



Issuing Date January 21, 2010 Revision Date January 20, 2010 Revision Number 08

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name AC-®236 Class B Mixed
Product Code(s) AC-236 Class B-1/2, B-2, and B-4 Mixed
UN-No Not regulated
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

CAUTION!

Emergency Overview		
May cause skin, eye, and respiratory tract irritation		
Appearance 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 Eye contact, Skin contact, Inhalation.

Acute Toxicity
Eyes Contact with eyes may cause irritation.
Skin May cause irritation.
Inhalation May cause irritation of respiratory tract.
Ingestion 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.

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
Hydrogenated terphenyls	61788-32-7	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Phenol	108-95-2	.01-.05
Formaldehyde	50-00-0	.01-0.04

4. FIRST AID MEASURES

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	Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult and you are trained.
Ingestion	Do not induce vomiting without medical advice. Consult a physician.
Notes to Physician	Treat symptomatically.

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.
Uniform Fire Code	• Combustible Liquid: III-B
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	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
NFPA	Health Hazard 1 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.

7. HANDLING AND STORAGE

Handling	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not smoke.
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
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
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³	IDLH: 5000 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	Maintain adequate ventilation.
Hygiene Measures	Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	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	1.63 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)	13.41
Actual VOC (lb/gal)	0.07	EPA VOC (lb/gal)	0.07
EPA VOC (g/l)	8	Viscosity	Thixotropic paste

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Incompatible Products	Incompatible with strong acids and bases. Strong reducing agents.
Conditions to Avoid	Keep away from children.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information	May be harmful if swallowed. The product itself has not been tested.
Irritation	Moderately irritating to eyes, skin and respiratory system.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Manganese dioxide	9000 mg/kg (Rat)		
Hydrogenated terphenyls	10200 mg/kg (Rat)	6800 mg/kg (Rabbit)	4.3 mg/L (Rat) 4 h
Titanium dioxide	10000 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.
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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.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		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

Target Organ Effects

Liver, Kidney, Skin.

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 Lepomis macrochirus 96 h LC50> 0.53 mg/L Oncorhynchus mykiss 96 h LC50> 0.53 mg/L Pimephales promelas 96 h		EC50 = 0.011 mg/L 48 h
Phenol	EC50 = 150 mg/L 96 h	LC50 5 - 12 mg/L Oncorhynchus mykiss 96 h LC50= 23.88 mg/L Lepomis macrochirus 96 h LC50= 24 mg/L Pimephales promelas 96 h LC50= 27.8 mg/L Brachydanio rerio 96 h LC50= 40 mg/L Poecilia reticulata 96 h LC50= 8.9 mg/L Oncorhynchus mykiss 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 Lepomis macrochirus 96 h LC50= 24.1 mg/L Pimephales promelas 96 h LC50= 41 mg/L Brachydanio rerio 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**

Dispose of contents/container in accordance with local regulation.

Contaminated Packaging

Dispose of in accordance with local regulations.

Chemical Name	California Hazardous Waste Status
Phenol	Toxic; Corrosive
Formaldehyde	Toxic; Ignitable

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>UN-No</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated

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
Phenol	108-95-2	.01-.05	1.0
Formaldehyde	50-00-0	.01-0.04	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
Phenol 108-95-2 (.01-.05)	1000 lb	X	X	X
Formaldehyde 50-00-0 (.01-0.04)	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)			
Phenol	108-95-2	.01-.05	Present	Group III		
Formaldehyde	50-00-0	.01-0.04	Present	Group I		

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Phenol	1000 lb	1000 lb

Formaldehyde	100 lb	100 lb
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U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	CAS-No	California Prop. 65
Formaldehyde	50-00-0	Carcinogen

International Regulations

Mexico - Grade Slight risk, Grade 1

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						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	1	Reactivity	0		Not regulated
Health Hazard	1								
Fire Hazard	1								
Reactivity	0								

Prepared By David Jordan
Director of R&D

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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