

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances and New Organisms Act 1996 (HSNO Act) and Regulations, as amended.

1.1. Product identifier 3M FireBarrier[™] Sealant IC 15 WB+

| Product Identification I | Numbers | | |
|--------------------------|----------------|----------------|----------------|
| 98-0400-5509-1 | 98-0400-5510-9 | 98-0400-5511-7 | 98-0400-5512-5 |

1.2. Recommended use and restrictions on use

Recommended use Fire Barrier Sealant.

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

2.1. Classification of the substance or mixture

Classified as hazardous according to the New Zealand, Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 as amended.

Not classified as a Dangerous Good according to; New Zealand, Land Transport Rule: Dangerous Goods 2005 (Rule 45001/1) as amended, NZS 5433:2012 Transport of Dangerous Goods on Land, UN Model Regulations on the Transport of Dangerous Goods, International Maritime Dangerous Goods Code and IATA Dangerous Goods Regulations.

HSNO classification

6.3B Irritating to the skin6.4A Irritating to the eye9.1A Aquatic toxicity

2.2. Label elements SIGNAL WORD

WARNING!

Symbols: Environment |

Pictograms



| HAZARD | STATEMENTS: |
|--------|--------------------|
| 11220 | |

| H320 | Causes eye irritation. |
|-------|--|
| H316 | Causes mild skin irritation. |
| | |
| H400 | Very toxic to aquatic life |
| 11/11 | Touis to a sustia life with long lesting offects |
| H411 | Toxic to aquatic file with long fasting effects. |

PRECAUTIONARY STATEMENTS

| Prevention: | |
|--------------------|--|
| P104 | Read Safety Data Sheet before use. |
| P273 | Avoid release to the environment. |
| 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. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |
| 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 |
|---------------------------|--------------|-------------|
| Calcium Carbonate | 1317-65-3 | 30 - 60 |
| Polymer | Trade Secret | 10 - 30 |
| Water | 7732-18-5 | 10 - 30 |
| Zinc borate | 138265-88-0 | 3 - 7 |
| Silicic acid, sodium salt | 1344-09-8 | 3 - 7 |
| Fiberglass | 65997-17-3 | 0.5 - 1.5 |

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

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact

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Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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

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.

Hazardous Decomposition or By-Products

| <u>Substance</u> | | | | |
|------------------|--|--|--|--|
| Carbon monoxide. | | | | |
| Carbon dioxide. | | | | |

<u>Condition</u> During combustion. During combustion.

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. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. 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.

SECTION 7: Handling and storage

Refer to Section 15: HSNO Controls for more information.

7.1. Precautions for safe handling

Avoid eye contact. For industrial or professional use only. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

7.3. Approved handler test certificate Not required

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Ingredient Fiberglass | CAS Nbr 65997-17-3 | Agency Manufacturer determined | Limit type TWA(as dust):10 mg/m3 | Additional comments |
|---|-----------------------|--------------------------------------|--|---------------------|
| Glass filaments | 65997-17-3 | New Zealand WES | TWA(as inhalable dust)(8 hours):5 mg/m3;TWA(as respirable dust)(8 hours):1 f/mL;TWA(Respirable fibers)(8 hours):1 f/mL | |
| ACGIH : American Conference of Govern | mental Industrial | Hygienists | | |
| AIHA : American Industrial Hygiene Asso | ciation | | | |

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: 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.

Gloves made from the following material(s) are recommended: Butyl rubber. Nitrile rubber.

Respiratory protection

Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment.

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Consult with your respirator manufacturer for selection of appropriate types of respirators.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | Solid. |
|---|--|
| Specific Physical Form: | Paste |
| Appearance/Odour | Light yellow viscous paste with a mild odour |
| Odour threshold | No data available. |
| Melting point/Freezing point | No data available. |
| Boiling point/Initial boiling point/Boiling range | Not applicable. |
| Flash point | Flash point $> 93 \degree C (200 \degree F)$ |
| Flammability (solid, gas) | Not classified |
| Flammable Limits(LEL) | Not applicable. |
| Flammable Limits(UEL) | Not applicable. |
| Relative density | 1.4 [<i>Ref Std</i> :WATER=1] |
| Water solubility | Moderate |
| Solubility- non-water | No data available. |
| Autoignition temperature | No data available. |
| Decomposition temperature | No data available. |
| Volatile organic compounds (VOC) | < 2 g/l |
| VOC less H2O & exempt solvents | < 2 g/l |

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 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products Substance

None known.

Refer to Section 5.2 for hazardous decomposition products during combustion.

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

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Condition

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

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

Eye contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy 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

| Route | Species | Value |
|-------------|---|---|
| Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Dermal | Rat | LD50 > 2,000 mg/kg |
| Inhalation- | Rat | LC50 3.0 mg/l |
| Dust/Mist | | |
| (4 hours) | | |
| Ingestion | Rat | LD50 6,450 mg/kg |
| Ingestion | Rat | LD50 > 2,000 mg/kg |
| Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Ingestion | Rat | LD50 > 10,000 mg/kg |
| Dermal | Rabbit | LD50 > 4,640 mg/kg |
| Ingestion | Rat | LD50 500 mg/kg |
| Dermal | | LD50 estimated to be $> 5,000 \text{ mg/kg}$ |
| Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| | Route Ingestion Dermal Inhalation- Dust/Mist (4 hours) Ingestion Ingestion Dermal Ingestion Dermal Ingestion Dermal Ingestion Dermal Ingestion Dermal Ingestion | RouteSpeciesIngestionRatDermalRatInhalation- Dust/MistRat(4 hours)IngestionIngestionRatIngestionRatDermalRabbitIngestionRatDermalRabbitIngestionRatDermalRabbitIngestionRatDermalRabbitIngestionRatDermalIngestionIngestionRat |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---------------------------|---------|---------------------------|
| Calcium Carbonate | Rabbit | No significant irritation |
| Polymer | Rabbit | Minimal irritation |
| Silicic acid, sodium salt | Rabbit | Corrosive |
| Fiberglass | | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---------------------------|---------|---------------------------|
| Calcium Carbonate | Rabbit | No significant irritation |
| Polymer | | Mild irritant |
| Silicic acid, sodium salt | Rabbit | Corrosive |
| Fiberglass | | No significant irritation |

Skin Sensitisation

| Name | Species | Value |
|---------------------------|---------|-----------------|
| Silicic acid, sodium salt | Mouse | Not sensitizing |

Respiratory Sensitisation

| Name | Species | Value |
|------|---------|-------|
| | | |

Germ Cell Mutagenicity

| Name | Route | Value |
|---------------------------|----------|--|
| Silicic acid, sodium salt | In Vitro | Not mutagenic |
| Silicic acid, sodium salt | In vivo | Not mutagenic |
| Fiberglass | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|------------|------------|----------|--|
| Fiberglass | Inhalation | Multiple | Some positive data exist, but the data are not |
| | | animal | sufficient for classification |
| | | species | |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure |
|---------------------------|-----------|--|---------|------------------------|------------------------------------|
| | | | | | Duration |
| Calcium Carbonate | Ingestion | Not toxic to development | Rat | NOAEL 625 mg/kg/day | premating & during gestation |
| Silicic acid, sodium salt | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Mouse | NOAEL 200 mg/kg/day | during gestation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure |
|---------------------------|------------|------------------------|----------------------------------|------------|-------------|------------|
| | | | | | | Duration |
| Calcium Carbonate | Inhalation | respiratory system | All data are negative | Rat | NOAEL | 90 minutes |
| | | | | | 0.812 mg/l | |
| Silicic acid, sodium salt | Inhalation | respiratory irritation | May cause respiratory irritation | official | NOAEL Not | |
| | | | | classifica | available | |
| | | | | tion | | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---------------------------|------------|--------------------------|--|---------|-----------------------------|--------------------------|
| Calcium Carbonate | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| Silicic acid, sodium salt | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Dog | LOAEL 2,400 mg/kg/day | 4 weeks |
| Silicic acid, sodium salt | Ingestion | endocrine system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 804 mg/kg/day | 3 months |
| Silicic acid, sodium salt | Ingestion | blood | All data are negative | Rat | NOAEL 804 mg/kg/day | 3 months |
| Silicic acid, sodium salt | Ingestion | heart liver | All data are negative | Rat | NOAEL 1,259 mg/kg/day | 8 weeks |
| Fiberglass | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL not available | occupational exposure |

| Aspiration Hazard | |
|-------------------|-------|
| Name | Value |

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. ToxicityEcotoxic to the aquatic environment.9.1A Aquatic toxicity

No product test data available.

| Material | CAS Number | Organism | Туре | Exposure | Test endpoint | Test result |
|------------------------------|--------------|-------------------------|--|----------|---------------|-------------|
| Polymer | Trade Secret | | Data not available or insufficient for classification | | | |
| Calcium Carbonate | 1317-65-3 | Rainbow trout | Experimental | 21 days | NOEC | >100 mg/l |
| Calcium Carbonate | 1317-65-3 | Western Mosquitofish | Experimental | 96 hours | LC50 | >100 mg/l |
| Fiberglass | 65997-17-3 | | Data not available or insufficient for classification | | | |
| Silicic acid, sodium salt | 1344-09-8 | Rainbow trout | Experimental | 96 hours | LC50 | 281 mg/l |
| Silicic acid, sodium salt | 1344-09-8 | Water flea | Experimental | 48 hours | EC50 | 1,700 mg/l |
| Zinc borate | 138265-88-0 | Green Algae | Estimated | 72 hours | NOEC | 0.039 mg/l |
| Zinc borate | 138265-88-0 | Water flea | Estimated | 48 hours | EC50 | 5.9 mg/l |
| Zinc borate | 138265-88-0 | Green Algae | Estimated | 72 hours | EC50 | 0.085 mg/l |
| Zinc borate | 138265-88-0 | Chinook Salmon | Estimated | 96 hours | LC50 | 0.43 mg/l |

12.2. Persistence and degradability

No test data available.

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|-------------|--------------|------------------|----------|------------|-------------|----------|
| Polymer | Trade Secret | Data not | N/A | N/A | N/A | N/A |
| | | available or | | | | |
| | | insufficient for | | | | |
| | | classification | | | | |
| Fiberglass | 65997-17-3 | Data not | N/A | N/A | N/A | N/A |
| | | available or | | | | |
| | | insufficient for | | | | |
| | | classification | | | | |
| Zinc borate | 138265-88-0 | Data not | N/A | N/A | N/A | N/A |
| | | available or | | | | |
| | | insufficient for | | | | |

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| | | classification | | | | |
|------------------------------|-----------|--|-----|-----|-----|-----|
| Calcium Carbonate | 1317-65-3 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Silicic acid, sodium salt | 1344-09-8 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |

12.3 : Bioaccumulative potential

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|------------------------------|--------------|--|----------|----------------------------|-------------|---|
| Polymer | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Fiberglass | 65997-17-3 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Zinc borate | 138265-88-0 | Estimated Bioconcentrati on | | Bioaccumulati on factor | =217 | OECD 305E - Bioaccumulation flow- through fish test |
| Calcium Carbonate | 1317-65-3 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Silicic acid, sodium salt | 1344-09-8 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |

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

See Section 11.1 Information on toxicological effects

Dispose of waste product in a permitted industrial waste 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

NOT HAZARDOUS FOR TRANSPORT

SECTION 15: Regulatory information

HSNO Approval numberHSR002544Group standard nameConstruction Products (Subsidiary Hazard) Group Standard 2006HSNO Hazard classificationRefer 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.

| HSNU Controls | |
|---|--|
| Approved handler test certificate | Not required |
| Location and transit Depot certification test | Not required |
| Hazardous atmosphere zone | Not required |
| Fire extinguishers | Not required |
| Emergency response plan | 100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a |
| | HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg |
| | (for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance) |
| Secondary containment | 100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a |
| | HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg |
| | (for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance) |
| Tracking | Not required |
| Warning signage | 100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a |
| | HSNO 8.3A, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for a HSNO |
| | 6.1D or 9.1D substance) |

SECTION 16: Other information

Revision information:

No revision information is available.

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