

Safety Data Sheet – FireZone 52 Basecoat

1. Product and Company Identification

| | | |
|-----------------------------------|--|---|
| Product name and/or code | FireZone 52 Basecoat | |
| Supplier/Manufacturer | Zone Architectural Products 4a Edwin Street Mt Eden, Auckland New Zealand Website: www.zone.net.nz Email: info@zone.net.nz | Telephone: 0800 508 800 Fax: 09 523 3743 |
| Emergency telephone number | Contact National Poison Centre via Hospital or General Practitioner | |

2. Hazards Identification

Hazard classification: Acute toxicity (Oral) Cat.4, Skin irritation Cat.3,
Eye irritation Cat. 2B, Carcinogenicity Cat.2B



Pictogram :

Signal Words : Warning

Hazard statement :
May be harmful if swallowed
Causes mild skin irritation
Cause eye irritation
Suspected of causing cancer

Precautionary statement :

- Prevention :** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe vapor. Wash hands thoroughly after handling.
- Response :** Get medical attention if you feel unwell. If exposed or concerned:
Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing. If eye irritation persists: Get medical attention.
- Storage :** Store locked up.
- Disposal :** Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements :

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **FOR INDUSTRIAL USE ONLY.**

Hazards not otherwise classified : None known.

3. Composition/Information on Ingredients

| Ingredient | CAS No | Percent |
|------------------|------------|-----------|
| Titanium Dioxide | 13463-67-7 | 10 ~ 25 % |
| Melamine | 108-78-1 | 10 ~ 25 % |
| Pentaerythritol | 115-77-5 | 10 ~ 20 % |

4. First Aid Measures

- Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

- Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

- Skin Contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

- Eye Contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention

Potential acute health effects :

| | |
|----------------|--|
| Inhalation : | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure |
| Ingestion : | May be irritating to mouth, throat and stomach. |
| Skin contact : | No known significant effects or critical hazards. |
| Eye contact : | Causes eye irritation. |

5. Fire Fighting Measures

Suitable extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency Personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and Storage

Handling:

1. Container must be labeled, close containers when not in use.
2. Ventilate designated places to avoid the release of vapor or mist when using.
3. Suitable fire extinguisher and spill kit shall be kept readily available to deal with fire and emergency response to device leakage.

Storage: Comply with the storage and handling of flammable or combustible materials regulations. Store in cool and dry area, away from heat, sparks and freezing temperatures. Use up as soon as possible after opening the lid; Ideal storage temperature is 5 °C ~ 35 °C

8. Exposure Controls/Personal Protection

| Ingredient | Regulatory Code | Classification |
|-------------------|------------------------------------|--|
| Titanium Dioxide | ACGIH TLV (United States, 4/2014) | TWA: 10 mg/m ³ 8 hours. |
| | OSHA PEL (United States, 2/2013) | TWA: 15 mg/m ³ 8 hours. Form: Total dust |
| Melamine | AIHA WEEL (United States, 10/2011) | TWA: 10 mg/m ³ 8 hours. Form: Inhalable |
| | | TWA: 5 mg/m ³ 8 hours. Form: Respirable |
| Pentaerythritol | NIOSH REL (United States, 10/2013) | TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction TWA: 10 mg/m ³ 10 hours. Form: Total |
| | ACGIH TLV (United States, 4/2014) | T TWA: 10 mg/m ³ 8 hours. |
| | OSHA PEL (United States, 2/2013) | TWA: 5 mg/m ³ 8 hours. Form: Respirable Fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust |

Appropriate engineering controls: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin Protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. Physical and Chemical Properties

| | |
|---|----------------------------|
| Appearance : | White liquid |
| Odor : | Mild emulsion odor |
| pH : | 7.0±1.0 |
| Density (25°C): | 1.35±0.1 g/cm ³ |
| Viscosity (at 25°C): | 8000 ~ 20000 cps |
| Volatile : | 30 ~ 35% |
| Solubility : | Water miscible |
| Partition coefficient: n-octanol / water | N/A |
| Flash point : | > 100°C |

| | |
|-------------------------------|---------|
| Boiling point/boiling range : | > 100°C |
| Melting point/range : | N/A |
| Evaporation rate : | N/A |
| Vapor pressure : | N/A |
| Relative vapor density : | N/A |
| Auto-ignition temperature : | N/A |
| Flammability (solid, gas) : | N/A |
| Lower explosion limit : | N/A |
| Upper explosion limit : | N/A |
| Self-ignition temperature : | N/A |
| Decomposition temperature | N/A |

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Special Condition of Hazardous Reaction Incompatibilities: N/A

Materials to Avoid Strong acid or alkali and oxidant

Hazardous decomposition products Will emit smoke, CO, CO₂ when burned

11. Toxicological Information

Acute Toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------|---------|-------------|----------|
| Melamine | LD50 Oral | Rat | 3161 mg/kg | --- |
| Pentaerythritol | LD50 Oral | Rat | 18500 mg/kg | --- |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|---------------------|---------|-------|--------------------------------------|-------------|
| Melamine | Eyes: Mild irritant | Rabbit | --- | 24 hours 500 milligrams | --- |
| Pentaerythritol | Skin: Mild irritant | Human | --- | 72 hours 300 micrograms intermittent | --- |

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Melamine | --- | 3 | --- |
| Pentaerythritol | --- | 2B | --- |

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|---|
| Pentaerythritol | Category 3 | Not applicable | Respiratory tract irritation and Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|---|
| Pentaerythritol | Category 2 | Not determined | Respiratory tract irritation and Narcotic effects |

12. Ecological Information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---|----------------------------|----------|
| Melamine | Acute EC50 33600000 µg/l Fresh water | Daphnia – Daphnia magna | 48 hours |
| Pentaerythritol | Acute LC50 >1000000 | Fish – Fundulus | 96 hours |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|------|-----------|
| Melamine | --- | <3.8 | low |
| Pentaerythritol | --- | 1.26 | low |
| Titanium Dioxide | --- | 352 | low |

13. Disposal Considerations

Disposal methods:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

| | DOT Classification | TDG Classification | Mexico Classification | IATA | IMDG |
|----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| UN number | Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| UN proper shipping name | | | | | |
| Transport hazard class(es) | | | | | |
| Packing group | | | | | |
| Environmental hazards | No | No | No | No | No |
| Additional information | Special provisions Not Applicable | Special provisions Not Applicable | Special provisions Not Applicable | Special provisions Not Applicable | Special provisions Not Applicable |

Special precautions for user

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

15. Regulatory Information

| Ingredient | CAS No | Regulatory Code | Classification |
|------------------|------------|-----------------|---|
| Titanium Dioxide | 13463-67-7 | CAPROP | CA Prop 65 |
| | | IARG2B | IARC - Group 2B - Possibly Carcinogenic to Humans |
| | | WHMHAZ | WHMIS - Canada Hazardous Chemicals |
| | | WMPR | List of WM Priority Chemicals Feb 2014 |
| Melamine | 108-78-1 | CFFLOW | Flash Points in Flammable/Combustible Range |
| | | WHMHAZ | WHMIS - Canada Hazardous Chemicals |
| Pentaerythritol | 115-77-5 | WHMHAZ | WHMIS - Canada Hazardous Chemicals |

16. Other Information

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.