SECTION 1 - PRODUCT IDENTIFICATION

Trade name : ICE COATING 5 GL
Product code : 34427000 805

COMPANY : Tremco Incorporated
3735 Green Road
Cleveland, OH 44122
Telephone : (216) 292-5000 8:30 - 5:00 EST
Emergency Phone: : (216) 765-6727 8:30 - 5:00 EST
After Hours: Chemtrec 1-800-424-9300

Product use : Coating

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview
White. Liquid. No serious effects anticipated under normal conditions of use. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : No serious effects anticipated under normal conditions of use.
Eyes : Direct contact may cause mild irritation.
Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.
Skin : May cause mild irritation.

Aggravated Medical Conditions
Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Chronic Health Effects
Long term overexposure to propylene glycol caused liver abnormalities, kidney damage in laboratory animals. Repeated excessive ingestion may cause central nervous system effects. Overexposure to sublimed zinc oxide may produce symptoms known as "zinc oxide chills" which have no recognized complications. Symptoms usually disappear within 24 hours. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

SECTION 3 - PRODUCT COMPOSITION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>30.0 - 60.0</td>
</tr>
<tr>
<td>Polymer/Solids</td>
<td>NJ TSRN# 51721300-6045P</td>
<td>15.0 - 40.0</td>
</tr>
<tr>
<td>Fire retardant</td>
<td>NJ TSRN# 51721300-5035P</td>
<td>7.0 - 13.0</td>
</tr>
<tr>
<td>Inert Filler</td>
<td>NJ TSRN# 51721300-5376P</td>
<td>7.0 - 13.0</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>5.0 - 10.0</td>
</tr>
<tr>
<td>Vinyl acrylic copolymer</td>
<td>NJ TSRN# 51721300-5745P</td>
<td>5.0 - 10.0</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>471-34-1</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Ammonium persulfate</td>
<td>7727-54-0</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>14808-60-7</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>
ICE COATING 5 GL

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Eye contact : Flush with water for 15 minutes. If irritation persists, get medical attention.

Skin contact : Wash area of contact thoroughly with hand cleaner followed by soap and water. If irritation, rash or other disorders develop, get medical attention immediately.

Ingestion : Get medical attention. Do not induce vomiting.

Notes to physician : Not applicable.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point : Not available.

Method : Not applicable.

Lower explosion limit : Not available.

Upper explosion limit : Not available.

Autoignition temperature : Not available.

Extinguishing media : This product is not expected to burn under normal conditions of use.

Hazardous combustion products : Carbon monoxide and carbon dioxide can form. Smoke, fumes.

Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).

Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Transfer to appropriate container for disposal. Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal. Use appropriate protective equipment. Avoid contact with material.

SECTION 7 - HANDLING AND STORAGE

Handle in compliance with common hygienic practices. Clean hands thoroughly after handling. Keep from freezing. Do not use in confined or poorly ventilated areas. Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Store in sealed containers in a dry, ventilated warehouse location above freezing.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment
Respiratory protection: Not required under normal conditions of use. Wear appropriate, NIOSH/MSHA approved respirator with combination particulate filter and vapor/gas removing cartridge when the ventilation is not adequate or if it is necessary to abrade or grind surfaces coated with this product.

Hand protection: Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.

Eye protection: Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.

Skin and body protection: Prevent contact with shoes and clothing. Use rubber apron and overshoes.

Protective measures: Other equipment not normally required. Use professional judgment in the selection, care, and use.

Engineering measures: Not required under normal conditions of use. Use local exhaust when the general ventilation is inadequate.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Regulation</th>
<th>Limit</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>ACGIH TWA:</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>15 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>ACGIH TWA:</td>
<td>2 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
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<td>ACGIH STEL:</td>
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<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>5 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Ammonium persulfate</td>
<td>7727-54-0</td>
<td>ACGIH TWA:</td>
<td>0.1 mg/m³</td>
<td>as persulfate</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)/ Silica Sand</td>
<td>14808-60-7</td>
<td>OSHA TWA:</td>
<td>0.1 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>0.3 mg/m³</td>
<td>Total dust.</td>
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<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TWA:</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Color: White
pH: Not available.
Vapour pressure: Not available.
Vapor density: Heavier than air
Melting point/range: Not available.
Freezing point : Not available.
Boiling point/range : Not available.
Water solubility : Soluble
Specific Gravity : 1.005
% Volatile Weight : 38%

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid : Strong acids. Strong bases.
Stability : Stable
Hazardous polymerization : Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Calcium carbonate, CAS-No.: 471-34-1
  Acute oral toxicity (LD-50 oral) : 6,450 mg/kg ( Rat )
Propylene glycol, CAS-No.: 57-55-6
  Acute oral toxicity (LD-50 oral) : 30,000 mg/kg ( Rat ) 18,000 mg/kg ( Rabbit ) 19,000 mg/kg ( Dog ) 23,900 - 31,800 mg/kg ( Mouse ) 18,400 - 196,000 mg/kg ( Guinea pig )
Zinc oxide, CAS-No.: 1314-13-2
  Acute oral toxicity (LD-50 oral) : 7,950 mg/kg ( Mouse ) 7,950 mg/kg ( Mouse )
Formaldehyde, CAS-No.: 50-00-0
  Acute oral toxicity (LD-50 oral) : 800 mg/kg ( Rat ) 260 mg/kg ( Guinea pig ) 100 mg/kg ( Rat ) 42 mg/kg ( Mouse )
  Acute inhalation toxicity (LC-50) : 0.82 mg/l for 30 min ( Rat ) 0.48 mg/l for 4 h ( Rat ) 0.414 mg/l for 4 h ( Mouse ) 0.4 mg/l for 2 h ( Mouse )

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS


SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:
NOT REGULATED
SECTION 15 - REGULATORY INFORMATION

North American Inventories:
All components are listed or exempt from the TSCA inventory.
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:
SARA 313 Components : Zinc oxide 1314-13-2
SARA 311/312 Hazards : Acute Health Hazard

OSHA Hazardous Components :
Titanium dioxide 13463-67-7
Zinc oxide 1314-13-2
Ammonium persulfate 7727-54-0
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
Formaldehyde 50-00-0

OSHA Status: Considered hazardous based on the following criteria:
OSHA Flammability : Not Regulated

Regulatory VOC (less water and exempt solvent) : 39 g/l
VOC Method 310 : 2 %

U.S. State Regulations:
MASS RTK Components : Titanium dioxide 13463-67-7
Calcium carbonate 471-34-1
Zinc oxide 1314-13-2
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
Formaldehyde 50-00-0

Penn RTK Components : Water 7732-18-5
Polymer/Solids NJ TSRN# 51721300-6045P
Fire retardant NJ TSRN# 51721300-5035P
Inert Filler NJ TSRN# 51721300-5376P
Titanium dioxide 13463-67-7
Vinyl acrylic copolymer NJ TSRN# 51721300-5745P
Calcium carbonate 471-34-1
Propylene glycol 57-55-6
Zinc oxide 1314-13-2
Formaldehyde 50-00-0

NJ RTK Components : Water 7732-18-5
Polymer/Solids NJ TSRN# 51721300-6045P
Fire retardant NJ TSRN# 51721300-5035P
Inert Filler NJ TSRN# 51721300-5376P
Titanium dioxide 13463-67-7
Material Safety Data Sheet

ICE COATING 5 GL
Version 1.
REVISION DATE: 08/12/2008

Print Date 08/27/2009

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:
330-54-1 n-(3,4-dichlorophenyl)-n,n-dimethyleneurea
14808-60-7 Crystalline Silica (Quartz)/ Silica Sand
50-00-0 Formaldehyde
79-06-1 Acrylamide
123-91-1 p-Dioxane

SECTION 16 - OTHER INFORMATION

HMIS Rating:

<table>
<thead>
<tr>
<th>Health</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

0 = Minimum
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

PPE

Further information:
For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

Legend
ACGIH - American Conference of Governmental Hygienists
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
DOT - Department of Transportation
DSL - Domestic Substance List
EPA - Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARCS - International Agency for Research on Cancer
MSHA - Mine Safety Health Administration
NDSSL - Non-Domestic Substance List
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
RTK - Right To Know
SARA - Superfund Amendments and Reauthorization Act
STEL - Short Term Exposure Limit
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
V - Volume
VOC - Volatile Organic Compound
WHMIS - Workplace Hazardous Materials Information System