



Issuing Date January 25, 2010 Revision Date January 22, 2010 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		
May cause skin, eye, and respiratory tract irritation		
Appearance Dark gray	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

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 Method	> 93 °C / > 200 °F 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 (NO _x), 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 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 ³	(vacated) Ceiling: 5 mg/m ³ Ceiling: 5 mg/m ³	IDLH: 500 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³
Calcium chromate 13765-19-0	TWA: 0.001 mg/m ³	TWA: 5 µg/m ³	IDLH: 15 mg/m ³ TWA: 0.001 mg/m ³
Hydrogenated terphenyls 61788-32-7	TWA: 0.5 ppm	(vacated) TWA: 0.5 ppm (vacated) TWA: 5 mg/m ³	TWA: 0.5 ppm TWA: 5 mg/m ³
Strontium chromate 7789-06-2	TWA: 0.0005 mg/m ³	TWA: 5 µg/m ³	IDLH: 15 mg/m ³ TWA: 0.001 mg/m ³
Phenol 108-95-2	TWA: 5 ppm	TWA: 5 ppm TWA: 19 mg/m ³	IDLH: 250 ppm Ceiling: 60 mg/m ³ Ceiling: 15.6 ppm TWA: 5 ppm TWA: 19 mg/m ³
Formaldehyde 50-00-0		TWA: 0.75 ppm	IDLH: 20 ppm Ceiling: 0.1 ppm 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	Dark gray	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
Explosion Limits	No information available	Flammability Limits in Air	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.
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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

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.
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Carcinogenicity	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

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 %
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

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 (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

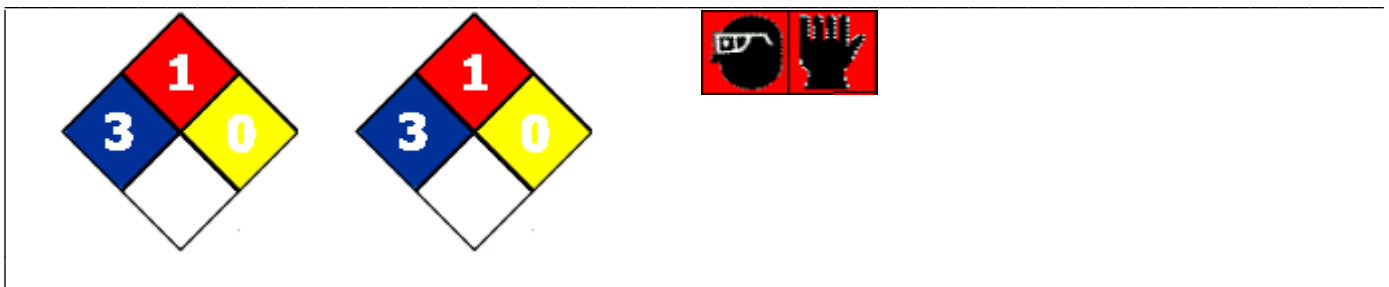
D2A Very toxic materials

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

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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