	LD50 2,737 mg/kg
Hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hexane	Inhalation-Vapor (4 hours)	Rat	LC50 170 mg/l
Hexane	Ingestion	Rat	LD50 > 28,700 mg/kg
Phenolic Polymer	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Phenolic Polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Polychloroprene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 mg/kg
Heptane	Dermal	Rabbit	LD50 3,000 mg/kg
Heptane	Inhalation-Vapor (4 hours)	Rat	LC50 103 mg/l
Heptane	Ingestion	Rat	LD50 > 15,000 mg/kg
Methylcyclopentane	Dermal		LD50 estimated to be > 5,000 mg/kg
Methylcyclopentane	Ingestion	Rat	LD50 > 5,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
2-Methylpentane	Dermal		LD50 estimated to be > 5,000 mg/kg
2-Methylpentane	Inhalation-Vapor		LC50 estimated to be > 50 mg/l
2-Methylpentane	Ingestion		LD50 estimated to be > 5,000 mg/kg
3-Methylpentane	Dermal		LD50 estimated to be > 5,000 mg/kg
3-Methylpentane	Inhalation-Vapor		LC50 estimated to be > 50 mg/l
3-Methylpentane	Ingestion		LD50 estimated to be > 5,000 mg/kg
Magnesium oxide	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
Magnesium oxide	Ingestion	Rat	LD50 3,870 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation-Vapor (4 hours)	Rat	LC50 > 32.9 mg/l
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Zinc oxide	Dermal		LD50 estimated to be > 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
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
Methyl isobutyl ketone	Dermal	Rabbit	LD50 > 16,000 mg/kg
Methyl isobutyl ketone	Inhalation-Vapor (4 hours)	Rat	LC50 11 mg/l
Methyl isobutyl ketone	Ingestion	Rat	LD50 3,038 mg/kg
Styrenated phenol	Dermal	Rat	LD50 > 2,000 mg/kg
Styrenated phenol	Ingestion	Rat	LD50 > 2,000 mg/kg
Carbon black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon black	Ingestion	Rat	LD50 > 8,000 mg/kg
O-xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
O-xylene	Inhalation-	Rat	LC50 29 mg/l

	Vapor (4 hours)		
O-xylene	Ingestion	Rat	LD50 3,523 mg/kg
p-Tert-Butylphenol	Dermal	Rabbit	LD50 2,318 mg/kg
p-Tert-Butylphenol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.6 mg/l
p-Tert-Butylphenol	Ingestion	Rat	LD50 4,000 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Naphtha (petroleum), solvent-refined light	Rabbit	Irritant
Butanone	Rabbit	Minimal irritation
Hexane	Human and animal	Mild irritant
Polychloroprene	Human	No significant irritation
Heptane	Human	Mild irritant
Methylcyclopentane	similar compounds	Minimal irritation
Toluene	Rabbit	Irritant
2-Methylpentane	Professional judgement	Mild irritant
3-Methylpentane	Professional judgement	Mild irritant
Magnesium oxide	Professional judgement	No significant irritation
Cyclohexane	Rabbit	Mild irritant
Zinc oxide	Human and animal	No significant irritation
Ethylbenzene	Rabbit	Mild irritant
Methyl isobutyl ketone	Rabbit	Mild irritant
Styrenated phenol	Rabbit	No significant irritation
Carbon black	Rabbit	No significant irritation
O-xylene	Rabbit	Mild irritant
p-Tert-Butylphenol	Rabbit	Irritant

### Serious Eye Damage/Irritation

Name	Species	Value
Naphtha (petroleum), solvent-refined light	Rabbit	Mild irritant
Butanone	Rabbit	Severe irritant
Hexane	Rabbit	Mild irritant
Polychloroprene	Professional judgement	No significant irritation
Heptane	Professional judgement	Moderate irritant
Methylcyclopentane	similar compounds	Mild irritant
Toluene	Rabbit	Moderate irritant

2-Methylpentane	Professional judgement	Moderate irritant
3-Methylpentane	Professional judgement	Moderate irritant
Cyclohexane	Rabbit	Mild irritant
Zinc oxide	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Moderate irritant
Methyl isobutyl ketone	Rabbit	Mild irritant
Styrenated phenol	Rabbit	Mild irritant
Carbon black	Rabbit	No significant irritation
O-xylene	Rabbit	Mild irritant
p-Tert-Butylphenol	Rabbit	Corrosive

### Sensitisation:

#### Skin Sensitisation

Name	Species	Value
Naphtha (petroleum), solvent-refined light	Guinea pig	Not classified
Hexane	Human	Not classified
Toluene	Guinea pig	Not classified
Zinc oxide	Guinea pig	Not classified
Ethylbenzene	Human	Not classified
Methyl isobutyl ketone	Guinea pig	Not classified
Styrenated phenol	Mouse	Sensitising
p-Tert-Butylphenol	Human and animal	Not classified

### Respiratory Sensitisation

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

#### Germ Cell Mutagenicity

Name	Route	Value
Butanone	In Vitro	Not mutagenic
Hexane	In Vitro	Not mutagenic
Hexane	In vivo	Not mutagenic
Heptane	In Vitro	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Magnesium oxide	In Vitro	Not mutagenic
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
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
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Methyl isobutyl ketone	In Vitro	Not mutagenic
Carbon black	In Vitro	Not mutagenic
Carbon black	In vivo	Some positive data exist, but the data are not

		sufficient for classification
O-xylene	In Vitro	Not mutagenic
O-xylene	In vivo	Not mutagenic
p-Tert-Butylphenol	In Vitro	Not mutagenic

### Carcinogenicity

Name	Route	Species	Value
Butanone	Inhalation	Human	Not carcinogenic
Hexane	Dermal	Mouse	Not carcinogenic
Hexane	Inhalation	Mouse	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
Magnesium oxide	Not specified.	Human and animal	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic.
Methyl isobutyl ketone	Inhalation	Multiple animal species	Carcinogenic.
Carbon black	Dermal	Mouse	Not carcinogenic
Carbon black	Ingestion	Mouse	Not carcinogenic
Carbon black	Inhalation	Rat	Carcinogenic.
O-xylene	Dermal	Rat	Not carcinogenic
O-xylene	Ingestion	Multiple animal species	Not carcinogenic
O-xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
p-Tert-Butylphenol	Ingestion	Multiple animal species	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
Naphtha (petroleum), solvent-refined light	Ingestion	Toxic to male reproduction	similar compounds	NOAEL not available	not available
Naphtha (petroleum), solvent-refined light	Inhalation	Toxic to male reproduction	similar compounds	NOAEL not available	not available
Butanone	Inhalation	Not classified for development	Rat	LOAEL 8.8 mg/l	during gestation
Hexane	Ingestion	Not classified for development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
Hexane	Inhalation	Not classified for development	Rat	NOAEL 0.7 mg/l	during gestation
Hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
Hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days
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
Cyclohexane	Inhalation	Not classified for female reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for male reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for development	Rat	NOAEL 6.9 mg/l	2 generation
Zinc oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	premating & during gestation
Methyl isobutyl ketone	Inhalation	Not classified for female reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
Methyl isobutyl ketone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Methyl isobutyl ketone	Inhalation	Not classified for male reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
Methyl isobutyl ketone	Inhalation	Not classified for development	Mouse	NOAEL 12.3 mg/l	during organogenesis
O-xylene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
O-xylene	Ingestion	Not classified for development	Mouse	NOAEL Not available	during organogenesis
O-xylene	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	during gestation
p-Tert-Butylphenol	Ingestion	Not classified for male reproduction	Rat	NOAEL 600 mg/kg/day	2 generation
p-Tert-Butylphenol	Ingestion	Not classified for development	Rat	NOAEL 70 mg/kg/day	2 generation
p-Tert-Butylphenol	Ingestion	Toxic to female reproduction	Rat	NOAEL 200 mg/kg/day	2 generation

## Lactation

Name	Route	Species	Value
O-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
Naphtha (petroleum), solvent-refined light	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL not available	not available
Naphtha (petroleum), solvent-refined light	Ingestion	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL not available	not available
Butanone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classification	NOAEL Not available	
Butanone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Butanone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

				nt		
Butanone	Ingestion	liver	Not classified	Rat	NOAEL Not available	not applicable
Butanone	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 1,080 mg/kg	not applicable
Hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
Hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
Hexane	Inhalation	respiratory system	Not classified	Rat	NOAEL 24.6 mg/l	8 hours
Heptane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Heptane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Heptane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Methylcyclopentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL Not available	
Methylcyclopentane	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
2-Methylpentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
2-Methylpentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2-Methylpentane	Inhalation	cardiac sensitization	Not classified	Dog	NOAEL Not available	
2-Methylpentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
3-Methylpentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
3-Methylpentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
3-Methylpentane	Inhalation	cardiac sensitization	Not classified	Dog	NOAEL Not available	
3-Methylpentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Magnesium oxide	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Human and	NOAEL Not available	

			classification	animal		
Cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	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	
Methyl isobutyl ketone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 0.1 mg/l	2 hours
Methyl isobutyl ketone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Methyl isobutyl ketone	Inhalation	vascular system	Not classified	Dog	NOAEL Not available	not available
Methyl isobutyl ketone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 900 mg/kg	not applicable
O-xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
O-xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
O-xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
O-xylene	Inhalation	eyes	Not classified	Rat	NOAEL 3.5 mg/l	not available
O-xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
O-xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
O-xylene	Ingestion	eyes	Not classified	Rat	NOAEL 250 mg/kg	not applicable
p-Tert-Butylphenol	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	LOAEL 5.6 mg/l	4 hours

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Naphtha (petroleum), solvent-refined light	Inhalation	peripheral nervous system	May cause damage to organs though prolonged or repeated exposure	similar compounds	NOAEL not available	not available
Butanone	Dermal	nervous system	Not classified	Guinea pig	NOAEL Not available	31 weeks
Butanone	Inhalation	liver   kidney and/or bladder   heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles	Not classified	Rat	NOAEL 14.7 mg/l	90 days
Butanone	Ingestion	liver	Not classified	Rat	NOAEL Not available	7 days
Butanone	Ingestion	nervous system	Not classified	Rat	NOAEL 173 mg/kg/day	90 days
Hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Hexane	Inhalation	respiratory system	Some positive data exist, but the	Mouse	LOAEL 1.76	13 weeks

			data are not sufficient for classification		mg/l	
Hexane	Inhalation	liver	Not classified	Rat	NOAEL Not available	6 months
Hexane	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.76 mg/l	6 months
Hexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 35.2 mg/l	13 weeks
Hexane	Inhalation	auditory system   immune system   eyes	Not classified	Human	NOAEL Not available	occupational exposure
Hexane	Inhalation	heart   skin   endocrine system	Not classified	Rat	NOAEL 1.76 mg/l	6 months
Hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
Hexane	Ingestion	endocrine system   hematopoietic system   liver   immune system   kidney and/or bladder	Not classified	Rat	NOAEL Not available	13 weeks
Heptane	Inhalation	liver   nervous system   kidney and/or bladder	Not classified	Rat	NOAEL 12 mg/l	26 weeks
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 though prolonged or repeated exposure	Human	NOAEL Not available	poisoning 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
2-Methylpentane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 5.3 mg/l	14 weeks
2-Methylpentane	Ingestion	peripheral nervous system	Not classified	Rat	NOAEL Not available	8 weeks
2-Methylpentane	Ingestion	kidney and/or	Not classified	Rat	LOAEL	28 days

		bladder			2,000 mg/kg	
3-Methylpentane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 5.3 mg/l	14 weeks
3-Methylpentane	Ingestion	peripheral nervous system	Not classified	Rat	NOAEL Not available	8 weeks
3-Methylpentane	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 2,000 mg/kg	28 days
Cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24 mg/l	90 days
Cyclohexane	Inhalation	auditory system	Not classified	Rat	NOAEL 1.7 mg/l	90 days
Cyclohexane	Inhalation	kidney and/or bladder	Not classified	Rabbit	NOAEL 2.7 mg/l	10 weeks
Cyclohexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 24 mg/l	14 weeks
Cyclohexane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 8.6 mg/l	30 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
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
Methyl isobutyl ketone	Inhalation	liver	Not classified	Rat	NOAEL 0.41 mg/l	13 weeks
Methyl isobutyl ketone	Inhalation	heart	Not classified	Multiple animal species	NOAEL 0.8 mg/l	2 weeks
Methyl isobutyl ketone	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 0.4 mg/l	90 days
Methyl isobutyl ketone	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 4.1 mg/l	14 weeks
Methyl isobutyl ketone	Inhalation	endocrine system   hematopoietic system	Not classified	Multiple animal species	NOAEL 0.41 mg/l	90 days
Methyl isobutyl ketone	Inhalation	nervous system	Not classified	Multiple animal species	NOAEL 0.41 mg/l	13 weeks
Methyl isobutyl ketone	Ingestion	endocrine system   hematopoietic system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Methyl isobutyl ketone	Ingestion	heart   immune	Not classified	Rat	NOAEL	120 days

		system   muscles   nervous system   respiratory system			1,040 mg/kg/day	
Carbon black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
O-xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
O-xylene	Inhalation	auditory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
O-xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
O-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
O-xylene	Ingestion	auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
O-xylene	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
O-xylene	Ingestion	liver	Not classified	Multiple animal species	NOAEL Not available	
O-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
p-Tert-Butylphenol	Ingestion	endocrine system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 600 mg/kg/day	2 generation
p-Tert-Butylphenol	Ingestion	blood	Not classified	Rat	NOAEL 200 mg/kg	6 weeks

#### Aspiration Hazard

Name	Value
Naphtha (petroleum), solvent-refined light	Aspiration hazard
Hexane	Aspiration hazard
Heptane	Aspiration hazard
Methylcyclopentane	Aspiration hazard
Toluene	Aspiration hazard
2-Methylpentane	Aspiration hazard
3-Methylpentane	Aspiration hazard
Cyclohexane	Aspiration hazard
Ethylbenzene	Aspiration hazard
Methyl isobutyl ketone	Some positive data exist, but the data are not sufficient for classification
O-xylene	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 be consistent with the material classification in Section 2 if specific ingredient

classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

### 12.1. Toxicity

#### Ecotoxic to the aquatic environment.

Acute Aquatic Toxicity: Category 2 (HSNO 9.1D Aquatic toxicity)

Chronic Aquatic Toxicity: Category 2 (HSNO 9.1B Aquatic toxicity)

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Naphtha (petroleum), solvent-refined light	64741-84-0	Green algae	Estimated	72 hours	EC50	30 mg/l
Naphtha (petroleum), solvent-refined light	64741-84-0	Rainbow trout	Estimated	96 hours	LL50	11.4 mg/l
Naphtha (petroleum), solvent-refined light	64741-84-0	Water flea	Estimated	48 hours	EL50	3 mg/l
Naphtha (petroleum), solvent-refined light	64741-84-0	Green algae	Estimated	72 hours	NOEL	3 mg/l
Naphtha (petroleum), solvent-refined light	64741-84-0	Water flea	Estimated	21 days	NOEL	1 mg/l
Hexane	110-54-3	Fathead minnow	Experimental	96 hours	LC50	2.5 mg/l
Hexane	110-54-3	Water flea	Experimental	48 hours	LC50	3.9 mg/l
Butanone	78-93-3	Fathead minnow	Experimental	96 hours	LC50	2,993 mg/l
Butanone	78-93-3	Green algae	Experimental	96 hours	ErC50	2,029 mg/l
Butanone	78-93-3	Water flea	Experimental	48 hours	EC50	308 mg/l
Butanone	78-93-3	Green algae	Experimental	96 hours	ErC10	1,289 mg/l
Butanone	78-93-3	Water flea	Experimental	21 days	NOEC	100 mg/l
Butanone	78-93-3	Bacteria	Experimental	16 hours	LOEC	1,150 mg/l
Phenolic Polymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	n/a
Polychloroprene	9010-98-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Heptane	142-82-5	Water flea	Experimental	48 hours	EC50	1.5 mg/l
Heptane	142-82-5	Water flea	Estimated	21 days	NOEC	0.17 mg/l
Methylcyclopentane	96-37-7	N/A	Data not available or	N/A	N/A	N/A

			insufficient for classification			
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)
Magnesium oxide	1309-48-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
2-Methylpentane	107-83-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
3-Methylpentane	96-14-0	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Cyclohexane	110-82-7	Bacteria	Experimental	24 hours	IC50	97 mg/l
Cyclohexane	110-82-7	Fathead minnow	Experimental	96 hours	LC50	4.53 mg/l
Cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
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
Carbon black	1333-86-4	Activated sludge	Experimental	3 hours	EC50	>=100 mg/l
Carbon black	1333-86-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
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
Methyl isobutyl ketone	108-10-1	Green algae	Experimental	96 hours	EC50	400 mg/l
Methyl isobutyl ketone	108-10-1	Water flea	Experimental	48 hours	EC50	>200 mg/l
Methyl isobutyl ketone	108-10-1	Zebra Fish	Experimental	96 hours	LC50	>179 mg/l
Methyl isobutyl ketone	108-10-1	Fathead minnow	Experimental	32 days	NOEC	56.2 mg/l
Methyl isobutyl ketone	108-10-1	Water flea	Experimental	21 days	NOEC	78 mg/l
Methyl isobutyl ketone	108-10-1	Activated sludge	Experimental	30 minutes	EC50	>1,000
Styrenated phenol	61788-44-1	Activated sludge	Experimental	3 hours	EC50	362 mg/l
Styrenated phenol	61788-44-1	Green algae	Experimental	72 hours	EC50	1.35 mg/l
Styrenated phenol	61788-44-1	Medaka	Experimental	96 hours	LC50	5.6 mg/l
Styrenated phenol	61788-44-1	Water flea	Experimental	48 hours	EC50	4.6 mg/l
Styrenated phenol	61788-44-1	Green algae	Experimental	72 hours	NOEC	0.42 mg/l
Styrenated phenol	61788-44-1	Water flea	Experimental	21 days	NOEC	0.2 mg/l
O-xylene	95-47-6	Activated sludge	Estimated	3 hours	NOEC	157 mg/l
O-xylene	95-47-6	Green algae	Experimental	73 hours	EC50	4.36 mg/l
O-xylene	95-47-6	Rainbow trout	Experimental	96 hours	LC50	2.6 mg/l
O-xylene	95-47-6	Water flea	Experimental	24 hours	IC50	1 mg/l
O-xylene	95-47-6	Green algae	Experimental	73 hours	NOEC	0.44 mg/l
O-xylene	95-47-6	Rainbow trout	Experimental	56 days	NOEC	>1.3 mg/l
O-xylene	95-47-6	Water flea	Experimental	7 days	NOEC	1.17 mg/l
p-Tert-Butylphenol	98-54-4	Ciliated protozoa	Experimental	60 hours	IC50	18.4 mg/l
p-Tert-Butylphenol	98-54-4	Green algae	Experimental	72 hours	ErC50	14 mg/l
p-Tert-Butylphenol	98-54-4	Invertebrate	Experimental	96 hours	LC50	1.9 mg/l
p-Tert-Butylphenol	98-54-4	Medaka	Experimental	96 hours	LC50	5.1 mg/l
p-Tert-Butylphenol	98-54-4	Water flea	Experimental	48 hours	EC50	3.9 mg/l
p-Tert-Butylphenol	98-54-4	Fathead minnow	Experimental	128 days	NOEC	0.01 mg/l
p-Tert-Butylphenol	98-54-4	Green algae	Experimental	72 hours	NOEC	0.32 mg/l
p-Tert-Butylphenol	98-54-4	Water flea	Experimental	21 days	NOEC	0.73 mg/l

## 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Naphtha (petroleum), solvent-refined light	64741-84-0	Estimated Biodegradation	28 days	BOD	98 %BOD/ThOD	OECD 301F - Manometric respirometry
Hexane	110-54-3	Experimental Bioconcentration	28 days	BOD	100 %BOD/ThOD	OECD 301C - MITI test (I)
Hexane	110-54-3	Experimental Photolysis		Photolytic half-life (in air)	5.4 days (t 1/2)	
Butanone	78-93-3	Experimental Biodegradation	28 days	BOD	98 %BOD/ThOD	OECD 301D - Closed bottle test
Phenolic Polymer	Trade Secret	Data not available - insufficient	N/A	N/A	N/A	N/A
Polychloroprene	9010-98-4	Data not available - insufficient	N/A	N/A	N/A	N/A
Heptane	142-82-5	Experimental Biodegradation	28 days	BOD	101 %BOD/ThOD	OECD 301C - MITI test (I)
Heptane	142-82-5	Experimental Photolysis		Photolytic half-life (in air)	4.24 days (t 1/2)	
Methylcyclopentane	96-37-7	Experimental Biodegradation	28 days	BOD	2 %BOD/ThOD	OECD 301C - MITI test (I)
Methylcyclopentane	96-37-7	Estimated Photolysis		Photolytic half-life (in air)	5.33 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)	
Magnesium oxide	1309-48-4	Data not available - insufficient	N/A	N/A	N/A	N/A
2-Methylpentane	107-83-5	Experimental Biodegradation	28 days	BOD	93 %BOD/ThOD	OECD 301C - MITI test (I)
2-Methylpentane	107-83-5	Experimental Photolysis		Photolytic half-life (in air)	5.4 days (t 1/2)	
3-Methylpentane	96-14-0	Estimated Biodegradation	28 days	BOD	93 %BOD/ThOD	OECD 301C - MITI test (I)
3-Methylpentane	96-14-0	Experimental Photolysis		Photolytic half-life (in air)	5.3 days (t 1/2)	
Cyclohexane	110-82-7	Experimental Biodegradation	28 days	BOD	77 %BOD/ThOD	OECD 301F - Manometric respirometry
Cyclohexane	110-82-7	Experimental Photolysis		Photolytic half-life (in air)	4.1 days (t 1/2)	
Zinc oxide	1314-13-2	Data not available - insufficient	N/A	N/A	N/A	N/A
Carbon black	1333-86-4	Data not available - insufficient	N/A	N/A	N/A	N/A
Ethylbenzene	100-41-4	Experimental Biodegradation	28 days	CO2 evolution	70-80 %CO2 evolution/THC	ISO 14593 Inorg C Headspace

					O2 evolution	
Ethylbenzene	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	
Methyl isobutyl ketone	108-10-1	Experimental Biodegradation	28 days	BOD	83 %BOD/ThO D	OECD 301F - Manometric respirometry
Methyl isobutyl ketone	108-10-1	Experimental Photolysis		Photolytic half-life (in air)	2.3 days (t 1/2)	
Styrenated phenol	61788-44-1	Experimental Biodegradation	28 days	BOD	7 %BOD/ThO D	OECD 301F - Manometric respirometry
O-xylene	95-47-6	Estimated Biodegradation	28 days	BOD	98 %BOD/ThO D	OECD 301F - Manometric respirometry
p-Tert-Butylphenol	98-54-4	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	98 % removal of DOC	EC C.4.A. DOC Die-Away Test

### 12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Naphtha (petroleum), solvent-refined light	64741-84-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hexane	110-54-3	Modeled Bioconcentration		Bioaccumulation factor	50	Catalogic™
Butanone	78-93-3	Experimental Bioconcentration		Log Kow	0.3	OECD 117 log Kow HPLC method
Phenolic Polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polychloroprene	9010-98-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Heptane	142-82-5	Estimated Bioconcentration		Bioaccumulation factor	105	
Methylcyclopentane	96-37-7	Experimental Bioconcentration		Log Kow	3.37	
Toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation factor	90	
Toluene	108-88-3	Experimental Bioconcentration		Log Kow	2.73	
Magnesium oxide	1309-48-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

2-Methylpentane	107-83-5	Estimated Bioconcentration		Bioaccumulation factor	63	
3-Methylpentane	96-14-0	Estimated Bioconcentration		Bioaccumulation factor	150	
Cyclohexane	110-82-7	Experimental BCF - Fish	56 days	Bioaccumulation factor	129	OECD305-Bioconcentration
Cyclohexane	110-82-7	Experimental Bioconcentration		Log Kow	3.44	
Zinc oxide	1314-13-2	Experimental BCF - Fish	56 days	Bioaccumulation factor	≤217	OECD305-Bioconcentration
Carbon black	1333-86-4	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	
Methyl isobutyl ketone	108-10-1	Experimental Bioconcentration		Log Kow	1.9	OECD 117 log Kow HPLC method
Styrenated phenol	61788-44-1	Experimental BCF - Fish	10 days	Bioaccumulation factor	10395	
O-xylene	95-47-6	Experimental Bioconcentration		Log Kow	3.12	
p-Tert-Butylphenol	98-54-4	Experimental BCF - Fish	56 days	Bioaccumulation factor	88	OECD305-Bioconcentration
p-Tert-Butylphenol	98-54-4	Experimental Bioconcentration		Log Kow	3	OECD 117 log Kow HPLC method

#### 12.4. Mobility in soil

Please contact manufacturer for more details

#### 12.5 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

In accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

Incinerate uncured product 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.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

## SECTION 14: Transport Information

**New Zealand Land Transport Rule: Dangerous Goods - Road/Rail Transport****UN No.:** UN1133**Proper Shipping Name:** ADHESIVES**Class/Division:** 3**Sub Risk:** Not applicable.**Packing Group:** II**Special Instructions:** Limited quantity may apply**Hazchem Code:** -3YE**IERG:** 14**International Air Transport Association (IATA) - Air Transport****UN No.:** UN1133**Proper Shipping Name:** ADHESIVES**Class/Division:** 3**Sub Risk:** Not applicable.**Packing Group:** II**International Maritime Dangerous Goods Code (IMDG) - Marine Transport****UN No.:** UN1133**Proper Shipping Name:** ADHESIVES**Class/Division:** 3**Sub Risk:** Not applicable.**Packing Group:** II**Marine Pollutant:** Not applicable.**Special Instructions:** Limited quantity may apply**SECTION 15: Regulatory information**

HSNO Approval number	HSR002669
Group standard name	Surface Coatings and Colourants (Flammable, Carcinogenic) Group Standard 2020
HSNO Hazard classification	Refer to Section 2: Hazard identification

**NZ Inventory of Chemicals (NZIoC) Status**

All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

**Controls in accordance with The Health and Safety at Work Act 2015, Health and Safety at Work (Hazardous Substances) Regulations 2017 and the HSNO Act 1996, Hazardous Substances (Hazardous Property Controls) Notice 2017**

Certified handler	Not required
Location Compliance Certificate	100 L (closed containers greater than 5 L) 250 L (closed containers up to and including 5 L) 50 L (open containers)
Hazardous atmosphere zone	100 L (closed containers) 25 L (decanting) 5 L (open occasionally) 1 L (open containers in continuous use)
Fire extinguishers	Two required for 250 L
Emergency response plan	100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (for all other substances)
Secondary containment	100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (for all other substances)
Tracking	Not required
Warning signage	100 L (for Hazardous to the aquatic environment Category 1 substances); or 250 L (for all other substances)

**SECTION 16: Other information**

**Revision information:**

Complete document review.

<b>Document group:</b>	08-0531-7	<b>Version number:</b>	5.00
<b>Issue Date:</b>	11/06/2023	<b>Supersedes date:</b>	24/02/2019

**Key to abbreviations and acronyms****GHS** refers to the Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition of 2017**HSNO** means Hazardous Substances and New Organisms Act 1996

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