



Issuing Date January 25, 2010

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Revision Number 05

1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** AC-®665 Class B Mixed  
**Product Code(s)** AC-665 Class B-1/2 and B-2 Mixed  
**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**

**Appearance** Dark gray

May cause skin, eye, and respiratory tract irritation

**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 %
Manganese dioxide	1313-13-9	2.5 - 10
Calcium chromate	13765-19-0	2.5 - 10
Hydrogenated terphenyls	61788-32-7	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

<b>General Advice</b>	Do not breathe dust/fume/gas/mist/vapors/spray.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Get medical attention immediately if symptoms occur.
<b>Skin Contact</b>	Wash skin with soap and water.
<b>Inhalation</b>	Administer oxygen if breathing is difficult and you are trained. Apply artificial respiration if victim is not breathing.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Consult a physician.
<b>Notes to Physician</b>	Treat symptomatically.
<b>Protection of First-aiders</b>	Use personal protective equipment.

### 5. FIRE-FIGHTING MEASURES

<b>Flash Point Method</b>	> 93 °C / > 200 °F Closed cup
<b>Suitable Extinguishing Media</b>	Use: Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical.
<b>Hazardous Combustion Products</b>	Carbon monoxide, Carbon dioxide (CO <sub>2</sub> ), Sulfur oxides, Nitrogen oxides (NO <sub>x</sub> ), Aldehydes.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	Not impact sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective Equipment and Precautions for Firefighters</b>	In the event of fire, wear self contained breathing apparatus. Use personal protective equipment.
<b>NFPA</b>	Health Hazard 3*      Flammability 1      Stability 0      Physical and Chemical Hazards N/A

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Avoid contact with the skin and the eyes. Use personal protective equipment. Ensure adequate ventilation. Refer to Section 8.
<b>Methods for Containment</b>	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).
<b>Methods for Cleaning Up</b>	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

<b>Handling</b>	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.
<b>Storage</b>	Keep at temperature not exceeding -40°C. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Manganese dioxide 1313-13-9	TWA: 0.2 mg/m <sup>3</sup>	(vacated) Ceiling: 5 mg/m <sup>3</sup> Ceiling: 5 mg/m <sup>3</sup>	IDLH: 500 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Calcium chromate 13765-19-0	TWA: 0.001 mg/m <sup>3</sup>	TWA: 5 µg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> TWA: 0.001 mg/m <sup>3</sup>
Hydrogenated terphenyls 61788-32-7	TWA: 0.5 ppm	(vacated) TWA: 0.5 ppm (vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 0.5 ppm TWA: 5 mg/m <sup>3</sup>
Strontium chromate 7789-06-2	TWA: 0.0005 mg/m <sup>3</sup>	TWA: 5 µg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> TWA: 0.001 mg/m <sup>3</sup>
Phenol 108-95-2	TWA: 5 ppm	TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>	IDLH: 250 ppm Ceiling: 60 mg/m <sup>3</sup> Ceiling: 15.6 ppm TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>
Formaldehyde 50-00-0		TWA: 0.75 ppm	IDLH: 20 ppm Ceiling: 0.1 ppm TWA: 0.016 ppm

<b>Engineering Measures</b>	Showers, eyewash stations, and ventilation systems.
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin and Body Protection</b>	Wear protective gloves/clothing.
<b>Respiratory Protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>Hygiene Measures</b>	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

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

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Incompatible Products</b>	Incompatible with strong acids and bases.
<b>Conditions to Avoid</b>	Burning produces obnoxious and toxic fumes. Avoid dust formation. Keep away from children.
<b>Hazardous Decomposition Products</b>	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Toxic fumes.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

<b>Product Information</b>	The product itself has not been tested. The product is harmful by inhalation and if swallowed.
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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Manganese dioxide	9000 mg/kg ( Rat )		
Calcium chromate	327 mg/kg ( Rat )		
Hydrogenated terphenyls	10200 mg/kg ( Rat )	6800 mg/kg ( Rabbit )	4.3 mg/L ( Rat ) 4 h
Strontium chromate	3118 mg/kg ( Rat )		
Phenol	317 mg/kg ( Rat )	525 mg/kg ( Rat ) 630 mg/kg ( Rabbit )	
Formaldehyde	100 mg/kg ( Rat )	270 mg/kg ( Rabbit )	0.578 mg/L ( Rat ) 4 h 250 ppm ( Rat ) 4 h

### Chronic Toxicity

<b>Chronic Toxicity</b>	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Substances known to be carcinogenic to man.
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<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid.
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Chemical Name	ACGIH	IARC	NTP	OSHA
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Calcium chromate	A2	Group 1	Known	X
Strontium chromate	A2	Group 1	Known	X
Formaldehyde	A2	Group 1	Reasonably Anticipated	X

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

**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)
Hydrogenated terphenyls	EC50 > 0.53 mg/L 96 h	LC50 > 0.53 mg/L <i>Lepomis macrochirus</i> 96 h LC50 > 0.53 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 > 0.53 mg/L <i>Pimephales promelas</i> 96 h		EC50 = 0.011 mg/L 48 h
Phenol	EC50 = 150 mg/L 96 h	LC50 5 - 12 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 = 23.88 mg/L <i>Lepomis macrochirus</i> 96 h LC50 = 24 mg/L <i>Pimephales promelas</i> 96 h LC50 = 27.8 mg/L <i>Brachydanio rerio</i> 96 h LC50 = 40 mg/L <i>Poecilia reticulata</i> 96 h LC50 = 8.9 mg/L <i>Oncorhynchus mykiss</i> 96 h	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min EC50 = 25.61 mg/L 15 min EC50 = 28.8 mg/L 5 min EC50 = 31.6 mg/L 15 min	LC50 = 13 mg/L 48 h EC50 = 23.0 mg/L 48 h
Formaldehyde		LC50 = 0.10 mg/L <i>Lepomis macrochirus</i> 96 h LC50 = 24.1 mg/L <i>Pimephales promelas</i> 96 h LC50 = 41 mg/L <i>Brachydanio rerio</i> 96 h	EC50 = 1.2 mg/L 1 h EC50 = 16.5 mg/L 30 min EC50 = 3.7 mg/L 5 h EC50 = 5.39 mg/L 72 h EC50 = 6.81 mg/L 25 min EC50 = 7.26 mg/L 15 min EC50 = 9.0 mg/L 5 min	EC50 = 2 mg/L 48 h EC50 = 20 mg/L 96 h

Chemical Name	Log Pow
Manganese dioxide	< 0 20 °C
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**

<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>EINECS/ELINCS</b>	Does not Comply
<b>ENCS</b>	Does not Comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	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 %
Manganese dioxide	1313-13-9	2.5 - 10	1.0
Calcium chromate	13765-19-0	2.5 - 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**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Calcium chromate 13765-19-0 ( 2.5 - 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
Manganese dioxide	1313-13-9	2.5 - 10	Present (includes any unique chemical substance that contains Manganese as part of its infrastructure)			
Calcium chromate	13765-19-0	2.5 - 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

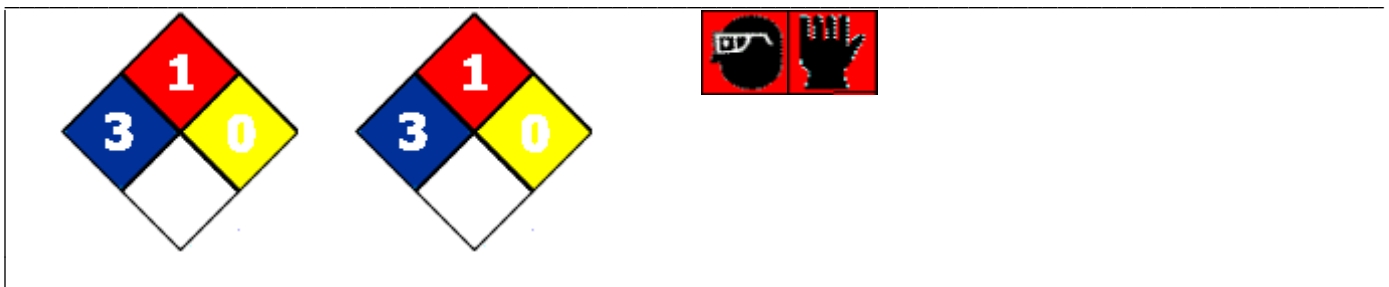
D2B Toxic materials



## 16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol
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*\*Indicates a chronic health hazard.*

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

**Issuing Date** January 25, 2010

**Revision Date** January 22, 2010

**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**