

Safety Data Sheet

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 25-7258-4
 Version number:
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 Issue Date:
 09/12/2020
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 25/05/2017

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

IDENTIFICATION:

1.1. Product identifier

3M[™] Clinpro[™] XT Varnish Durable Fluoride-Releasing Coating (12248)

Product Identification Numbers 70-2010-5653-1

1.2. Recommended use and restrictions on use

Recommended use Dental Product, Dental varnish

Restrictions on use For use by dental professionals 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)

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the SDSs for components of this product are:

25-7222-0, 25-7233-7

One or more components of this KIT is classified as a hazardous substance in accordance with the relevant criteria of the HSNO Act 1996, the Hazardous Substances (Classification) Notice 2017 and the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017.

TRANSPORT INFORMATION

NOT HAZARDOUS FOR TRANSPORT

Revision information:

Complete document review.

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date of issue. TO THE EXTENT PERMITTED BY LAW, 3M MAKES NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for user or application. 3M provides information in electronic form as a service to customers. Due to the remote possibility of electronic transfer may have resulted in errors, omissions or alterations in this information; 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

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Safety Data Sheet

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| Document group: | 25-7222-0 | Version number: | 3.00 |
|-----------------|------------|------------------|------------|
| Issue Date: | 18/10/2020 | Supersedes date: | 25/05/2017 |

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[™] Clinpro[™] XT Varnish Durable Fluoride-Releasing Coating, Part B

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Varnish

Restrictions on use

For use by dental professionals 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 | | |
|---|----------------------------|--|--|
| Acute Toxicity (oral): Category 5 | 6.1E Acute toxicity (oral) | | |
| Serious Eye Damage/Irritation: Category 2 | 6.4A Irritating to the eye | | |
| Skin Sensitiser: Category 1 | 6.5B Skin sensitiser | | |

2.2. Label elements SIGNAL WORD

WARNING!

Symbols: Exclamation mark |

Pictograms



HAZARD STATEMENTS:

| H303 | May be harmful if swallowed. |
|------|--------------------------------------|
| H320 | Causes eye irritation. |
| H317 | May cause an allergic skin reaction. |

PRECAUTIONARY STATEMENTS

| Prevention: P261 P280E P264B P272A | Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves. Wash exposed skin thoroughly after handling. 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. |
| 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. |
| 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 |
|---|------------|-------------|
| Copolymer of Acrylic and Itaconic Acids | 25948-33-8 | 35 - 45 |
| Water | 7732-18-5 | 30 - 40 |
| 2-Hydroxyethyl Methacrylate (HEMA) | 868-77-9 | 15 - 20 |
| Calcium Glycerophosphate | 27214-00-2 | 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 wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

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

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

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u> Carbon monoxide. Carbon dioxide. Condition During combustion. 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: Not applicable.

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.

6.3. Methods and material for containment and cleaning up

Contain spill. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. 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

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Avoid breathing dust/fume/gas/mist/vapours/spray. 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. Do not get in eyes.

7.2. Conditions for safe storage including any incompatibilities

Store away from heat.

7.3. Certified handler

Not required

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 in a well-ventilated area.

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.

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

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| · information on busic physical and chemical properties | | |
|---|--------------------|--|
| Physical state | Liquid. | |
| Colour | Yellow | |
| Odour | Slight Acrylate | |
| Odour threshold | No data available. | |
| рН | 3.6 | |
| Melting point/Freezing point | Not applicable. | |
| Boiling point/Initial boiling point/Boiling range | No data available. | |

3MTM ClinproTM XT Varnish Durable Fluoride-Releasing Coating, Part B

| Flash point | >=93.3 °C [<i>Test Method</i> :Closed Cup] | | | |
|---|---|--|--|--|
| * | | | | |
| Evaporation rate | No data available. | | | |
| Flammability (solid, gas) | Not applicable. | | | |
| 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 | 1.14 g/ml | | | |
| Relative density | 1.14 [<i>Ref Std</i> :WATER=1] | | | |
| Water solubility | Complete | | | |
| 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 | 800 - 1,400 mm ² /sec | | | |
| Volatile organic compounds (VOC) | | | | |
| Percent volatile | | | | |
| VOC less H2O & exempt solvents | | | | |
| 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 Heat.

10.5 Incompatible materials None known.

10.6 Hazardous decomposition products

<u>Substance</u>

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 relevant to the material as a whole.

Condition

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

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

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

Ingestion

May be harmful if swallowed.

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 ATE2,000 - 5,000 mg/kg |
| Copolymer of Acrylic and Itaconic Acids | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Copolymer of Acrylic and Itaconic Acids | Dermal | similar | LD50 estimated to be > 5,000 mg/kg |
| | | health | |
| | | hazards | |
| 2-Hydroxyethyl Methacrylate (HEMA) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 2-Hydroxyethyl Methacrylate (HEMA) | Ingestion | Rat | LD50 5,564 mg/kg |
| Calcium Glycerophosphate | Ingestion | similar | LD50 estimated to be 300 - 2,000 mg/kg |
| | | compoun | |
| | | ds | |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|------------------------------------|---------|--------------------|
| | | |
| 2-Hydroxyethyl Methacrylate (HEMA) | Rabbit | Minimal irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|------------------------------------|---------|-------------------|
| 2-Hydroxyethyl Methacrylate (HEMA) | Rabbit | Moderate irritant |

Sensitisation:

Skin Sensitisation

| Name | Species | Value |
|------------------------------------|---------|-------------|
| 2-Hydroxyethyl Methacrylate (HEMA) | Human | Sensitising |
| | and | |

3MTM ClinproTM XT Varnish Durable Fluoride-Releasing Coating, Part B

| animal | |
|--------|--|
| | |

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 |
|------------------------------------|----------|--|
| 2-Hydroxyethyl Methacrylate (HEMA) | In vivo | Not mutagenic |
| 2-Hydroxyethyl Methacrylate (HEMA) | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|------------------------------------|-----------|--|---------|-----------------------------|------------------------------------|
| 2-Hydroxyethyl Methacrylate (HEMA) | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| 2-Hydroxyethyl Methacrylate (HEMA) | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 49 days |
| 2-Hydroxyethyl Methacrylate (HEMA) | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|-----------|-----------------|----------------|---------|----------------------|----------------------|
| Copolymer of Acrylic and Itaconic Acids | Ingestion | nervous system | Not classified | Rat | NOAEL 5,000 mg/kg | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|-----------|--|----------------|---------|-----------------------------|----------------------|
| Copolymer of Acrylic and Itaconic Acids | Ingestion | endocrine system hematopoietic system liver | Not classified | Rat | NOAEL 200 mg/kg/day | 28 days |
| Copolymer of Acrylic and Itaconic Acids | Ingestion | heart bone, teeth, nails, and/or hair immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system | Not classified | Rat | NOAEL 2,000 mg/kg/day | 28 days |

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 terrestrial vertebrates

9.3C Terrestrial vertebrate toxicity

No product test data available.

| Material | CAS Number | Organism | Туре | Exposure | Test endpoint | Test result |
|---|------------|-------------------|--|----------|---------------|-------------|
| Copolymer of Acrylic and Itaconic Acids | 25948-33-8 | | Data not available or insufficient for classification | | | |
| 2- Hydroxyethyl Methacrylate (HEMA) | 868-77-9 | Fathead minnow | Experimental | 96 hours | LC50 | 227 mg/l |
| 2- Hydroxyethyl Methacrylate (HEMA) | 868-77-9 | Green algae | Experimental | 72 hours | EC50 | 710 mg/l |
| 2- Hydroxyethyl Methacrylate (HEMA) | 868-77-9 | Water flea | Experimental | 48 hours | EC50 | 380 mg/l |
| 2- Hydroxyethyl Methacrylate (HEMA) | 868-77-9 | Green Algae | Experimental | 72 hours | NOEC | 160 mg/l |
| 2- Hydroxyethyl Methacrylate (HEMA) | 868-77-9 | Water flea | Experimental | 21 days | NOEC | 24.1 mg/l |
| Calcium Glycerophosph ate | 27214-00-2 | | Data not available or insufficient for classification | | | |

12.2. Persistence and degradability

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|----------------|------------|----------------|----------|------------|-------------|------------------|
| Copolymer of | 25948-33-8 | Data not | | | N/A | |
| Acrylic and | | availbl- | | | | |
| Itaconic Acids | | insufficient | | | | |
| 2- | 868-77-9 | Experimental | 14 days | BOD | 95 % | OECD 301C - MITI |
| Hydroxyethyl | | Biodegradation | - | | BOD/ThBOD | test (I) |
| Methacrylate | | _ | | | | |
| (HEMA) | | | | | | |
| Calcium | 27214-00-2 | Estimated | 28 days | BOD | 81 % | OECD 301C - MITI |

3MTM ClinproTM XT Varnish Durable Fluoride-Releasing Coating, Part B

| Glycerophosph | Biodegradation | | BOD/ThBOD | test (I) |
|---------------|----------------|--|-----------|----------|
| ate | | | | |

12.3 : Bioaccumulative potential

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|----------------|------------|------------------|----------|----------------|-------------|-------------------------|
| Copolymer of | 25948-33-8 | Data not | N/A | N/A | N/A | N/A |
| Acrylic and | | available or | | | | |
| Itaconic Acids | | insufficient for | | | | |
| | | classification | | | | |
| 2- | 868-77-9 | Experimental | | Log Kow | 0.42 | Other methods |
| Hydroxyethyl | | Bioconcentrati | | | | |
| Methacrylate | | on | | | | |
| (HEMA) | | | | | | |
| Calcium | 27214-00-2 | Estimated | | Bioaccumulatio | 1.9 | Estimated: |
| Glycerophosph | | Bioconcentrati | | n factor | | Bioconcentration factor |
| ate | | on | | | | |

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 completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

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.: 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

HSNO Approval numberHSR002558Group standard nameDental Products (Subsidiary Hazard) Group Standard 2017HSNO 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.

Controls in accordance with the Health and Safety at Work (Hazardous Substances) Regulations 2017

| | in and Sarety at 11 orn (malar doub Substances) regulations 2017 |
|---------------------------------|---|
| Certified handler | Not required |
| Location Compliance Certificate | Not required |
| Hazardous atmosphere zone | Not required |
| Fire extinguishers | Not required |
| Emergency response plan | 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 | 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 | 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:

Complete document review.

| Document group: | 25-7222-0 | Version number: | 3.00 |
|-----------------|------------|------------------|------------|
| Issue Date: | 18/10/2020 | Supersedes date: | 25/05/2017 |

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

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date of issue. TO THE EXTENT PERMITTED BY LAW, 3M MAKES NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. 3M provides information in electronic form as a service to customers. Due to the remote possibility of electronic transfer may have resulted in errors, omissions or alterations in this information; 3M makes no representations as to its

3MTM ClinproTM XT Varnish Durable Fluoride-Releasing Coating, Part B

completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

3M New Zealand SDS are available at 3M New Zealand Website: http://solutions.3mnz.co.nz



Safety Data Sheet

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| Document group: | 25-7233-7 | Version number: | 3.00 |
|-----------------|------------|------------------|------------|
| Issue Date: | 09/12/2020 | Supersedes date: | 25/05/2017 |

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[™] Clinpro[™] XT Varnish Durable Fluoride-Releasing Coating, Part A

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Varnish

Restrictions on use

For use by dental professionals 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

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2.1. Classification of the substance or mixture

| GHS | HSNO |
|---|----------------------------|
| Acute Toxicity (oral): Category 5 | 6.1E Acute toxicity (oral) |
| Serious Eye Damage/Irritation: Category 2 | 6.4A Irritating to the eye |
| Skin Sensitiser: Category 1 | 6.5B Skin sensitiser |

2.2. Label elements SIGNAL WORD

WARNING!

Symbols: Exclamation mark |

Pictograms



HAZARD STATEMENTS:

| H303 | May be harmful if swallowed. |
|------|--------------------------------------|
| H320 | Causes eye irritation. |
| H317 | May cause an allergic skin reaction. |

PRECAUTIONARY STATEMENTS

| Prevention: P261 P280E P264B P272A | Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves. Wash exposed skin thoroughly after handling. 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. |
| 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. |
| 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 |
|--|------------|-------------|
| 2-hydroxyethyl methacrylate | 868-77-9 | 10 - 20 |
| Water | 7732-18-5 | 1 - 10 |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica | 68909-20-6 | < 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

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

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

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u> Carbon monoxide. Carbon dioxide. Condition During combustion. 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: Not applicable.

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.

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 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

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. 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. Wash contaminated clothing before reuse. Do not get in eyes.

7.2. Conditions for safe storage including any incompatibilities

Store away from heat.

7.3. Certified handler

Not required

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 in a well-ventilated area.

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.

Safety glasses with side shields.

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

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | Solid. |
|------------------------------|--------------------|
| Specific Physical Form: | Paste |
| Colour | Off-White, Yellow |
| Odour | Odourless |
| Odour threshold | No data available. |
| рН | Not applicable. |
| Melting point/Freezing point | No data available. |

| Boiling point/Initial boiling point/Boiling range | Not applicable. | |
|---|--|--|
| Flash point | No flash point | |
| Evaporation rate | Not applicable. | |
| Flammability (solid, gas) | Not classified | |
| Flammable Limits(LEL) | Not applicable. | |
| Flammable Limits(UEL) | Not applicable. | |
| Vapour pressure | Not applicable. | |
| Vapor Density and/or Relative Vapor Density | Not applicable. | |
| Density | 1.9 g/cm3 | |
| Relative density | 1.9 [<i>Ref Std</i> :WATER=1] | |
| Water solubility | Nil | |
| Solubility- non-water | No data available. | |
| Partition coefficient: n-octanol/water | No data available. | |
| Autoignition temperature | Not applicable. | |
| Decomposition temperature | No data available. | |
| Viscosity/Kinematic Viscosity | >=300,000 mm ² /sec [<i>Test Method</i> :Brookfield] | |
| Volatile organic compounds (VOC) | Not applicable. | |
| Percent volatile | | |
| VOC less H2O & exempt solvents | Not applicable. | |
| Molecular weight | No data available. | |

Nanoparticles

This material contains 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 Heat.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

<u>Substance</u>

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

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

No health effects are expected.

Skin contact

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

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

Ingestion

May be harmful if swallowed.

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 ATE2,000 - 5,000 mg/kg |
| 2-hydroxyethyl methacrylate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 2-hydroxyethyl methacrylate | Ingestion | Rat | LD50 5,564 mg/kg |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| hydrolysis products with silica | | | |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, | Inhalation- | Rat | LC50 > 0.691 mg/l |
| hydrolysis products with silica | Dust/Mist | | |
| | (4 hours) | | |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, | Ingestion | Rat | LD50 > 5,110 mg/kg |
| hydrolysis products with silica | | | |
| ATE - conta tanicity activate | | | |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|---------|---------------------------|
| | | |
| 2-hydroxyethyl methacrylate | Rabbit | Minimal irritation |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products | Rabbit | No significant irritation |
| with silica | | |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|---------|---------------------------|
| | | |
| 2-hydroxyethyl methacrylate | Rabbit | Moderate irritant |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica | Rabbit | No significant irritation |

Sensitisation:

Skin Sensitisation

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

3MTM ClinproTM XT Varnish Durable Fluoride-Releasing Coating, Part A

| 2-hydroxyethyl methacrylate | Human | Sensitising |
|--|--------|----------------|
| | and | |
| | animal | |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products | Human | Not classified |
| with silica | and | |
| | animal | |

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 |
|--|----------|--|
| | | |
| 2-hydroxyethyl methacrylate | In vivo | Not mutagenic |
| 2-hydroxyethyl methacrylate | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, hydrolysis products with silica | In Vitro | Not mutagenic |

Carcinogenicity

| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | | | | | | |
|--|------------|---------|--|--|--|--|--|
| Name | Route | Species | Value | | | | |
| 2-Propenoic acid, 2-methyl-, 3-(trimetoxysilyl)propyl ester, | Not | Mouse | Some positive data exist, but the data are not | | | | |
| hydrolysis products with silica | specified. | | sufficient for classification | | | | |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|-----------|--|---------|-----------------------------|------------------------------------|
| 2-hydroxyethyl methacrylate | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| 2-hydroxyethyl methacrylate | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 49 days |
| 2-hydroxyethyl methacrylate | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| 2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| 2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| 2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |

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.

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|------------|-----------------------------------|----------------|---------|------------------------|--------------------------|
| 2-Propenoic acid, 2- methyl-, 3- (trimetoxysilyl)propyl ester, hydrolysis products with silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |

Specific Target Organ Toxicity - repeated exposure

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

No product test data available.

| Material | CAS Number | Organism | Туре | Exposure | Test endpoint | Test result |
|---|------------|----------------|--------------|----------|---------------|-------------|
| 2-hydroxyethyl methacrylate | 868-77-9 | Fathead minnow | Experimental | 96 hours | LC50 | 227 mg/l |
| 2-hydroxyethyl methacrylate | 868-77-9 | Green algae | Experimental | 72 hours | EC50 | 710 mg/l |
| 2-hydroxyethyl methacrylate | 868-77-9 | Water flea | Experimental | 48 hours | EC50 | 380 mg/l |
| 2-hydroxyethyl methacrylate | 868-77-9 | Green Algae | Experimental | 72 hours | NOEC | 160 mg/l |
| 2-hydroxyethyl methacrylate | 868-77-9 | Water flea | Experimental | 21 days | NOEC | 24.1 mg/l |
| 2-Propenoic acid, 2-methyl-, 3- (trimetoxysilyl) propyl ester, hydrolysis products with | | Algae | Estimated | 72 hours | EC50 | >100 mg/l |
| silica | | | | | | |

12.2. Persistence and degradability

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|------------------|------------|----------------|----------|------------|-------------|------------------|
| 2-hydroxyethyl | 868-77-9 | Experimental | 14 days | BOD | 95 % | OECD 301C - MITI |
| methacrylate | | Biodegradation | - | | BOD/ThBOD | test (I) |
| 2-Propenoic | 68909-20-6 | Data not | | | N/A | |
| acid, 2-methyl-, | | availbl- | | | | |
| 3- | | insufficient | | | | |
| (trimetoxysilyl) | | | | | | |
| propyl ester, | | | | | | |
| hydrolysis | | | | | | |
| products with | | | | | | |
| silica | | | | | | |

12.3 : Bioaccumulative potential

3MTM ClinproTM XT Varnish Durable Fluoride-Releasing Coating, Part A

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|------------------|------------|------------------|----------|------------|-------------|---------------|
| 2-hydroxyethyl | 868-77-9 | Experimental | | Log Kow | 0.42 | Other methods |
| methacrylate | | Bioconcentrati | | | | |
| | | on | | | | |
| 2-Propenoic | 68909-20-6 | Data not | N/A | N/A | N/A | N/A |
| acid, 2-methyl-, | | available or | | | | |
| 3- | | insufficient for | | | | |
| (trimetoxysilyl) | | classification | | | | |
| propyl ester, | | | | | | |
| hydrolysis | | | | | | |
| products with | | | | | | |
| silica | | | | | | |

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 completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

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.: 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

HSNO Approval numberHSR002558Group standard nameDental Products (Subsidiary Hazard) Group Standard 2017HSNO 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.

Controls in accordance with the Health and Safety at Work (Hazardous Substances) Regulations 2017

| Certified handler | Not required |
|---------------------------------|--|
| Location Compliance Certificate | Not required |
| Hazardous atmosphere zone | Not required |
| Fire extinguishers | Not required |
| Emergency response plan | 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 | 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 | Not required |

SECTION 16: Other information

Revision information:

Complete document review.

| Document group: | 25-7233-7 | Version number: | 3.00 |
|-----------------|------------|------------------|------------|
| Issue Date: | 09/12/2020 | Supersedes date: | 25/05/2017 |

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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