

# **Safety Data Sheet**

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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<sup>TM</sup> Blue Cream Hardener

#### **Product Identification Numbers**

70-0080-0380-1

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

#### Recommended use

Automotive. Hardener for Body Fillers

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, the Hazardous Substances (Classification) Notice 2017 and Hazardous Substances (Minimum Degrees of Hazard) Notice 2017. Refer to Section 14 of this Safety Data Sheet for product Dangerous Goods Classification.

## 2.1. Classification of the substance or mixture

GHS	HSNO		
Organic Peroxide: Type E	5.2E Organic peroxide: Type E		
Acute Toxicity (dermal): Category 5	6.1E Acute toxicity (skin)		
Serious Eye Damage/Irritation: Category 2	6.4A Irritating to the eye		
Skin Sensitiser: Category 1	6.5B Skin sensitiser		

Acute Aquatic Toxicity: Category 1	9.1A Aquatic toxicity (acute)
Chronic Aquatic Toxicity: Category 1	9.1A Aquatic toxicity (chronic)

# 2.2. Label elements SIGNAL WORD

WARNING!

**Symbols:** 

Flame | Exclamation mark | Environment |









#### **HAZARD STATEMENTS:**

H242 Heating may cause a fire.

H313 May be harmful in contact with skin.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

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.

P240B Ground and bond container and receiving equipment.

P235 Keep cool.

P234A Keep only in original packaging.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280A Wear eye/face protection.

P280B Wear protective gloves and eye/face protection.

P280E Wear protective gloves.

P273 Avoid release to the environment.

P264B Wash exposed skin thoroughly after handling.

P272A Contaminated work clothing must not be allowed out of the workplace.

**Response:** 

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P321 Specific treatment (see Notes to Physician on this label).

P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

P370 + P378I In case of fire: Use a fire fighting agent suitable for ordinary combustible material

such as water or foam to extinguish.

Storage:

P410 Protect from sunlight.

P403 Store in a well-ventilated place.

P411 Store at temperatures not exceeding 5C/40F.

P420A Store separately.

Disposal:

P501 Dispose of contents/container in accordance with applicable

local/regional/national/international regulations.

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

Ingredient	CAS Nbr	% by Weight
Dibenzoyl peroxide	94-36-0	30 - 60
Benzoic Acid, C9-11-Branched Alkyl Esters	131298-44-7	10 - 30

# **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

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. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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

Closed containers exposed to heat from fire may build pressure and explode. Part of the oxygen for combustion is supplied by the peroxide itself.

## **Hazardous Decomposition or By-Products**

SubstanceConditionCarbon monoxide.During combustion.Carbon dioxide.During combustion.Toxic vapour, gas, particulate.During combustion.

## 5.3. Special protective actions for fire-fighters

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:** 1W

## **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

Collect as much of the spilled material as possible using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing 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.

## 7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store at temperatures not exceeding 32C. Keep cool. Keep only in original container. Store away from other materials. Keep/store away from clothing and other combustible materials.

#### 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.

for the component.				
Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Dibenzoyl peroxide	94-36-0	ACGIH	TWA:5 mg/m3	A4: Not class. as human carcinogin
Dihenzovl peroxide	94-36-0	New Zealand	TWA(8 hours):5 mg/m3	S

Dibenzoyl peroxide 94-36-0 New Zealand TWA(8 hours):5 r

WI

 $ACGIH: American\ Conference\ of\ Governmental\ Industrial\ Hygienists$ 

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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

CEIL: 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.

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

#### Eye/face protection

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

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**

Wear respiratory protection if ventilation is inadequate to prevent overexposure. 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

Physical state	Solid.
Specific Physical Form:	Paste
Colour	Blue

Odour	Slight Ester	
Odour threshold	No data available.	
pH	No data available.	
Melting point/Freezing point	No data available.	
Boiling point/Initial boiling point/Boiling range	Not applicable.	
Flash point	111 °C [Test Method: Estimated]	
Evaporation rate	No data available.	
Flammability (solid, gas)	Organic Peroxide: Type E.	
Flammable Limits(LEL)	Not applicable.	
Flammable Limits(UEL)	Not applicable.	
Vapour pressure	No data available.	
Vapor Density and/or Relative Vapor Density	No data available.	
Density	1.2 g/ml	
Relative density	1.2 [Ref Std:WATER=1] [Details:@ 25 C]	
Water solubility	Negligible	
Solubility- non-water	No data available.	
Partition coefficient: n-octanol/water	No data available.	
Autoignition temperature	410 °C [Test Method:Estimated]	
Decomposition temperature	No data available.	
Viscosity/Kinematic Viscosity	70,000 mPa-s - 150,000 mPa-s	
Volatile organic compounds (VOC)	0 % weight [Test Method:calculated per CARB title 2]	
Volatile organic compounds (VOC)	0 g/l [Test Method:calculated SCAQMD rule 443.1]	
Percent volatile		
VOC less H2O & exempt solvents	0 g/l [Test Method:calculated SCAQMD rule 443.1]	
Molecular weight	No data available.	

## **Nanoparticles**

This material does not contain nanoparticles.

# **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

None known.

## 10.5 Incompatible materials

Accelerators

## 10.6 Hazardous decomposition products

Substance
None known.

Condition

Refer to Section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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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.

#### Skin contact

May be harmful in contact with skin.

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

## **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 ATE2,000 - 5,000 mg/kg
Overall product	Inhalation- Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Dibenzoyl peroxide	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Dibenzoyl peroxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 24.3 mg/l
Dibenzoyl peroxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Benzoic Acid, C9-11-Branched Alkyl Esters	Dermal	Rabbit	LD50 > 2,000 mg/kg
Benzoic Acid, C9-11-Branched Alkyl Esters	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5 mg/l
Benzoic Acid, C9-11-Branched Alkyl Esters	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Dibenzoyl peroxide	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Dibenzoyl peroxide	Rabbit	Severe irritant

#### **Sensitisation:**

#### **Skin Sensitisation**

Name	Species	Value
Dibenzoyl peroxide	Guinea pig	Sensitising

#### **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
Dibenzoyl peroxide	In Vitro	Not mutagenic
Dibenzoyl peroxide	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Dibenzoyl peroxide	Ingestion	Multiple	Not carcinogenic
		animal	
		species	
Dibenzoyl peroxide	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
Dibenzoyl peroxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Dibenzoyl peroxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	premating & during gestation
Dibenzoyl peroxide	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	premating & during gestation

## Target Organ(s)

## Specific Target Organ Toxicity - single exposure

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

## Specific Target Organ Toxicity - repeated exposure

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

## **Aspiration Hazard**

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

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 1 (HSNO 9.1A Aquatic toxicity) Chronic Aquatic Toxicity: Category 1 (HSNO 9.1A Aquatic toxicity)

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Dibenzoyl peroxide	94-36-0	Green Algae	Experimental	72 hours	EC50	0.071 mg/l
Dibenzoyl peroxide	94-36-0	Rainbow trout	Experimental	96 hours	LC50	0.06 mg/l
Dibenzoyl peroxide	94-36-0	Water flea	Experimental	48 hours	EC50	0.11 mg/l
Dibenzoyl peroxide	94-36-0	Green Algae	Experimental	72 hours	NOEC	0.02 mg/l
Dibenzoyl peroxide	94-36-0	Water flea	Experimental	21 hours	Effect Concentration 10%	0.001 mg/l
Benzoic Acid, C9-11- Branched Alkyl	131298-44-7		Data not available or insufficient for			
Esters			classification			

## 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Dibenzoyl	94-36-0	Experimental		Hydrolytic	<24 hours (t	Other methods
peroxide		Hydrolysis		half-life	1/2)	
Dibenzoyl	94-36-0	Experimental	28 days	BOD	71 % weight	OECD 301D - Closed
peroxide		Biodegradation				bottle test
Benzoic Acid,	131298-44-7	Data not			N/A	
C9-11-		availbl-				
Branched Alkyl		insufficient				
Esters						

#### 12.3: Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Dibenzoyl	94-36-0	Experimental		Log Kow	3.2	Other methods
peroxide		Bioconcentrati				
		on				
Benzoic Acid,	131298-44-7	Data not	N/A	N/A	N/A	N/A
C9-11-		available or				
Branched Alkyl		insufficient for				
Esters		classification				

## 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.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.: UN3108

Proper Shipping Name: ORGANIC PEROXIDE TYPE E, SOLID, (Dibenzoyl Peroxide (As a Paste), <= 52%)

Class/Division: 5.2 Sub Risk: Not applicable. Packing Group: Not applicable.

**Special Instructions:** Limited quantity may apply

Hazchem Code: 1W

**IERG: 32** 

International Air Transport Association (IATA) - Air Transport

UN No.: UN3108

Proper Shipping Name: ORGANIC PEROXIDE TYPE E, SOLID, (Dibenzoyl Peroxide (As a Paste), <= 52%)

Class/Division: 5.2 Sub Risk: Not applicable. Packing Group: Not applicable.

Special Instructions: Forbidden packaging does not meet requirements for this mode of transport

International Maritime Dangerous Goods Code (IMDG) - Marine Transport

UN No.: UN3108

Proper Shipping Name: ORGANIC PEROXIDE TYPE E, SOLID, (Dibenzoyl Peroxide (As a Paste), <= 52%)

Class/Division: 5.2
Sub Risk: Not applicable.
Packing Group: Not applicable.
Marine Pollutant: Not applicable.

**Special Instructions:** Limited quantity may apply

## **SECTION 15: Regulatory information**

HSNO Approval number HSR002629

Group standard name Organic Peroxides Group Standard 2017
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 (Hazardous Substances) Regulations 2017

Certified handler Not required Location Compliance Certificate 25 kg
Hazardous atmosphere zone Not required

Fire extinguishers

One required for 50 L or 50 kg

Emergency response plan 100 L or 100 kg
Secondary containment 100 L or 100 kg
Tracking Not required
Warning signage 10 L or 10 kg

# **SECTION 16: Other information**

#### **Revision information:**

Complete document review.

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#### Key to abbreviations and acronyms

GHS means the Globally Harmonised System of Classification and Labelling of Chemicals, 5th revised edition 2013

HSNO means Hazardous Substances and New Organisms Act 1996

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