# Material Safety Data Sheet

**Issuing Date** January 25, 2010 **Revision Date** January 22, 2010 **Revision Number** 12

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** **AC-®665 Class B Base**

**Product Code(s)** AC-665 Class B Base

**UN-No** 3077

**Recommended Use** Sealant.

**Company** Advanced Chemistry & Technology, Inc.
7341 Anaconda Avenue
Garden Grove, CA 92841

**Company Emergency Phone Number** 714-373-2837 (8 AM to 5 PM Pacific)

**Emergency Telephone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**WARNING!**

### Emergency Overview

May cause skin, eye, and respiratory tract irritation

**Appearance** Yellow **Physical State** Paste/Gel **Odor** Sulphurous

**OSHA Regulatory Status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Potential Health Effects**

**Principle Routes of Exposure** Skin contact, Inhalation, Eye contact.

**Acute Toxicity**

**Eyes** Moderately irritating to the eyes.

**Skin** May cause irritation.

**Inhalation** May cause irritation of respiratory tract.

**Ingestion** Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Chronic Effects** Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Substances known to be carcinogenic to man.

**Main Symptoms** Redness.

**Aggravated Medical Conditions** Skin disorders. Liver disorders. Kidney disorders. Allergies.

**Environmental Hazard** See Section 12 for additional Ecological Information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|---|---|---|
| Calcium carbonate | 471-34-1 | 20-25 |
| Calcium chromate | 13765-19-0 | 5-10 |
| Titanium dioxide | 13463-67-7 | 1-5 |
| Strontium chromate | 7789-06-2 | 0.5 - 1.0 |
| Phenol | 108-95-2 | .01-.03 |
| Formaldehyde | 50-00-0 | .0004-0.003 |

## 4. FIRST AID MEASURES

**General Advice** Do not breathe dust/fume/gas/mist/vapors/spray.

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Get medical attention immediately if symptoms occur.

**Skin Contact** Wash skin with soap and water.

**Inhalation** Administer oxygen if breathing is difficult and you are trained. Apply artificial respiration if victim is not breathing.

**Ingestion** Do not induce vomiting without medical advice. Consult a physician.

**Notes to Physician** Treat symptomatically.

**Protection of First-aiders** Use personal protective equipment.

## 5. FIRE-FIGHTING MEASURES

**Flash Point** > 93 °C / > 200 °F
**Method** Closed cup

**Suitable Extinguishing Media** Use:. Water spray. Carbon dioxide ($CO_2$). Dry chemical.

**Hazardous Combustion Products** Carbon monoxide, Carbon dioxide ($CO_2$), Sulfur oxides, Nitrogen oxides (NOx), Aldehydes.

**Explosion Data**
**Sensitivity to Mechanical Impact** Not impact sensitive.
**Sensitivity to Static Discharge** Not sensitive.

**Protective Equipment and Precautions for Firefighters** In the event of fire, wear self contained breathing apparatus. Use personal protective equipment.

**NFPA** **Health Hazard** 3* **Flammability** 1 **Stability** 0 **Physical and Chemical Hazards** N/A

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid contact with the skin and the eyes. Use personal protective equipment. Ensure adequate ventilation. Refer to Section 8.

**Methods for Containment** Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Use personal protective equipment. Prevent product and washings from entering drains, sewers or surface water due to high toxicity to aquatic organisms.

## 7. HANDLING AND STORAGE

**Handling** Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product.

**Storage** Keep at temperatures below 28°C. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Calcium carbonate<br>471-34-1 | | TWA: 5 mg/m$^3$<br>TWA: 15 mg/m$^3$ | TWA: 5 mg/m$^3$<br>TWA: 10 mg/m$^3$ |
| Calcium chromate<br>13765-19-0 | TWA: 0.001 mg/m$^3$ | TWA: 5 µg/m$^3$ | IDLH: 15 mg/m$^3$<br>TWA: 0.001 mg/m$^3$ |
| Titanium dioxide<br>13463-67-7 | TWA: 10 mg/m$^3$ | TWA: 15 mg/m$^3$ | IDLH: 5000 mg/m$^3$ |
| Strontium chromate<br>7789-06-2 | TWA: 0.0005 mg/m$^3$ | TWA: 5 µg/m$^3$ | IDLH: 15 mg/m$^3$<br>TWA: 0.001 mg/m$^3$ |
| Phenol<br>108-95-2 | TWA: 5 ppm | TWA: 5 ppm<br>TWA: 19 mg/m$^3$ | IDLH: 250 ppm<br>Ceiling: 60 mg/m$^3$<br>Ceiling: 15.6 ppm<br>TWA: 5 ppm<br>TWA: 19 mg/m$^3$ |
| Formaldehyde<br>50-00-0 | | TWA: 0.75 ppm | IDLH: 20 ppm<br>Ceiling: 0.1 ppm<br>TWA: 0.016 ppm |

**Engineering Measures** Showers, eyewash stations, and ventilation systems.

**Personal Protective Equipment**

**Eye/Face Protection** Safety glasses with side-shields.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hygiene Measures** Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Yellow **Odor** Sulphurous

| | | | |
|---|---|---|---|
| **Physical State** | Paste/Gel | **pH** | No data available |
| **Flash Point** | > 93 °C / > 200 °F | **Method** | Closed cup |
| **Autoignition Temperature** | No data available | **Boiling Point/Range** | Not applicable |
| | | **Flammability Limits in Air** | No information available |
| **Explosion Limits** | No information available | | |
| **Specific Gravity** | 1.53 g/cc | **Solubility** | Soluble in aromatic hydrocarbons and ketones |
| **Evaporation Rate** | No information available | **Vapor Pressure** | No information available |
| **Vapor Density** | No information available. | **Weight per Gallon (lbs)** | 12.8 |
| **Actual VOC (lb/gal)** | 0.12 | **EPA VOC (lb/gal)** | 0.12 |
| **EPA VOC (g/l)** | 15 | **Viscosity** | Thixotropic paste |

## 10. STABILITY AND REACTIVITY

**Stability** Stable under normal conditions.

**Incompatible Products** Incompatible with strong acids and bases.

**Conditions to Avoid** Burning produces obnoxious and toxic fumes. Avoid dust formation. Keep away from children.

**Hazardous Decomposition Products** Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Toxic fumes.

**Hazardous Polymerization** Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

**Product Information** The product itself has not been tested. The product is harmful by inhalation and if swallowed.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Calcium carbonate | 6450 mg/kg ( Rat ) | | |
| Calcium chromate | 327 mg/kg ( Rat ) | | |
| Titanium dioxide | 10000 mg/kg ( Rat ) | | |
| Strontium chromate | 3118 mg/kg ( Rat ) | | |
| Phenol | 317 mg/kg ( Rat ) | 525 mg/kg ( Rat )<br>630 mg/kg ( Rabbit ) | |
| Formaldehyde | 100 mg/kg ( Rat ) | 270 mg/kg ( Rabbit ) | 0.578 mg/L ( Rat ) 4 h<br>250 ppm ( Rat ) 4 h |

**Chronic Toxicity**

**Chronic Toxicity** Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Substances known to be carcinogenic to man.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Calcium chromate | A2 | Group 1 | Known | X |

| | | | | |
|---|---|---|---|---|
| Titanium dioxide | | Group 2B | | X |
| Strontium chromate | A2 | Group 1 | Known | X |
| Formaldehyde | A2 | Group 1 | Reasonably Anticipated | X |

**Sensitization** May cause sensitization of susceptible persons.

**Target Organ Effects** Liver, Kidney, Respiratory system, Digestive System.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

This product contains an ingredient that is classified, according to European regulations, as "harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment".

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Microtox | Daphnia Magna (Water Flea) |
|---|---|---|---|---|
| Phenol | EC50 = 150 mg/L 96 h | LC50 5 - 12 mg/L Oncorhynchus mykiss 96 h<br>LC50= 23.88 mg/L Lepomis macrochirus 96 h<br>LC50= 24 mg/L Pimephales promelas 96 h<br>LC50= 27.8 mg/L Brachydanio rerio 96 h<br>LC50= 40 mg/L Poecilia reticulata 96 h<br>LC50= 8.9 mg/L Oncorhynchus mykiss 96 h | EC50 21 - 36 mg/L 30 min<br>EC50 = 23.28 mg/L 5 min<br>EC50 = 25.61 mg/L 15 min<br>EC50 = 28.8 mg/L 5 min<br>EC50 = 31.6 mg/L 15 min | LC50 = 13 mg/L 48 h<br>EC50 = 23.0 mg/L 48 h |
| Formaldehyde | | LC50= 0.10 mg/L Lepomis macrochirus 96 h<br>LC50= 24.1 mg/L Pimephales promelas 96 h<br>LC50= 41 mg/L Brachydanio rerio 96 h | EC50 = 1.2 mg/L 1 h<br>EC50 = 16.5 mg/L 30 min<br>EC50 = 3.7 mg/L 5 h<br>EC50 = 5.39 mg/L 72 h<br>EC50 = 6.81 mg/L 25 min<br>EC50 = 7.26 mg/L 15 min<br>EC50 = 9.0 mg/L 5 min | EC50 = 2 mg/L 48 h<br>EC50 = 20 mg/L 96 h |

| Chemical Name | Log Pow |
|---|---|
| Phenol | = 1.47 |
| Formaldehyde | = 0.35 25 °C |

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method** Should not be released into the environment. Dispose of in accordance with local regulations.

**Contaminated Packaging** Do not re-use empty containers. Dispose of in accordance with local regulations.

| Chemical Name | California Hazardous Waste Status |
|---|---|
| Calcium chromate | Toxic; Corrosive; Ignitable |
| Strontium chromate | Toxic; Corrosive; Ignitable |
| Phenol | Toxic; Corrosive |
| Formaldehyde | Toxic; Ignitable |

## 14. TRANSPORT INFORMATION

**DOT**

| | |
|---|---|
| **Proper Shipping Name** | Environmentally Hazardous Substance, solid, n.o.s. (calcium chromate, strontium chromate) |
| **Hazard Class** | 9 |
| **UN-No** | 3077 |
| **Packing Group** | III |
| **Reportable Quantity (RQ)** | 169 pounds |
| **Special Provisions** | Single containers with less than 168 pounds of base material are not regulated for shipping. |

**IATA**

| | |
|---|---|
| **UN-No** | 3077 |
| **Proper Shipping Name** | Environmentally Hazardous Substance, solid, n.o.s. (calcium chromate, strontium chromate) |
| **Hazard Class** | 9 |
| **Packing Group** | III |
| **ERG Code** | 171 |
| **Special Provisions** | Single containers with less than 168 pounds of base material are not regulated for shipping. |

**IMDG/IMO**

| | |
|---|---|
| **Proper Shipping Name** | Environmentally Hazardous Substance, solid, n.o.s. (calcium chromate, strontium chromate) |
| **Hazard Class** | 9 |
| **UN-No** | 3077 |
| **Packing Group** | III |
| **EmS No.** | F-A, F-S |
| **Special Provisions** | Single containers with less than 168 pounds of base material are not regulated for shipping. |

## 15. REGULATORY INFORMATION

### International Inventories

| | |
|---|---|
| **TSCA** | Complies |
| **DSL** | Complies |
| **EINECS/ELINCS** | Does not Comply |
| **ENCS** | Does not Comply |
| **IECSC** | Complies |
| **KECL** | Complies |
| **PICCS** | Complies |
| **AICS** | Complies |

### U.S. Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Calcium chromate | 13765-19-0 | 5-10 | 0.1 |
| Strontium chromate | 7789-06-2 | 0.5 - 1.0 | 0.1 |
| Phenol | 108-95-2 | .01-.03 | 1.0 |
| Formaldehyde | 50-00-0 | .0004-0.003 | 0.1 |

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Calcium chromate 13765-19-0 ( 5-10 ) | 10 lb | X | | X |
| Strontium chromate 7789-06-2 ( 0.5 - 1.0 ) | 10 lb | X | | X |
| Phenol 108-95-2 ( .01-.03 ) | 1000 lb | X | X | X |
| Formaldehyde 50-00-0 ( .0004-0.003 ) | 100 lb | | | X |

| Chemical Name | CAS-No | Weight % | HAPS data | VOC Chemicals | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---|---|---|---|---|---|---|
| Calcium chromate | 13765-19-0 | 5-10 | Present (includes any unique chemical substance that contains Chromium as part of its infrastructure) | | | |
| Strontium chromate | 7789-06-2 | 0.5 - 1.0 | Present | | | |
| Phenol | 108-95-2 | .01-.03 | Present | Group III | | |
| Formaldehyde | 50-00-0 | .0004-0.003 | Present | Group I | | |

**CERCLA**

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|---|---|---|
| Calcium chromate | 10 lb | |
| Strontium chromate | 10 lb | |
| Phenol | 1000 lb | 1000 lb |
| Formaldehyde | 100 lb | 100 lb |

## U.S. State Regulations

| Chemical Name | CAS-No | California Prop. 65 |
|---|---|---|
| Calcium chromate | 13765-19-0 | Carcinogen |
| Strontium chromate | 7789-06-2 | Carcinogen |
| Formaldehyde | 50-00-0 | Carcinogen |

## International Regulations

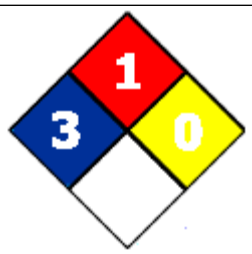
**Mexico - Grade** Moderate risk, Grade 2

**Canada**

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

**WHMIS Hazard Class**
D2A Very toxic materials
D2B Toxic materials

## 16. OTHER INFORMATION

| NFPA | HMIS | PPE | Transport Symbol |
|---|---|---|---|
|  |  |  | |





**Indicates a chronic health hazard.*

**Prepared By** David Jordan
Director of R&D

| | |
|---|---|
| **Issuing Date** | January 25, 2010 |
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| **Revision Note** | (M)SDS sections updated. 1. 16. |

**Disclaimer**

**The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of MSDS**