# **Material Safety Data Sheet**



RoofKeeper / RoofSkin Elastomeric Roof Coating (Black, Brown, Grey, Green)

# 1. Product and company identification

Product name : RoofKeeper / RoofSkin Elastomeric Roof Coating (Black, Brown, Grey, Green)

Material uses : Elastomeric roof coating.

Supplier/Manufacturer : Techniseal

300, avenue Liberté

Candiac, QC, Canada, J5R 6X1

Tel: (514) 523-2110 Toll free: 1-800-465-7325 Fax: (450) 633-3035

Validation date : 4/25/2016 Prepared by : IHS

In case of emergency : CANUTEC (613) 996-6666

# 2. Hazards identification

Physical state : Liquid. [Viscous.]

Color : Various

Odor : Ammonia [Slight]

**Emergency overview** 

Signal word : WARNING!

Hazard statements : MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION.

CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON

ANIMAL DATA. BIRTH DEFECT HAZARD - CAN CAUSE BIRTH DEFECTS.

DEVELOPMENTAL HAZARD - CAN CAUSE ADVERSE DEVELOPMENTAL EFFECTS.

**Precautions**: Wooid exposure - obtain special instructions before use. Do not breathe vapor or mist.

Do not ingest. Do not get on skin or clothing. Avoid contact with eyes. Avoid exposure during pregnancy. Use only with adequate ventilation. Keep container tightly closed

and sealed until ready for use. Wash thoroughly after handling.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

**Inhalation** : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed.

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Skin : Slightly irritating to the skin.

Eyes : Moderately irritating to eyes.

#### Potential chronic health effects

Chronic effects : Contains material that may cause target organ damage, based on animal data.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.

Teratogenicity : Can cause birth defects.

**Developmental effects** : Can cause developmental abnormalities.

**Fertility effects**: No known significant effects or critical hazards.

Target organs : Contains material which may cause damage to the following organs: blood, kidneys,

lungs, liver, heart, upper respiratory tract, skin, bone marrow, central nervous system

(CNS), eye, lens or cornea.

### Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

**Skin**: Adverse symptoms may include the following:

irritation redness

**Eyes**: Adverse symptoms may include the following:

irritation watering redness

Medical conditions aggravated by over-

aggravated by over exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at

risk may be aggravated by over-exposure to this product.

# 3. Composition/information on ingredients

#### **United States**

| Name                        | CAS number | %     |
|-----------------------------|------------|-------|
| Nepheline syenite           | 37244-96-5 | 30-60 |
| zinc oxide                  | 1314-13-2  | 1-5   |
| Titanium dioxide            | 13463-67-7 | 1-5   |
| ethanediol                  | 107-21-1   | 1-5   |
| carbon black non-respirable | 1333-86-4  | 1-5   |
| diiron trioxide             | 1309-37-1  | 1-5   |
| benzophenone                | 119-61-9   | 1-5   |

### **Canada**

| Name                        | CAS number | %     |
|-----------------------------|------------|-------|
| Mepheline syenite           | 37244-96-5 | 30-60 |
| zinc oxide                  | 1314-13-2  | 1-5   |
| Titanium dioxide            | 13463-67-7 | 1-5   |
| ethanediol                  | 107-21-1   | 1-5   |
| carbon black non-respirable | 1333-86-4  | 1-5   |
| diiron trioxide             | 1309-37-1  | 1-5   |
| benzophenone                | 119-61-9   | 1-5   |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

# 4. First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water

for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical

attention immediately.

**Skin contact**: In case of contact, immediately flush skin with plenty of water for at least 15 minutes

while removing contaminated clothing and shoes. Wash clothing before reuse. Clean

shoes thoroughly before reuse. Get medical attention immediately.

**Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention

immediately.

**Ingestion**: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical

personnel. Never give anything by mouth to an unconscious person. Get medical

attention immediately.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled.

# 5. Fire-fighting measures

Flammability of the product : Non-flammable.

Extinguishing media

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

Not suitable : None known.

**Special exposure hazards**: Fire water contaminated with this material must be contained and prevented from being

discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide metal oxide/oxides

Monomer for acrylic polymers.

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**: 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 (see Section 8).

**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).

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#### Methods for 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

• Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Storage

: Do not store below the following temperature: 15°C (59°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# 8. Exposure controls/personal protection

#### **United States**

| Ingredient                  | Exposure limits  |
|-----------------------------|--|
| Mepheline syenite           | ACGIH TLV (United States).   |
|                             | TWA: 10 mg/m³ Form: Inhalable  |
| zinc oxide                  | NIOSH REL (United States, 10/2013).  |
|                             | CEIL: 15 mg/m³ Form: Dust  |
|                             | TWA: 5 mg/m³ 10 hours. Form: Dust and fumes  |
|                             | STEL: 10 mg/m³ 15 minutes. Form: Fume  |
|                             | OSHA PEL (United States, 2/2013).  |
|                             | TWA: 5 mg/m³ 8 hours. Form: Fume   |
|                             | TWA: 5 mg/m³ 8 hours. Form: Respirable fraction  |
|                             | TWA: 15 mg/m³ 8 hours. Form: Total dust  |
|                             | ACGIH TLV (United States, 3/2015).   |
|                             | TWA: 2 mg/m³ 8 hours. Form: Respirable fraction STEL: 10 mg/m³ 15 minutes. Form: Respirable fraction |
|                             |  |
| Titanium dioxide            | ACGIH TLV (United States, 3/2012).   |
|                             | TWA: 10 mg/m³ 8 hours.   |
|                             | OSHA PEL (United States, 6/2010).  |
|                             | TWA: 15 mg/m³ 8 hours. Form: Total dust  |
| ethanediol                  | ACGIH TLV (United States, 3/2015).   |
|                             | C: 100 mg/m³ Form: Aerosol   |
| carbon black non-respirable | NIOSH REL (United States, 10/2013).  |
|                             | TWA: 3.5 mg/m³ 10 hours.   |

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TWA: 0.1 mg of PAHs/cm<sup>3</sup> 10 hours. OSHA PEL (United States, 2/2013).

TWA: 3.5 mg/m<sup>3</sup> 8 hours.

ACGIH TLV (United States, 3/2015).

TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction

NIOSH REL (United States, 10/2013).

TWA: 5 mg/m³, (as Fe) 10 hours. Form: Dust and fumes

OSHA PEL (United States, 2/2013). TWA: 10 mg/m³ 8 hours.

ACGIH TLV (United States, 3/2015).

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

AIHA WEEL (United States, 10/2011).

TWA: 0.5 mg/m3 8 hours.

### **Canada**

diiron trioxide

benzophenone

| Occupational exposure limits    |                 | TWA (8 hours) |       | STEL (15 mins) |     | Ceiling |       |     |       |       |            |
|---------------------------------|-----------------|---------------|-------|----------------|-----|---------|-------|-----|-------|-------|------------|
| Ingredient                      | List name       | ppm           | mg/m³ | Other          | ppm | mg/m³   | Other | ppm | mg/m³ | Other | Notations  |
| Mepheline syenite               | US ACGIH        | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [a]        |
|                                 | ON 7/2015       | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [b]        |
| zinc oxide                      | US ACGIH 3/2015 | -             | 2     | -              | -   | 10      | -     | -   | -     | -     | [c]        |
|                                 | AB 4/2009       | -             | 2     | -              | -   | 10      | -     | -   | -     | -     | [d]        |
|                                 | BC 5/2015       | -             | 2     | -              | -   | 10      | -     | -   | -     | -     | [d]        |
|                                 | ON 7/2015       | -             | 2     | -              | -   | 10      | -     | -   | -     | -     | [c]        |
|                                 | QC 1/2014       | -             | 5     | -              | -   | 10      | -     | -   | -     | -     | [e]        |
|                                 | SK              | -             | 2     | -              | -   | 10      | -     | -   | -     | -     | [f]        |
| Titanium dioxide                | US ACGIH 3/2012 | -             | 10    | -              | -   | -       | -     | -   | -     | -     |            |
|                                 | AB 4/2009       | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [3]        |
|                                 | BC 4/2012       | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [g]        |
|                                 |                 | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [b]        |
|                                 | ON 7/2010       | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [h]        |
|                                 | QC 9/2011       | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [i]        |
| ethanediol                      | US ACGIH 3/2015 | -             | -     | -              | -   | -       | -     | -   | 100   | -     | [ن]        |
|                                 | AB 4/2009       | -             | -     | -              | -   | -       | -     | -   | 100   | -     | [k]        |
|                                 | BC 5/2015       | -             | -     | -              | -   | -       | -     | -   | 100   | -     | [[]]       |
|                                 |                 | -             | 10    | -              | -   | 20      | -     | -   | -     | -     | [i]        |
|                                 |                 | -             | -     | -              | -   | -       | -     | 50  | -     | -     | [m]        |
|                                 | ON 7/2015       | -             | -     | -              | -   | -       | -     | -   | 100   | -     | [k]        |
|                                 | QC 1/2014       | -             | -     | -              | 50  | 127     | -     | -   | -     | -     | [n]        |
|                                 | SK              | -             | -     | -              | -   | -       | -     | -   | 100   | -     | [k]        |
| carbon black non-respirable     | US ACGIH 3/2015 | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [0]        |
|                                 | AB 4/2009       | -             | 3.5   | -              | -   | -       | -     | -   | -     | -     |            |
|                                 | BC 5/2015       | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [a]        |
|                                 | ON 7/2015       | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [a]<br>[o] |
|                                 | QC 1/2014       | -             | 3.5   | -              | -   | -       | -     | -   | -     | -     |            |
|                                 | SK              | -             | 3.5   | -              | -   | 7       | -     | -   | -     | -     |            |
| diiron trioxide                 | US ACGIH 3/2015 | -             | 5     | -              | -   | -       | -     | -   | -     | -     | [c]        |
| diiron trioxide, as Fe          | AB 4/2009       | -             | 5     | -              | -   | -       | -     | -   | -     | -     | [d]        |
|                                 | BC 5/2015       | -             | 5     | -              | -   | -       | -     | -   | -     | -     | [p]        |
|                                 |                 | -             | 5     | H              | -   | 10      | -     | -   | -     | +     | [q]        |
|                                 |                 | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [g]        |
|                                 |                 | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [b]        |
| diiron trioxide                 | ON 7/2015       | -             | 5     | F              | -   | -       | -     | -   | -     | -     | [c]        |
| diiron trioxide, as Fe          | QC 1/2014       | -             | 5     | F              | -   | -       | -     | -   | -     | -     | [r]        |
| diiron trioxide, measured as Fe | SK              | -             | 5     | -              | -   | 10      | -     | -   | -     | -     | [r]        |
| benzophenone                    | US AIHA 10/2011 | -             | 0.5   | -              | -   | -       | -     | -   | -     | -     |            |

Skin sensitization

**Form:** [a]Inhalable [b]Total dust [c]Respirable fraction [d]Respirable [e]fume [f]respirable dust and fume [g]Respirable dust [h]total dust [i]Total dust. [j]Aerosol [k]aerosol [l]Particulate [m]Vapour [n]vapour and mist [o]Inhalable fraction [p]Dust [q] Fume [r]dust and fume

Consult local authorities for acceptable exposure limits.

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# Recommended monitoring

procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### **Engineering measures**

: Sood general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### **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.

#### Personal protection

Respiratory

: 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.

Hands

: 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. Rubber gloves.

**Eyes** 

: 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 or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: Splash goggles.

Skin

: 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. Recommended: Overall.

# **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.

# 9. Physical and chemical properties

Physical state : Liquid. [Viscous.] : Not available. Flash point **Auto-ignition temperature** : Not available. Flammable limits : Not available. Color : Various

Odor : Ammonia [Slight]

: 8 to 10 pН

: 100°C (212°F) **Boiling/condensation point** : -3.5°C (25.7°F) Melting/freezing point : 1.32 to 1.41 g/cm<sup>3</sup> Density Vapor pressure : Not available. Vapor density : Not available.

**VOC** content : 0.308 lbs/gal (36.9 g/l) [ISO 11890-1]

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**Odor threshold** : Not available. **Evaporation rate** : Not available.

: Dynamic (room temperature): 1600 to 2500 mPa·s (1600 to 2500 cP) **Viscosity** 

Solubility : Soluble in the following materials: cold water and hot water.

LogKow : Not available.

# 10. Stability and reactivity

**Chemical stability** : The product is stable. Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, acids and

alkalis.

Halogenated compounds.

**Hazardous decomposition** 

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous polymerization will not occur.

# 11. Toxicological information

### **Acute toxicity**

| Product/ingredient name     | Result      | Species | Dose         | Exposure |
|-----------------------------|-------------|---------|--------------|----------|
| <b>e</b> thanediol          | LD50 Oral   | Rat     | 4700 mg/kg   | -        |
| carbon black non-respirable | LD50 Oral   | Rat     | >15400 mg/kg | -        |
| benzophenone                | LD50 Dermal | Rabbit  | 3535 mg/kg   | -        |
|                             | LD50 Oral   | Rat     | >10 g/kg     | -        |

### **Chronic toxicity**

Not available.

### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure                | Observation |
|-------------------------|--------------------------|---------|-------|-------------------------|-------------|
| zínc oxide              | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
| ethanediol              | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                         | Eyes - Mild irritant     | Rabbit  | -     | 1 hours 100 milligrams  | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 6 hours 1440 milligrams | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 555<br>milligrams       | -           |

### <u>Sensitizer</u>

Not available.

**Conclusion/Summary** : Not available.

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|------|----------------------|-----------|
|      |                      |           |

**Skin**: May cause sensitization by skin contact.

# Carcinogenicity

# Classification

| Product/ingredient name     | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|-----------------------------|-------|------|-----|-------|-----|------|
| <b>e</b> thanediol          | A4    | -    | -   | -     | -   | -    |
| carbon black non-respirable | A3    | 2B   | -   | +     | -   | -    |
| diiron trioxide             | A4    | 3    | -   | -     | -   | -    |
| benzophenone                | -     | 2B   | -   | -     | -   | -    |

# **Mutagenicity**

Not available.

# **Teratogenicity**

Not available.

### Reproductive toxicity

Not available.

# 12. Ecological information

# **Ecotoxicity**

: This material is very toxic to aquatic life with long lasting effects.

# **Aquatic ecotoxicity**

| Product/ingredient name | Result                                | Species   | Exposure |
|-------------------------|---------------------------------------|---|----------|
| zinc oxide              | Acute IC50 1.85 mg/l Marine water     | Algae - Skeletonema costatum  | 96 hours |
|                         | Acute IC50 46 μg/l Fresh water        | Algae - Pseudokirchneriella subcapitata - Exponential growth phase        | 72 hours |
|                         | Acute LC50 98 μg/l Fresh water        | Daphnia - Daphnia magna -<br>Neonate                                      | 48 hours |
|                         | Acute LC50 1.1 ppm Fresh water        | Fish - Oncorhynchus mykiss  | 96 hours |
| Titanium dioxide        | Acute EC50 5.83 mg/l Fresh water      | Algae - Pseudokirchneriella<br>subcapitata - Exponential growth<br>phase  | 72 hours |
|                         | Acute LC50 3 mg/l Fresh water         | Crustaceans - Ceriodaphnia<br>dubia - Neonate                             | 48 hours |
|                         | Acute LC50 5.5 ppm Fresh water        | Daphnia - Daphnia magna -<br>Juvenile (Fledgling, Hatchling,<br>Weanling) | 48 hours |
|                         | Acute LC50 1000 mg/l Fresh water      | Fish - Pimephales promelas  | 96 hours |
|                         | Acute LC50 >1000000 μg/l Marine water | Fish - Fundulus heteroclitus  | 96 hours |
|                         | Chronic NOEC 0.984 mg/l Fresh water   | Algae - Pseudokirchneriella subcapitata - Exponential growth phase        | 72 hours |
| ethanediol              | Acute LC50 6900000 μg/l Fresh water   | Crustaceans - Ceriodaphnia<br>dubia - Neonate                             | 48 hours |
|                         | Acute LC50 41000000 μg/l Fresh water  | Daphnia - Daphnia magna -<br>Neonate                                      | 48 hours |
|                         | Acute LC50 8050000 µg/l Fresh water   | Fish - Pimephales promelas  | 96 hours |
| benzophenone            | Acute LC50 10.89 mg/l Fresh water     | Fish - Pimephales promelas -<br>Larvae                                    | 96 hours |
|                         | Chronic NOEC 1.03 mg/l Fresh water    | Fish - Pimephales promelas - Embryo                                       | 32 days  |

# Persistence/degradability

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|------|----------------------|-----------|--|
|------|----------------------|-----------|--|

Not available.

# 13. Disposal considerations

### Waste disposal

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: 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

# 14. Transport information

| Regulatory information | UN number      | Proper shipping name  | Classes | PG*  | Label | Additional information  |
|------------------------|----------------|---|---------|------|-------|---|
| DOT Classification     | Not regulated. |   |         |      |       |   |
| TDG Classification     | <b>Ø</b> N3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide). Marine pollutant (zinc oxide) | 9       | IM . |       | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).  Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.  Explosive Limit and Limited Quantity Index 5  Special provisions 16, 99 |
|                        |                |   |         |      |       |   |

**United States/Canada** 

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| RoofKeeper / RoofSI | kin Elastomeric | c Roof Coating (Black,  | Brown, Grey, Gr | een) |   |   |
|---------------------|-----------------|---|-----------------|------|---|---|
| IMDG Class          | UN3082          | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide). Marine pollutant (zinc oxide) | 9               | III  | *************************************** | Phis product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.  Emergency schedules (EmS) F-A, S-F  Special provisions 274, 335, 969   |
| IATA-DGR Class      | UN3082          | Environmentally hazardous substance, liquid, n.o.s. (zinc oxide)                                | 9               | III  |   | in is product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.  Passenger and Cargo Aircraft Quantity limitation: 450 L Packaging instructions: 964 Cargo Aircraft Only Quantity limitation: 450 L Packaging instructions: 964 Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: y964  Special provisions A97, A158, A197 |

PG\* : Packing group

# 15. Regulatory information

**United States** 

**HCS Classification** : **I**rritating material

Target organ effects

U.S. Federal regulations : FSCA 4(a) final test rules: benzophenone

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

TSCA 12(b) one-time export: benzophenone

SARA 302/304: cadmium oxide

SARA 311/312 Hazards identification: Immediate (acute) health hazard, Delayed

(chronic) health hazard

Clean Water Act (CWA) 307: zinc oxide; copper; cadmium oxide; lead monoxide

Clean Water Act (CWA) 311: ammonia

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act Section 112 : Isted

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

Class II Substances

**DEA List I Chemicals** 

(Precursor Chemicals)

**DEA List II Chemicals** 

: Not listed

: Not listed

(Essential Chemicals)

#### **SARA 313**

|                                 | Product name                             | CAS number                         | Concentration         |
|---------------------------------|--|------------------------------------|-----------------------|
| Form R - Reporting requirements | Znc oxide<br>ethanediol<br>lead monoxide | 1314-13-2<br>107-21-1<br>1317-36-8 | 1-5<br>1-5<br>0.00004 |
| Supplier notification           | ☑nc oxide ethanediol                     | 1314-13-2<br>107-21-1              | 1-5<br>1-5            |

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

### State regulations

Massachusetts : The following components are listed: TITANIUM DIOXIDE; IRON OXIDE DUST;

ETHYLENE GLYCOL; CARBON BLACK; ZINC OXIDE FUME

**New York** : The following components are listed: Ethylene glycol

**New Jersey** : The following components are listed: TITANIUM DIOXIDE; TITANIUM OXIDE (TiO2);

IRON OXIDE; FERRIC OXIDE; ETHYLENE GLYCOL; 1,2-ETHANEDIOL; CARBON

BLACK; ZINC OXIDE

Pennsylvania : The following components are listed: TITANIUM OXIDE (TIO2); IRON OXIDE; 1,

2-ETHANEDIOL; CARBON BLACK

#### California Prop. 65

**MARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

| Ingredient name             | Cancer | Reproductive | No significant risk<br>level | Maximum<br>acceptable dosage<br>level |
|-----------------------------|--------|--------------|------------------------------|---------------------------------------|
| <b>e</b> thanediol          | No.    | Yes.         | No.                          | No.                                   |
| carbon black non-respirable | Yes.   | No.          | No.                          | No.                                   |
| benzophenone                | Yes.   | No.          | No.                          | No.                                   |
| cadmium oxide               | Yes.   | Yes.         | No.                          | No.                                   |
| lead monoxide               | Yes.   | No.          | No.                          | No.                                   |

#### <u>Canada</u>

WHMIS (Canada) : Class D-2A: Material causing other toxic effects (Very toxic).

**Canadian lists** 

Canadian NPRI : The following components are listed: Ethylene glycol; Zinc (and its compounds)

**CEPA Toxic substances** : None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

#### International regulations

| <b>11/13</b> United States/Canada 4/25/2016 |
|---|
|---|

International lists

: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.

**Korea inventory**: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Taiwan Chemical Substances Inventory (TCSI): Not determined.

Turkey inventory: Not determined.

**Chemical Weapons** 

**Convention List Schedule** 

I Chemicals

Chemical Weapons **Convention List Schedule** 

II Chemicals

**Chemical Weapons** 

**III Chemicals** 

: Not listed

: Not listed

: Not listed

**Convention List Schedule** 

# 16. Other information

Label requirements : MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON

ANIMAL DATA. BIRTH DEFECT HAZARD - CAN CAUSE BIRTH DEFECTS.

DEVELOPMENTAL HAZARD - CAN CAUSE ADVERSE DEVELOPMENTAL EFFECTS.

**Hazardous Material** Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection** Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of issue: 4/25/2016Date of previous issue: 5/9/2013

Version : 4

Indicates information that has changed from previously issued version.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.