1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: 2186.
PRODUCT NAME: BLACK CHLORINATED ZONE MARKING PAINT
PRODUCT USE: Liquid Paint
MANUFACTURER: RAE Products & Chemicals Corporation
11638 South Mayfield Avenue.
Alsip, IL 60803
1-(877)-275-7550

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Flammable liquid and vapor.

CLASSIFICATION:
- Flammable liquids - Category 2
- Eye irritation - Category 2A
- Specific target organ toxicity - single exposure - Category 3
- Acute toxicity, Inhalation - Category 4
- Acute toxicity, Dermal - Category 4
- Skin irritation - Category 2
- Aspiration hazard - Category 1
- Reproductive toxicity - Category 2
- Germ cell mutagenicity - Category 1B

SIGNAL WORD: DANGER

HAZARD STATEMENTS:
- H225 - Highly flammable liquid and vapor.
- H304 - May be fatal if swallowed and enters airways.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H336 - May cause drowsiness or dizziness.
- H340 - May cause genetic defects.
- H350 - May cause cancer.
- H373 - May cause damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS:
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical / ventilating / lighting / equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fumes/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P281 Use personal protective equipment as required.

POTENTIAL HEALTH EFFECTS:
- EYES: Can cause severe eye irritation.
- SKIN: May be harmful if absorbed through skin. Causes skin irritation.
- INGESTION: Harmful if swallowed. Irritating to mouth, throat and stomach. Aspiration hazard - can enter lungs and cause damage
- INHALATION: Harmful if inhaled. May cause drowsiness and dizziness. Vapors may cause respiratory irritation.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>WEIGHT % (MAX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>14.8</td>
</tr>
<tr>
<td>PETROLEUM DISTILLATES N.O.S.</td>
<td>64742-89-8</td>
<td>8.75</td>
</tr>
<tr>
<td>METHYL ETHYL KETONE</td>
<td>78-93-3</td>
<td>6.31</td>
</tr>
<tr>
<td>ETHYL BENZENE</td>
<td>100-41-4</td>
<td>0.12</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

- **EYES**: Rinse thoroughly with plenty of water, also under the eyelids for at least 15 minutes. Seek medical attention if needed.
- **SKIN**: Wash off with soap and water immediately. Remove all contaminated clothing. Seek medical attention if needed.
- **INGESTION**: Do not induce vomiting. Call Poison Control Center immediately.
- **INHALATION**: Move to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Seek medical attention if needed.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:**

- **SYMPTOMS**: Eye and skin irritation. Drowsiness and dizziness.
- **EFFECTS**: Pain or irritation, coughing, nausea or vomiting, headache, unconsciousness.

**NOTES TO PHYSICIAN**: Treat symptomatically. If large quantities have been ingested or inhaled, contact poison control center immediately.

5. FIRE FIGHTING MEASURES

- **PERSONAL PRECAUTIONS**: See Section 8
- **EXTINGUISHING MEDIA**: Carbon Dioxide, dry chemical or foam
- **FIRE FIGHTING PROCEDURES**: Isolate scene. Use appropriate extinguishing media. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with full face-piece operated in positive pressure mode.
- **UNUSUAL FIRE HAZARD**: Vapors are heavier than air and may travel along the ground and be ignited by heat, open flame or other ignition sources. Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flames. Closed containers may explode when exposed to extreme heat. Thermal decomposition can lead to release of irritating gases and vapors.

6. ACCIDENTAL RELEASE MEASURES

- **SPILL**: Evacuate all nonessential personnel. Remove all sources of ignition. Ventilate the area. Equip employees with appropriate personal protective equipment. Dike around spilled material. Cover spill with inert absorbent material. Use nonsparking tools.
- **PERSONAL PRECAUTIONS**: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate unnecessary personnel to safe areas. Beware of vapors, accumulating to form explosive concentrations.
- **METHOD OF CLEAN UP**: Contain spillage. Absorb with inert dry material and place in appropriate waste disposal container. Dispose of in accordance with all local, State or Federal regulations.

7. HANDLING AND STORAGE

- **PRECAUTIONS FOR SAFE HANDLING**: Do not store or use near sources of high temperature, near fire or open flame, or other ignition sources. All equipment should be grounded and bonded to reduce static electricity hazard. Use non sparking tools.
- **CONDITIONS FOR SAFE STORAGE**: Keep container tightly closed in a dry, cool and well-ventilated area, away from sources of heat, fire or sparks. Do not store in unlabeled containers. Keep separate from oxidizing materials.
8. EXPOSURE CONTROLS | PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE</td>
<td>78-93-3</td>
<td>OSHA TWA: 200 PPM, ACGIH TWA: 200 PPM</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>OSHA TWA: 100 PPM, ACGIH TWA: 20 PPM</td>
</tr>
<tr>
<td>PETROLEUM DISTILLATES N.O.S.</td>
<td>64742-89-8</td>
<td>OSHA Z1 TWA 500 PPM</td>
</tr>
</tbody>
</table>

NL = Not Listed

ENGINEERING CONTROLS: Use only with proper ventilation. Use explosion-proof ventilation equipment if necessary.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields or chemical splash goggles.

SKIN: Chemical resistant impervious gloves.

RESPIRATORY: In case of insufficient ventilation wear suitable respiratory equipment.

WORK HYGIENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practice(s). Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

OTHER PRECAUTIONS: Wear impervious clothing and appropriate footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOR &amp; PHYSICAL STATE</td>
<td>Black liquid</td>
</tr>
<tr>
<td>ODOR</td>
<td>Characteristic of acetone</td>
</tr>
<tr>
<td>ODOR THRESHOLD</td>
<td>No information available</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>175.0 deg F</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>No information available</td>
</tr>
<tr>
<td>FREEZING POINT</td>
<td>Not applicable</td>
</tr>
<tr>
<td>EVAPORATION RATE</td>
<td>No information available</td>
</tr>
<tr>
<td>FLAMMABILITY (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VISCOSITY</td>
<td>78-95 KU</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>1.3743</td>
</tr>
<tr>
<td>VAPOR DENSITY</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>No information available</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Not applicable</td>
</tr>
<tr>
<td>PARTITION COEFFICIENT</td>
<td>No information available</td>
</tr>
<tr>
<td>AUTO IGNITION TEMPERATURE</td>
<td>No information available</td>
</tr>
<tr>
<td>DECOMPOSITION TEMPERATURE</td>
<td>No information available</td>
</tr>
<tr>
<td>FLAMMABILITY LIMITS</td>
<td>1.4% TO 11.5%</td>
</tr>
<tr>
<td>FLASH POINT &amp; METHOD</td>
<td>19.00 deg F deg F TCC</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

POSSIBILITY OF REACTION: Under normal conditions of storage and use, hazardous reactions will not occur. Vapors may form an explosive mixture with air.

CONDITIONS TO AVOID: Heat, flames and sparks. Extremes in temperature and direct sunlight.

INCOMPATIBLE MATERIALS: Avoid contact with strong oxidizing agents, heat and open flames.

DECOMPOSITION PRODUCTS: May form toxic materials, carbon dioxide, carbon monoxide, etc.

11. TOXICOLOGICAL INFORMATION

ACUTE SIGNS AND SYMPTOMS OF OVEREXPOSURE:

<table>
<thead>
<tr>
<th>EFFECT</th>
<th>SYMPTOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EYE</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>SKIN</td>
<td>Prolonged or repeated skin contact may cause irritation. Allergic reactions are possible.</td>
</tr>
<tr>
<td>INHALATION</td>
<td>Harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. May cause headaches and dizziness. High vapor concentrations are irritating to the eyes, nose, throat and lungs. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Prolonged or excessive inhalation may cause respiratory tract irritation.</td>
</tr>
<tr>
<td>INGESTION</td>
<td>Harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.</td>
</tr>
<tr>
<td>CHRONIC EFFECTS</td>
<td>Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.</td>
</tr>
</tbody>
</table>
TOXICOLOGICAL INFORMATION

METHYL ETHYL KETONE (78-93-3)

Acute oral toxicity  
LD50 (rat): 2,737 mg/kg

Acute inhalation toxicity  
LC50 (mouse): 320 mg/l

Acute dermal toxicity  
LD50 (rabbit): 6,480 mg/kg

PETROLEUM DISTILLATES N.O.S. (64742-89-8)

Acute oral toxicity  
LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity  
LC50 (Rat): > 20 mg/l

Acute dermal toxicity  
LD50 (Rabbit): > 2,000 mg/kg

TOLUENE (108-88-3)

Acute oral toxicity  
LD50 (rat, male): > 5,580 mg/kg

Acute inhalation toxicity  
LC50 (rat, male and female): 28.1 mg/l

Acute dermal toxicity  
LD50 (rabbit): > 5,000 mg/kg

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Prevent entry into waterways, sewers or confined areas. Do not allow material or used container to contaminate ground water system.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, State and Federal regulations.
CONTAINER: Empty containers may contain product residue and should not be reused. Vapors from residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers.

14. TRANSPORT INFORMATION

SPECIAL TRANSPORT PRECAUTIONS: None known
UN NUMBER: UN1263
DOT HAZARD CLASS: 3
ERG #: #128

UN PROPER SHIPPING NAME: PAINT
PACKING GROUP: II
MARINE POLLUTANT: No

15. REGULATORY INFORMATION

TSCA CERTIFICATION: All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SARA 311/312 HAZARD CATEGORIES:

ACUTE HEALTH: Yes
CHRONIC HEALTH: Yes
FIRE: Yes
PRESSURE GENERATING: No
REACTIVE: No

SARA 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

REVISION DATE: 06/01/15

<table>
<thead>
<tr>
<th>HMIS RATING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>3</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>X</td>
</tr>
</tbody>
</table>

MANUFACTURER DISCLAIMER: All information and data appearing on this Safety Data Sheet are believed to be reliable and accurate to the best of our knowledge at the date of publication. None of the provided information is to be considered a warranty or quality specification or all-inclusive and is given only as guidance. It is the user’s responsibility to determine the safety of use, handling, storage, transportation, disposal and suitability for the intended utilization of the product. Unless otherwise specified, the data provided herein is valid only for the described material and may be not applicable for the product used in combination with any other materials or processes. RAE Products and Chemicals Corporation shall not be liable for any damage resulting from handling, contact, use or inability to use of this product. No guarantee, expressed or implied, is made by RAE Products and Chemicals Corporation and the user assumes all risk and responsibility.

NFPA CODES

PERSONAL PROTECTIVE EQUIPMENT

- Splash Goggles
- Gloves
- Synthetic Apron
- Dust and Vapor Respirator

3 FLAMMABLE LIQUID