



## SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY INFORMATION

Product Name(s): ROOF MATE Base coat  
Product Code(s): Not available.  
Uses: Weather coating with cool roof qualities, applied with and to protect Hydroseall or HydroSeal Topcoat waterproofing systems installed on all types of commercial roofing applications.  
Company: HYDROSEAL CHANGSHA LLC.  
Address: NO.98 LiXiang Road, ChangSha Development, Hunan  
Telephone Number: (0731)84067532 Fax Number: (0731)84067531  
Emergency Telephone Number: Not available.  
Date Issued: May 10, 2016 Date Revised: May 10, 2016

This SDS complies with the OSHA Hazard Communication Standard 29CFR1910.1200 as revised in May 2012 (GHS). It may not meet requirements in other countries.

### SECTION 2 HAZARDS IDENTIFICATION

GHS Classification: **DANGER**  
Carcinogen (Category 2)  
Reproductive Toxin (Category 1)  
Eye Irritation (Category 2B)  
Aquatic Acute Toxicity (Category 3)  
Aquatic Chronic Toxicity (Category 3)



GHS Hazard Statements: Suspected of causing cancer  
May damage fertility or the unborn child  
Causes eye irritation  
Harmful to aquatic life with long lasting effects

GHS Precautionary Statements: Prevention:  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash hands/skin thoroughly after handling.  
Avoid release to the environment.

Response:  
If exposed or concerned: Get medical advice/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 advice/attention.  
Collect spillage.

Disposal:  
Dispose of contents/container in accordance

Storage:

Store locked up.

**SECTION 2 HAZARDS IDENTIFICATION**

with local/regional/national/international regulations.

Hazards Not Classified: None.

Otherwise Classified:

GHS

Approximately < 2% of this mixture consists of ingredient(s) of unknown acute toxicity.

Assessment:

Approximately < 3% of the mixture consists of ingredient(s) of unknown hazards to the aquatic environment.

**SECTION 3 COMPOSITION / INGREDIENTS**

Component	CAS Number	EC Number	Concentration
Water	7732-18-5	231-791-2	25.0- 40.0%
Acrylic polymer(s)	Proprietary	---	15.0- 30.0%
Calcium carbonate	1317-65-3	215-279-6	30.0- 45.0%
Zinc oxide	1314-13-2	215-222-5	1.0- 5.0%
Titanium dioxide	13463-67-7	236-675-5	0.1- 1.0%
Dibutyl phthalate	84-74-2	201-557-4	0.1- 1.0%
Diphenyl ketone	119-61-9	204-337-6	0.1- 0.2%

Trade Secret Claims: Specific chemical identity and/or exact percentage (concentration) of components has been withheld as a trade secret.

**SECTION 4 FIRST AID MEASURES**

First Aid - Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention, if irritation develops.

First Aid - Skin: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately if irritation or rash develops and/or persists. Wash contaminated clothing before reuse.

First Aid - Ingestion: If swallowed and feel unwell, call a physician or poison control center. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

First Aid - Inhalation: If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Important Symptoms / Tissue inflammation, nausea.

Effects – Acute and

Delayed:

Advice to Physician: Treat symptomatically.

**SECTION 5 FIRE FIGHTING MEASURES**

Extinguishing Media: Treat surrounding material. Water spray, dry chemical, carbon dioxide, or foam is recommended. Carbon dioxide can displace oxygen. Use caution

**SECTION 5 FIRE FIGHTING MEASURES**

	when applying carbon dioxide in confined spaces.
Specific Hazards:	This product is not flammable. This product may give rise to hazardous vapors in a fire. Vapors/fumes may be irritating, corrosive and/or toxic.
Protective equipment and procedures for fire-fighters.	Wear full protective clothing and self-contained breathing apparatus.
Additional Advice:	None.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Spill Procedures:	Wipe up spills with an absorbent towel/material and transfer into suitable containers for recovery or disposal. Finally flush area with water.
Personal Precautions:	Wear suitable protective clothing and equipment.
Environmental Precautions:	Prevent the material from entering drains or water courses. Do not discharge directly to a water source. Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

**SECTION 7 HANDLING AND STORAGE**

Handling:	Wear appropriate personal protection (See Section 8) when handling this material. The work area should be equipped with a safety shower and eye wash station. If exposed to the liquid, avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing mist or vapor. Use in a well-ventilated area.
Storage:	Keep container(s) tightly closed. Use and store this material at temperatures below 30°C (86°F) away from heat, direct sunlight, and hot metal surfaces. Do not freeze. Keep away from any incompatible materials (see Section 10).
Additional Advice:	Store in original container. Store as directed by the manufacturer.

**SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Occupational Exposure Standards:	Exposure limits are listed below, if they exist.
Water:	None.
Acrylic polymer(s):	None.
Calcium carbonate:	ACGIH TLV: 10 mg/m <sup>3</sup> TWA. OSHA PEL: 5 mg/m <sup>3</sup> TWA (respirable). OSHA PEL: 15 mg/m <sup>3</sup> TWA (total dust).
Zinc oxide:	ACGIH TLV: 2 mg/m <sup>3</sup> TWA (respirable). ACGIH TLV: 10 mg/m <sup>3</sup> STEL (respirable). OSHA PEL: 5 mg/m <sup>3</sup> TWA (respirable). OSHA PEL: 15 mg/m <sup>3</sup> TWA (total dust).
Titanium dioxide:	ACGIH TLV: 3 mg/m <sup>3</sup> TWA (respirable). ACGIH TLV: 10 mg/m <sup>3</sup> TWA (inhalable). OSHA PEL: 15 mg/m <sup>3</sup> TWA (total dust).
Dibutyl phthalate:	ACGIH TLV: 5 mg/m <sup>3</sup> TWA. NIOSH REL: 5 mg/m <sup>3</sup> TWA. OSHA PEL: 5 mg/m <sup>3</sup> TWA.
Diphenyl ketone:	None.
Engineering Control Measures:	Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local

**SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

	exhaust), and control of process conditions.
Respiratory Protection:	A NIOSH certified self-contained breathing apparatus or air purifying respirator may be used under conditions where airborne concentrations are expected to exceed exposure limits.
Hand Protection:	The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation and skin damage (see glove manufacturer literature for information on permeability).
Eye Protection:	Approved eye protection (safety glasses with side-shields or goggles) to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.
Body Protection:	Impervious clothing should be worn as needed to prevent skin contact.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Physical State:	Viscous paste
Color:	Yellow
Odor:	Faint, sweet
Odor Threshold:	Not available.
pH:	7 - 9
Melting Point/Range (°C/°F):	0°C / 32°F (water)
Boiling Point/Range (°C/°F):	100°C / 212°F (water)
Flash Point (PMCC) (°C/°F):	Non-flammable
Evaporation Rate:	Not available.
Flammability / Explosivity Limits in Air (%):	Not available.
Vapor Pressure:	23.8 mmHg (25°C) (water)
Vapor Density (Air = 1):	Not available.
Relative Density:	ca. 1.8 - 2.0
Solubility in Water:	Miscible
Partition Coefficient:	Not available.
Autoignition Temperature (°C/°F):	Not available.
Decomposition Temperature (°C/°F):	Not available.
Viscosity:	Not available.
Explosive Properties:	None.
Oxidizing Properties:	None.
Volatile Organic Content (VOC) (g/l):	ca. 40 - 60 g/l (as defined by 40CFR51.100)

**SECTION 10 STABILITY AND REACTIVITY**

Reactivity:	Product will not undergo additional reaction.
Stability:	Stable under normal storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Contact with incompatible materials, excessive heat (> 100°C).

**SECTION 10 STABILITY AND REACTIVITY**

Incompatibilities:	Strong oxidizers.
Hazardous Decomposition Products:	Oxides of carbon, oxides of nitrogen, oxides of phosphorus, metal oxides, acrylic monomers, aliphatic and aromatic compounds, toxic by-products.

**SECTION 11 TOXICOLOGICAL INFORMATION**

*If available, toxicity data for the product is given; otherwise component data is listed.*

Acute Toxicity:	<p>This product is not expected to be appreciably toxic.</p> <p>(Water) No data.</p> <p>(Acrylic polymer(s)) Acute toxicity estimate (ATE) (oral) &gt; 2000 mg/kg; Acute toxicity estimate (ATE) (dermal) &gt; 2000 mg/kg</p> <p>(Calcium carbonate) Oral LD50 (rat) 6450 mg/kg</p> <p>(Zinc oxide) Oral LD50 (rat) &gt; 5000 mg/kg; Inhalation LC50 (mouse) &gt; 5-7 mg/L (4 hr)</p> <p>(Titanium dioxide) Oral LD50 (rat) &gt; 10,000 mg/kg; Dermal LD50 (rabbit) &gt; 10,000 mg/kg; Inhalation LC50 (rat) &gt; 6.8 mg/L (4 hr)</p> <p>(Dibutyl phthalate) Oral LD50 (rat) 6279 mg/kg; Inhalation LC50 (rat) &gt; 15.67 mg/l (4 hr)</p> <p>(Diphenyl ketone) Oral LD50 (mouse) ca. 2895 mg/kg; Dermal LD50 (rabbit) 3535 mg/kg</p>
Skin Corrosion / Irritation:	<p>The product may be slightly irritating to the skin.</p> <p>(Water) No data.</p> <p>(Acrylic polymer(s)) May cause slight skin irritation.</p> <p>(Calcium carbonate) Mechanically irritating to skin (animal).</p> <p>(Zinc oxide) Slightly irritating to skin (guinea pig / rabbit).</p> <p>(Titanium dioxide) No data.</p> <p>(Dibutyl phthalate) Slightly irritating to skin (rabbit).</p> <p>(Diphenyl ketone) Non-irritating to skin (rabbit).</p>
Serious Eye Damage / Irritation:	<p>The product may be irritating to the eyes.</p> <p>(Water) No data.</p> <p>(Acrylic polymer(s)) Non-irritating to eyes.</p> <p>(Calcium carbonate) Mechanically irritating to eyes (animal).</p> <p>(Zinc oxide) Slightly irritating to eyes (rabbit).</p> <p>(Titanium dioxide) No data.</p> <p>(Dibutyl phthalate) Slightly irritating to eye (rabbit).</p> <p>(Diphenyl ketone) Slightly irritating to eye (rabbit).</p>
Respiratory or Skin Sensitization:	<p>The product is not expected to be dermally sensitizing.</p> <p>(Water) No data.</p> <p>(Acrylic polymer(s)) No data.</p> <p>(Calcium carbonate) No data.</p> <p>(Zinc oxide) Not dermally sensitizing (human patch testing).</p> <p>(Titanium dioxide) No data.</p> <p>(Dibutyl phthalate) Not dermally sensitizing (guinea pig).</p> <p>(Diphenyl ketone) Not dermally sensitizing (guinea pig).</p>
Mutagenicity:	<p>This product is not expected to be mutagenic.</p> <p>(Water) No data.</p> <p>(Acrylic polymer(s)) No data.</p> <p>(Calcium carbonate) Not genotoxic in Ames testing.</p> <p>(Zinc oxide) Not genotoxic in Ames and E. coli testing. Positive results have been observed in mouse lymphoma and Syrian hamster embryo systems. Slight increase in chromosomal aberrations in rat bone marrow was reported after exposure to zinc oxide by inhalation.</p> <p>(Titanium dioxide) Not genotoxic in Ames and Syrian hamster embryo cell testing.</p>

<b>SECTION 11 TOXICOLOGICAL INFORMATION</b>
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	(Dibutyl phthalate) Not mutagenic (Ames test and micronucleus assay). Weakly mutagenic (bacterial gene mutation assay). (Diphenyl ketone) Not mutagenic (Ames test, DNA damage and repair assay, mammalian cell gene mutation assay and micronucleus assay).
Carcinogenicity:	This product may be carcinogenic. (Water) No data. (Acrylic polymer(s)) No data. (Calcium carbonate) Not carcinogenic (orally administered rats). (Zinc oxide) Inadequate evidence in humans and animals. (Titanium dioxide) Limited evidence for carcinogenicity in animals. There is inadequate evidence in humans. Studies related to inhalation of airborne particles. (Dibutyl phthalate) No data. (Diphenyl ketone) In a 2 -year carcinogenicity study (rat, mouse), there was equivocal or limited evidence of carcinogenic activity. Possibly carcinogenic in humans (IARC).
Reproductive / Developmental Toxicity:	This product may be reproductively and developmentally harmful. (Water) No data. (Acrylic polymer(s)) No data. (Calcium carbonate) Excessive oral consumption during pregnancy showed increased potential for cardiovascular, cerebral, neurologic, gastrointestinal and renal systems effects on offspring (human). (Zinc oxide) In diets of 0.5% in rats there was no retardation of growth; at 1% retarded growth was observed. In pregnant rats, dietary zinc oxide at 4000 ppm zinc causes resorption and death of fetuses. (Titanium dioxide) No data. (Dibutyl phthalate) In a 2-generation study in orally-dosed rats, pregnancy and fertility indices for parents were significantly decreased (1% in diet). Testicular atrophy and decreased sperm count were observed. No indication of an effect on estrous cycles in females. (Diphenyl ketone) No significant reproductive/developmental effects were noted in orally-dosed rats.
Chronic/Subchronic Toxicity: Specific Target Organ/Systemic Toxicity – Single Exposure:	(Water) No data. (Acrylic polymer(s)) No data. (Calcium carbonate) No data. (Zinc oxide) No data. (Titanium dioxide) No data. (Dibutyl phthalate) No data. (Diphenyl ketone) No data.
Chronic/Subchronic Toxicity: Specific Target Organ/Systemic Toxicity – Repeated Exposure:	(Water) No data. (Acrylic polymer(s)) No data. (Calcium carbonate) Renal and other systemic effects have been noted (human). (Zinc oxide) No data. (Titanium dioxide) No data. (Dibutyl phthalate) No significant histomorphological changes were observed in orally-dosed rats over a 90 day study up to a concentration of 752 mg/kg/day. (Diphenyl ketone) Changes to the liver and kidneys were noted in orally-dosed rats in a 14 week study.
Aspiration Hazard:	This product does not pose an appreciable aspiration hazard.
Additional Information:	None.

**SECTION 12 ECOLOGICAL INFORMATION**

*If available, ecological data for the product is given; otherwise component data is listed.*

Acute Ecotoxicity:	This product may be harmful to aquatic species. (Water) No data. (Acrylic polymer(s)) LC50 (Rainbow trout) > 100 mg/l/96 hr; EC50 (Daphnia magna) > 100 mg/l/48 hr (similar compounds). (Calcium carbonate) LC50 (mosquitofish) > 56,000 mg/l/24-96 hr. (Zinc oxide) EC50 (tadpole) 3.2 mg/l/48 hr; LD0 (carp, forcefed) 228-262 mg/l/52 hr. (Titanium dioxide) No data. (Dibutyl phthalate) LC50 (fathead minnow) 0.92 mg/l/96 hr; LC50 (Rainbow trout) 1.6 mg/l/96 hr; EC50 (Daphnia magna) ca. 2.99 mg/l/48 hr; EC50 (algae) 0.75 mg/l/10 day. (Diphenyl ketone) LC50 (Fathead minnow) 15.3 mg/l/96 hr; EC50 (Daphnia magna) 6.784 mg/l/48 hr; EC50 (algae) 3.5 mg/l/72 hr.
Mobility:	(Water) No data. (Acrylic polymer(s)) No data. (Calcium carbonate) No data. (Zinc oxide) No data. (Titanium dioxide) No data. (Dibutyl phthalate) Expected to have low mobility based upon log Koc values of 3.05-3.14. (Diphenyl ketone) Expected to have moderate to low mobility based upon Koc values of 430 and 517.
Persistence/Degradability:	(Water) No data. (Acrylic polymer(s)) Not biodegradable. (Calcium carbonate) No data. (Zinc oxide) No data. (Titanium dioxide) Not biodegradable. (Dibutyl phthalate) Readily biodegradable (81% in 28 days). (Diphenyl ketone) Readily biodegradable (66-84% in 28 days).
Bioaccumulation:	(Water) No data. (Acrylic polymer(s)) No data. (Calcium carbonate) No data. (Zinc oxide) No data. (Titanium dioxide) No data. (Dibutyl phthalate) BCFs of 3.1 to 176 were reported in various fish. (Diphenyl ketone) BCF values ranging from 3.4 to 12 suggest bioconcentration in aquatic organisms is low.
Other adverse effects:	None.

**SECTION 13 DISPOSAL CONSIDERATION**

Environmental precautions:	Prevent the material from entering drains or water courses. Do not discharge directly to a water source. Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.
Product Disposal:	Dispose in accordance with all local, state (provincial), and federal regulations. Under RCRA, it is the responsibility of the product's user to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because the product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.
Container Disposal:	Do not remove label until container is thoroughly cleaned. Empty containers may contain hazardous residues. This material and its container must be disposed of in a safe way.

**SECTION 14 TRANSPORT INFORMATION**

## DOT (US):

Proper Shipping Name:	Not regulated
UN Number:	None.
Class:	None.
Packaging Group:	None.
Reportable Quantity:	None.
Marine Pollutant:	None.

## IATA:

Proper Shipping Name:	Not regulated
UN Number:	None.
Class:	None.
Packing Group:	None.

## IMDG:

Proper Shipping Name:	Not regulated
UN Number:	None.
Class:	None.
Packing Group:	None.
Marine Pollutant:	None.

*Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.*

**SECTION 15 REGULATORY INFORMATION**

US Toxic Substance Control Act:	All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
Canadian Domestic Substance List:	One or more component(s) of this product are not listed on the Canadian Domestic Substance List. Limited quantities may be permitted.
EU REACH:	One or more component(s) of this product have not been pre-listed or registered under REACH. Limited quantities may be permitted.
TSCA Sec.12(b) Export Notification:	This product does not contain a chemical at or above de minimis concentrations which requires reporting.
Canadian WHMIS Classification:	D.2.A; D.2.B  This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.
Massachusetts Right-To-Know:	This product contains materials subject to disclosure under the Massachusetts' Right-To-Know Law: - Calcium carbonate - Zinc oxide (as fume) - Titanium dioxide - Dibutyl phthalate
New Jersey Right-To-Know:	This product contains materials subject to disclosure under the New Jersey's Right-To-Know Law: - Calcium carbonate (4001)



**SECTION 15 REGULATORY INFORMATION**

	<ul style="list-style-type: none"> <li>- Zinc oxide (2037)</li> <li>- Titanium dioxide (1861)</li> <li>- Dibutyl phthalate (0773)</li> </ul>										
Pennsylvania Right-To-Know:	<p>This product contains materials subject to disclosure under the Pennsylvania's Right-To-Know Law:</p> <ul style="list-style-type: none"> <li>- Calcium carbonate</li> <li>- Zinc oxide</li> <li>- Titanium dioxide</li> <li>- Dibutyl phthalate</li> </ul>										
California Proposition 65:	<p>This product contains materials which the State of California has found to cause cancer, birth defects or other reproductive harm:</p> <ul style="list-style-type: none"> <li>- Crystalline silica (&lt; 0.4%) (as respirable particles)</li> <li>- Titanium dioxide (&lt; 0.4%) (as respirable particles)</li> <li>- Diphenyl ketone (&lt; 0.2%)</li> <li>- Dibutyl phthalate (&lt; 0.7%)</li> <li>- Dioxane, 1,4- (trace)</li> <li>- Lead oxide (trace)</li> <li>- Cadmium oxide (trace)</li> <li>- Arsenic (&lt; 2 ppm)</li> <li>- Cadmium (&lt; 50 ppb)</li> <li>- Mercury (&lt; 10 ppb)</li> <li>- Nickel (&lt; 2 ppm)</li> <li>- Lead (&lt; 2 ppm)</li> <li>- Beryllium (&lt; 5 ppb)</li> <li>- Chromium (&lt; 5 ppb)</li> </ul>										
SARA TITLE III-Section 311/312 Categorization (40 CFR 370):	Immediate (acute), delayed (chronic) hazard										
SARA TITLE III-Section 313 (40 CFR 372):	<p>This product contains materials which are listed in Section 313 at or above de minimis concentrations:</p> <ul style="list-style-type: none"> <li>- Zinc oxide (as zinc compounds)</li> <li>- Dibutyl phthalate</li> </ul>										
CERCLA Hazardous Substance (40 CFR 302)	<p>This product contains materials subject to reporting under CERCLA and Section 304 of EPCRA:</p> <ul style="list-style-type: none"> <li>- Zinc oxide (as zinc compounds)</li> <li>- Dibutyl phthalate (10 pounds)</li> </ul>										
Water Hazard Class (WGK):	This product is water-endangering (WGK=2).										
Other Chemical Inventories:	<table border="0"> <tr> <td>Australia (AICS):</td> <td>One or more component(s) are not listed.</td> </tr> <tr> <td>China (IECSC):</td> <td>One or more component(s) are not listed.</td> </tr> <tr> <td>Japan (ENCS):</td> <td>One or more component(s) are not listed.</td> </tr> <tr> <td>Korea (KCI):</td> <td>One or more component(s) are not listed.</td> </tr> <tr> <td>Philippines (PICCS):</td> <td>One or more component(s) are not listed.</td> </tr> </table>	Australia (AICS):	One or more component(s) are not listed.	China (IECSC):	One or more component(s) are not listed.	Japan (ENCS):	One or more component(s) are not listed.	Korea (KCI):	One or more component(s) are not listed.	Philippines (PICCS):	One or more component(s) are not listed.
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Japan (ENCS):	One or more component(s) are not listed.										
Korea (KCI):	One or more component(s) are not listed.										
Philippines (PICCS):	One or more component(s) are not listed.										

**SECTION 16 OTHER INFORMATION**

NFPA Rating - HEALTH:	1
NFPA Rating - FIRE:	1
NFPA Rating - REACTIVITY:	0
NFPA Rating - SPECIAL:	NONE
SDS Date Issued:	May 10, 2016

**SECTION 16 OTHER INFORMATION**

SDS Current Version: 1.0 Version Date: May 10, 2016

SDS Revision History: v1.0 Initial version.

Abbreviations:

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

CAS#: Chemical Abstract Services Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

NFPA: National Fire Protection Association

DOT: US Department of Transportation

RCRA: US Resource Conservation and Recovery Act

TLV: Threshold Limit Value

TWA: Time-Weighted Average

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

WEEL: Workplace Environmental Exposure Levels

AIHA: American Industrial Hygiene Association

NTP: National Toxicology Program

IARC: International Agency for Research on Cancer

R: Risk

S: Safety

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

BCF: Bioconcentration Factor

BOD: Biological Oxygen Demand

Koc: Soil Organic Carbon Partition Coefficient.

Tlm: Median Tolerance Limit

Key References: United States National Library of Medicine's TOXNET  
Patty's Toxicology, 5<sup>th</sup> Edition  
European Commission's Institute for Health and Consumer Protection  
American Conference of Governmental Industrial Hygienists  
International Agency for Research on Cancer  
United States National Toxicology Program  
United States Occupational Safety and Health Administration  
United States Department of Transportation  
Supplier Material Safety Data Sheets

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Prepared by: ChemOne Compliance, LLC