



## Safety Data Sheet

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|                        |            |                         |            |
|------------------------|------------|-------------------------|------------|
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This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Dyneon™ PTFE Dispersion TF 5070GZ

#### Product Identification Numbers

97-5000-1557-9

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

##### Recommended use

Custom Compound

For Industrial or Professional use only.

#### 1.3. Supplier's details

**Address:** 3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113  
**Telephone:** 136 136  
**E Mail:** productinfo.au@mmm.com  
**Website:** www.3m.com.au

#### 1.4. Emergency telephone number

EMERGENCY: 1800 097 146 (Australia only)

### SECTION 2: Hazard identification

This product is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

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

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

Serious Eye Damage/Irritation: Category 1.

#### 2.2. Label elements

The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product label.

**Signal word**

Danger

**Symbols**

Corrosion |

**Pictograms****Hazard statements**

H318 Causes serious eye damage.

**Precautionary statements****Prevention:**

P280E Wear protective gloves.

**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.

P310 Immediately call a POISON CENTRE or doctor/physician.

**2.3. Other assigned/identified product hazards**

May cause thermal burns.

**2.4. Other hazards which do not result in classification**

Causes mild skin irritation.

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

This material is a mixture.

| Ingredient              | CAS Nbr    | % by Weight |
|-------------------------|------------|-------------|
| Polytetrafluoroethylene | 9002-84-0  | 45 - 55     |
| Water                   | 7732-18-5  | 35 - 55     |
| Polyether Polymer       | 78330-21-9 | 1 - 10      |

**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 flush skin with large amounts of cold water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Cover affected area with a clean dressing. Get immediate medical attention.

**Eye contact**

Immediately flush eyes with large amounts of water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Get immediate medical attention.

**If swallowed**

Rinse mouth. If you feel unwell, get medical attention.

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

No critical symptoms or effects. 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**

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

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

None inherent in this product.

**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. 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. 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. 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. Place in a closed 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

**7.1. Precautions for safe handling**

Avoid skin contact with hot material. For industrial/occupational use only. Not for consumer sale or use. Store work clothes separately from other clothing, food and tobacco products. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of hazardous decomposition products.

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

No special storage requirements.

## 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.

## 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. Curing enclosures must be exhausted to outdoors or to a suitable emission control device.

### 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:

Full face shield.

Indirect vented goggles.

Select and use eye protection in accordance with AS/NZS 1336. Eye protection should comply with the performance specifications of AS/NZS 1337.

#### 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: Neoprene.

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: Neoprene apron.

Select and use gloves according to AS/NZ 2161.

#### Respiratory protection

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

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

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

Select and use respirators according to AS/NZS 1715. Respirators should comply with AS/NZS 1716 performance specifications. For information about respirators, call 3M on 1800 024 464.

#### Thermal hazards

Wear heat insulating gloves, indirect vented goggles, and a full face shield when handling hot material to prevent thermal burns.

## SECTION 9: Physical and chemical properties

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

|  |   |
|--|---|
| <b>Physical state</b>                                    | Liquid.                                   |
| <b>Specific Physical Form:</b>                           | Emulsion                                  |
| <b>Colour</b>  | White                                     |
| <b>Odour</b>   | Slight Ammoniacal                         |
| <b>Odour threshold</b>                                   | <i>No data available.</i>                 |
| <b>pH</b>  | 8 - 11                                    |
| <b>Melting point/Freezing point</b>                      | <i>Not applicable.</i>                    |
| <b>Boiling point/Initial boiling point/Boiling range</b> | 100 °C                                    |
| <b>Flash point</b>                                       | No flash point                            |
| <b>Evaporation rate</b>                                  | 1 [Ref Std: WATER=1]                      |
| <b>Flammability (solid, gas)</b>                         | Not applicable.                           |
| <b>Flammable Limits(LEL)</b>                             | <i>Not applicable.</i>                    |
| <b>Flammable Limits(UEL)</b>                             | <i>Not applicable.</i>                    |
| <b>Vapour pressure</b>                                   | 2,500 Pa [@ 20 °C ]                       |
| <b>Vapor Density and/or Relative Vapor Density</b>       | 25 [@ 20 °C ] [Ref Std: AIR=1]            |
| <b>Density</b>   | 1.2 - 1.6 g/ml                            |
| <b>Relative density</b>                                  | 1.2 - 1.6 [@ 23 °C ] [Ref Std: WATER=1]   |
| <b>Water solubility</b>                                  | Negligible [Details: Polymer not soluble] |
| <b>Solubility- non-water</b>                             | <i>No data available.</i>                 |
| <b>Partition coefficient: n-octanol/water</b>            | <i>No data available.</i>                 |
| <b>Autoignition temperature</b>                          | <i>Not applicable.</i>                    |
| <b>Decomposition temperature</b>                         | <i>No data available.</i>                 |
| <b>Viscosity/Kinematic Viscosity</b>                     | 5 - 15 mPa-s                              |
| <b>Volatile organic compounds (VOC)</b>                  | <i>Not applicable.</i>                    |
| <b>Percent volatile</b>                                  | 33 - 37 %                                 |
| <b>VOC less H2O &amp; exempt solvents</b>                | <i>Not applicable.</i>                    |
| <b>Molecular weight</b>                                  | <i>Not applicable.</i>                    |

**Nanoparticles**

This material does not contain nanoparticles.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

This material is considered to be non reactive under normal use conditions

**10.2 Chemical stability**

Stable.

**10.3. Conditions to avoid**

None known.

**10.4. Possibility of hazardous reactions**

Hazardous polymerisation will not occur.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products****Substance**

Carbonyl fluoride.  
Carbon monoxide.  
Carbon dioxide.

**Condition**

At elevated temperatures. - above 380 C  
At elevated temperatures. - above 380 C  
At elevated temperatures. - above 380 C

|                                 |   |
|---------------------------------|---|
| Hydrogen Fluoride               | At elevated temperatures. - above 380 C |
| Ammonia                         | At elevated temperatures. - above 380 C |
| Perfluoroisobutylene (PFIB).    | At elevated temperatures. - above 380 C |
| Toxic vapour, gas, particulate. | At elevated temperatures. - above 380 C |

If the product is exposed to extreme conditions of heat from misuse or equipment failure, toxic decomposition products that include hydrogen fluoride and perfluoroisobutylene can occur.

## 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.

During heating:

Polymer fume fever: Sign/symptoms may include chest pain or tightness, shortness of breath, cough, malaise, muscle aches, increased heart rate, fever, chills, sweats, nausea and headache.

#### Skin contact

During heating: Thermal Burns: Signs/symptoms may include intense pain, redness and swelling, and tissue destruction.

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

#### Eye contact

During heating: Thermal Burns: Signs/symptoms may include severe pain, redness and swelling, and tissue destruction.

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of 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         | Ingestion |         | No data available; calculated ATE >5,000 mg/kg |
| Polytetrafluoroethylene | Dermal    |         | LD50 estimated to be > 5,000 mg/kg             |
| Polytetrafluoroethylene | Ingestion |         | LD50 estimated to be > 5,000 mg/kg             |
| Polyether Polymer       | Ingestion | Rat     | LD50 1,350 mg/kg                               |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

| Name                    | Species          | Value                     |
|-------------------------|------------------|---------------------------|
| Polytetrafluoroethylene | Human and animal | No significant irritation |
| Polyether Polymer       | Rabbit           | Mild irritant             |

**Serious Eye Damage/Irritation**

| Name                    | Species                | Value                     |
|-------------------------|------------------------|---------------------------|
| Polytetrafluoroethylene | Professional judgement | No significant irritation |
| Polyether Polymer       | Rabbit                 | Corrosive                 |

**Skin Sensitisation**

| Name                    | Species | Value          |
|-------------------------|---------|----------------|
| Polytetrafluoroethylene | Human   | Not classified |
| Polyether Polymer       | Human   | 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**

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

**Carcinogenicity**

| Name                    | Route          | Species                 | Value  |
|-------------------------|----------------|-------------------------|--|
| Polytetrafluoroethylene | Not specified. | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |

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

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

**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**

| Name                    | Route     | Target Organ(s)      | Value          | Species | Test result         | Exposure Duration |
|-------------------------|-----------|----------------------|----------------|---------|---------------------|-------------------|
| Polytetrafluoroethylene | Ingestion | hematopoietic system | Not classified | Rat     | NOAEL Not available | 90 days           |

**Aspiration Hazard**

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

**Exposure Levels**

Refer Section 8.1 **Control Parameters** of this Safety Data Sheet.

**Interactive Effects**

Not determined.

**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

#### Acute aquatic hazard:

Not acutely toxic to aquatic life by GHS criteria.

#### Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

| Material                 | CAS Number | Organism | Type  | Exposure | Test endpoint | Test result |
|--------------------------|------------|----------|---|----------|---------------|-------------|
| Polytetrafluoro ethylene | 9002-84-0  |          | Data not available or insufficient for classification |          |               | N/A         |
| Polyether Polymer        | 78330-21-9 |          | Data not available or insufficient for classification |          |               | N/A         |

### 12.2. Persistence and degradability

| Material                 | CAS Number | Test type                        | Duration | Study Type    | Test result   | Protocol                          |
|--------------------------|------------|----------------------------------|----------|---------------|---------------|-----------------------------------|
| Polytetrafluoro ethylene | 9002-84-0  | Data not available- insufficient |          |               | N/A           |                                   |
| Polyether Polymer        | 78330-21-9 | Experimental Biodegradation      | 28 days  | CO2 evolution | =>40 % weight | OECD 301B - Modified sturm or CO2 |

### 12.3 : Bioaccumulative potential

| Material                 | CAS Number | Test type   | Duration | Study Type | Test result | Protocol |
|--------------------------|------------|---|----------|------------|-------------|----------|
| Polytetrafluoro ethylene | 9002-84-0  | Data not available or insufficient for classification | N/A      | N/A        | N/A         | N/A      |
| Polyether Polymer        | 78330-21-9 | Experimental BCF - Fathead Minnow                     | 72 hours |            | 232         |          |

### 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



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

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include HF. Facility must be capable of handling halogenated materials.

## SECTION 14: Transport Information

### Australian Dangerous Goods Code (ADG) - Road/Rail Transport

**UN No.:** Not applicable.

**Proper shipping name:** Not applicable.

**Class/Division:** Not applicable.

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**Hazchem Code:** Not applicable

**IERG:** Not applicable.

### International Air Transport Association (IATA) - Air Transport

**UN No.:** Not applicable.

**Proper shipping name:** Not applicable.

**Class/Division:** Not applicable.

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

### International Maritime Dangerous Goods Code (IMDG)- Marine Transport

**UN No.:** Not applicable.

**Proper shipping name:** Not applicable.

**Class/Division:** Not applicable.

**Sub Risk:** Not applicable.

**Packing Group:** Not applicable.

**Marine Pollutant:** Not applicable.

## SECTION 15: Regulatory information

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

#### Australian Inventory Status:

All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC). Conditions may apply prior to introduction for direct importers of this product, Please contact 3M Australia on 136 136 for further details.

**Poison Schedule:** This product is intended for Industrial or Professional Use only and therefore is not packaged and labelled in accordance with the requirements of the Standard for the Uniform Scheduling of Medicines and Poisons.

## SECTION 16: Other information

#### Revision information:

Complete document review.

**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 Safety 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.

Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State

regulations exemptions for some solvents.

**3M Australia SDSs are available at [www.3m.com.au](http://www.3m.com.au)**