SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>RCS 650 Acrylic Restoration Roof Coating</td>
</tr>
<tr>
<td>Product code</td>
<td>RCS 650 Series</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Restoration Coating Series</td>
</tr>
</tbody>
</table>

1.2. Relevant identified uses of the substance or mixture and uses advised against

<table>
<thead>
<tr>
<th>Use of the substance/mixture</th>
<th>Fluid applied elastomeric roof coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the substance/mixture</td>
<td>For professional use only</td>
</tr>
</tbody>
</table>

1.3. Details of the supplier of the safety data sheet

Lapolla Industries, Inc.
15402 Vantage Parkway East, Ste. 322
Houston, Texas 77032
Tel: +1 281 219 4100, (877) 636-2648
Email: sds@lapolla.com

1.4. Emergency telephone number

Emergency number: CARECHEM (866) 928-0789

SECTION 2: Hazards identiﬁcation

2.1. Classiﬁcation of the substance or mixture

GHS-US classification
Carc. 2 H351

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US):

[Diagram of hazard pictogram]

Signal word (GHS-US): Warning
Hazard statements (GHS-US): H351 - Suspected of causing cancer
Precautionary statements (GHS-US):
- P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood
- P280 - Wear eye protection, protective clothing, protective gloves
- P308+P313 - If exposed or concerned: Get medical advice/attention
- P405 - Store locked up
- P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>(CAS No) 13463-87-7</td>
<td>&lt;8</td>
<td>Carc. 2, H351</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
First-aid measures after skin contact: Remove contaminated clothing and shoes. Wash hands with water and soap. Seek medical attention if irritation develops.
First-aid measures after eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately get medical attention.
First-aid measures after ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Immediately call a POISON CENTER or doctor/physician. Give water to drink if victim completely conscious/alert. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: Inhalation of mist or aerosol may cause irritation to nose and throat. In case of repeated or prolonged exposure: Lungs irritation. Dizziness, headaches, nausea. Suspected of causing cancer if inhaled.
Symptoms/injuries after skin contact: Prolonged or repeated contact with the skin may cause dermatitis.
Symptoms/injuries after eye contact: May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: carbon dioxide (CO2), water, dry chemical powder. Foam.
Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire.
Protective equipment for firefighters: Wear proper protective equipment. Wear a self contained breathing apparatus.
Other information: Prevent entry to sewers and public waters. Material can splatter above 100° C (212° F). Dried product can burn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Ensure adequate ventilation. The vapour is heavier than air; beware of pits and confined spaces. Spilled material may present a slipping hazard. Stop leak if safe to do so. No action shall be taken involving any personal risk or without suitable training.

6.1.1. For non-emergency personnel

Protective equipment: Wear suitable protective clothing. Refer to section 8.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Evacuate unnecessary personnel.

6.2. Environmental precautions

Do not discharge into drains or the environment. Relevant water authorities should be notified of any large spillage to water course or drain.
6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Wear proper protective equipment. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Collect all waste in suitable and labelled containers and dispose according to local legislation. Avoid static electricity discharges. Store away from other materials. Dispose of contents/container to comply with applicable local, national and international regulations.

6.4. Reference to other sections

For further information refer to section 8: Exposure controls/personal protection. For disposal of residues refer to section 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Obtain special instructions before use. Use only in well-ventilated areas. Avoid all eye and skin contact and do not breathe vapour and mist. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container closed when not in use. Take precautionary measures against static discharge. Ensure adequate ventilation.

Hygiene measures: Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practices. Wash exposed skin thoroughly with soap and water after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

Storage conditions: Keep container tightly closed in a cool place. Keep only in the original container in a cool, well-ventilated place away from highly flammable substances. Store away from direct sunlight or other heat sources. PROTECT FROM FREEZING DURING SHIPMENT AND STORAGE. Do not store material at temperatures below 50 °F (10 °C).


7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Titanium dioxide (13463-67-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
</tr>
<tr>
<td>USA OSHA</td>
</tr>
<tr>
<td>Ammonia (7664-41-7)</td>
</tr>
<tr>
<td>USA ACGIH</td>
</tr>
<tr>
<td>USA ACGIH</td>
</tr>
<tr>
<td>USA OSHA</td>
</tr>
<tr>
<td>USA OSHA</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Provide adequate ventilation. Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Insufficient ventilation: wear respiratory protection. Protective goggles. Gloves. Protective clothing. For certain operations, additional Personal Protection Equipment (PPE) may be required.

Hand protection: Wear protective gloves. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles. Contact lenses should not be worn.
Skin and body protection: Long sleeved protective clothing. Personal protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling.

Respiratory protection: An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. Use an approved air purifying respirator equipped with an ammonia/methylamine cartridge. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>White or colors</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight odour</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>8.5 - 9.5</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100 °C (212 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>115 °C (240 °F)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.44 Specific Gravity</td>
</tr>
<tr>
<td>Solubility</td>
<td>soluble in water.</td>
</tr>
<tr>
<td></td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

VOC content: 20.1 g/l (0.17 lb/gal)

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable at normal conditions. Will freeze and become unusable at temperatures below 32°F (0 °C).

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid Freezing. Heat, open flame, sparks, hot surfaces, ignition sources, elevated temperatures. Avoid exposure to temperatures above 150 °F (65.6 °C). May emit toxic materials when heated to 350 °F (177 °C) or above.

10.5. Incompatible materials

### 10.6. Hazardous decomposition products

Hazardous combustion products are Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur, phosphorus, zinc and/or nitrogen.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity**

- Not classified

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 oral rat</th>
<th>ATE US (oral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentapotassium triphosphate (13845-36-8)</td>
<td>2000 mg/kg</td>
<td>2000.00000000 mg/kg bodyweight</td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>&gt; 10000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**

- Not classified

**Serious eye damage/irritation**

- Not classified

**Respiratory or skin sensitisation**

- Not classified

**Germ cell mutagenicity**

- Not classified

**Carcinogenicity**

- Suspected of causing cancer.

**Titanium dioxide (13463-67-7)**

- IARC group: 2B - Possibly carcinogenic to humans
- Reproductive toxicity: Not classified
- Specific target organ toxicity (single exposure): Not classified
- Specific target organ toxicity (repeated exposure): Not classified
- Aspiration hazard: Not classified
- Symptoms/injuries after inhalation: Inhalation of mist or aerosol may cause irritation to nose and throat. In case of repeated or prolonged exposure: Lungs irritation. Dizziness, headaches, nausea. Suspected of causing cancer if inhaled.
- Symptoms/injuries after skin contact: Prolonged or repeated contact with the skin may cause dermatitis.
- Symptoms/injuries after eye contact: May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Ecology - water**: Harmful to aquatic life with long lasting effects

<table>
<thead>
<tr>
<th>Compound</th>
<th>LC50 fishes 1</th>
<th>EC50 Daphnia 1</th>
<th>LC50 fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (7664-41-7)</td>
<td>0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio)</td>
<td>25.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
<td>0.26 - 4.6 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

- No additional information available

#### 12.3. Bioaccumulative potential
Ammonia (7664-41-7)

Log Pow  -1.14 (at 25 °C)

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

Other adverse effects  : Prevent entry to sewers and public waters.
Effect on ozone layer : No additional information available
Effect on the global warming : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations : Dispose of contents/container to comply with applicable local, national and international regulations. Consult the appropriate authorities about waste disposal.
Additional information : Do not re-use empty containers. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.
Ecology - waste materials : Avoid release to the environment. Do not allow into drains or water courses.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information
Other information : No supplementary information available.

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Ammonia (7664-41-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the United States SARA Section 302
Listed on United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists) 100 lb
SARA Section 302 Threshold Planning Quantity (TPQ) 500
SARA Section 313 - Emission Reporting 1.0 % (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)

15.2. International regulations

CANADA

Titanium dioxide (13463-67-7)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification  Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Ammonia (7664-41-7)
Listed on the Canadian DSL (Domestic Substances List)
RCS 650 Acrylic Restoration Roof Coating
Safety Data Sheet

Ammonia (7664-41-7)

| WHMIS Classification | Class A - Compressed Gas  
|                       | Class B Division 1 - Flammable Gas  
|                       | Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects  
|                       | Class E - Corrosive Material  

EU-Regulations

Ammonia (7664-41-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

No additional information available

15.2. National regulations

Ammonia (7664-41-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSG (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

Titanium dioxide (13463-67-7)

<table>
<thead>
<tr>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significance risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Indication of changes: 2.1. Classification of the substance or mixture. 3. Composition/information on ingredients. according to the federal final rule of hazard communication revised on 2012 (HazCom 2012).

Revision date: 1/29/2015 12:00:00 AM
Sources of Key data: SDS - Safety Data Sheet.
Other information: None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Inhalation:gas)</th>
<th>Acute toxicity (inhalation:gas) Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity, Category 2</td>
</tr>
<tr>
<td>Compressed gas</td>
<td>Gases under pressure: Compressed gas</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Flam. Gas 2</td>
<td>Flammable gases, Category 2</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation Category 1B</td>
</tr>
<tr>
<td>H221</td>
<td>Flammable gas</td>
</tr>
<tr>
<td>H280</td>
<td>Contains gas under pressure; may explode if heated</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
</tbody>
</table>
RCS 650 Acrylic Restoration Roof Coating
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Personal Protection : I

SDS US (GHS HazCom 2012)

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