



Material Safety Data Sheet

Issuing Date January 4, 2010

Revision Date January 4, 2010

Revision Number 12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name AC-@250 Class B Base
Product Code(s) AC-250 Class B-1/6 Base
UN-No 1866
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

DANGER!

Emergency Overview

Flammable Liquid
Harmful by inhalation
Harmful if swallowed

Appearance White

Physical State Paste/Gel

Odor Aromatic

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

Irritating to eyes. Vapor may cause irritation.

Skin

May cause sensitization by skin contact. Prolonged skin contact may defat the skin and produce dermatitis.

Inhalation

Harmful by inhalation. Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

Ingestion

May be harmful if swallowed. 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. Repeated or prolonged skin contact with the unexposed coating may cause skin irritation and/or dermatitis and sensitization of susceptible persons.

Main Symptoms

Redness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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	30 - 40
Formaldehyde	50-00-0	.0001-0.03
Titanium dioxide	13463-67-7	1 - 5
Ethyl acetate	141-78-6	2.5 - 10

4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash skin with soap and water.
Inhalation	Move to fresh air. 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.
Protection of First-aiders	Remove all sources of ignition.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Flammable.
Flash Point Method	24 °C / 75 °F Closed cup
Suitable Extinguishing Media	Use: Water spray. Carbon dioxide (CO ₂). Dry chemical.
Uniform Fire Code	• Flammable Liquid: I-C
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.
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 2 Flammability 3 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. Ground and bond containers when transferring material. Clean contaminated surface thoroughly. Prevent product from entering drains.

7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Do not smoke. Remove and wash contaminated clothing before re-use.

Storage Keep at temperatures below 28°C.. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium carbonate 471-34-1		TWA: 5 mg/m ³ TWA: 15 mg/m ³	TWA: 5 mg/m ³ TWA: 10 mg/m ³
Formaldehyde 50-00-0		TWA: 0.75 ppm	IDLH: 20 ppm Ceiling: 0.1 ppm TWA: 0.016 ppm
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³	IDLH: 5000 mg/m ³
Ethyl acetate 141-78-6	TWA: 400 ppm	TWA: 1400 mg/m ³ TWA: 400 ppm (vacated) TWA: 1400 mg/m ³ (vacated) TWA: 400 ppm	IDLH: 2000 ppm 10% LEL TWA: 400 ppm TWA: 1400 mg/m ³

Engineering Measures Showers, eyewash stations, and ventilation systems.

Personal Protective Equipment

Eye/Face Protection

Safety glasses with side-shields. If splashes are likely to occur, wear: Face-shield.

Skin and Body Protection

Wear protective gloves/clothing.

Respiratory Protection

Maintain adequate ventilation. 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. General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White	Odor	Aromatic
Physical State	Paste/Gel	pH	No data available
Flash Point	24 °C / 75 °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	1.58 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)	13.1
Actual VOC (lb/gal)	0.58	EPA VOC (lb/gal)	0.58
EPA VOC (g/l)	68	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 open flames, hot surfaces and sources of ignition. 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	The product itself has not been tested. Harmful by inhalation.
Irritation	Moderately irritating to eyes, skin and respiratory system.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium carbonate	6450 mg/kg (Rat)		
Formaldehyde	100 mg/kg (Rat)	270 mg/kg (Rabbit)	0.578 mg/L (Rat) 4 h 250 ppm (Rat) 4 h
Titanium dioxide	10000 mg/kg (Rat)		
Ethyl acetate	5620 mg/kg (Rat)	18000 mg/kg (Rabbit) 20 mL/kg (Rabbit)	

Chronic Toxicity

Chronic Toxicity	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Repeated or prolonged skin contact with the unexposed coating 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.
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Chemical Name	ACGIH	IARC	NTP	OSHA
Formaldehyde	A2	Group 1	Reasonably Anticipated	X
Titanium dioxide		Group 2B		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

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Target Organ Effects	Liver, Kidney, Skin, Central nervous system (CNS), Lungs
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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)
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
Ethyl acetate	EC50 = 3300 mg/L 48 h	LC50= 230 mg/L Pimephales promelas 96 h LC50= 484 mg/L Oncorhynchus mykiss 96 h	EC50 = 1180 mg/L 5 min EC50 = 1500 mg/L 15 min EC50 = 5870 mg/L 15 min EC50 = 7400 mg/L 2 h	EC50 = 717 mg/L 48 h

Chemical Name	Log Pow
Formaldehyde	= 0.35 25 °C
Ethyl acetate	= 0.6

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of contents/container in accordance with local regulation. Can be incinerated, when in compliance with local regulations. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging

Dispose of in accordance with local regulations.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Calcium carbonate - 471-34-1				
Formaldehyde - 50-00-0				
Titanium dioxide - 13463-67-7				
Ethyl acetate - 141-78-6				

Chemical Name	California Hazardous Waste Status
Formaldehyde	Toxic; Ignitable
Ethyl acetate	Toxic; Ignitable

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Resin Solution, flammable
Hazard Class 3
UN-No 1866
Packing Group III

IATA

UN-No 1866
Proper Shipping Name Resin Solution, flammable
Hazard Class 3

Packing Group	III
ERG Code	127

IMDG/IMO

Proper Shipping Name	Resin Solution, flammable
Hazard Class	3.3
UN-No	1866
Packing Group	III
EmS No.	F-E, S-E

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
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 %
Formaldehyde	50-00-0	.0001-0.03	0.1

SARA 311/312 Hazard Categories

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

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Formaldehyde 50-00-0 (.0001-0.03)	100 lb			X

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Formaldehyde	50-00-0	.0001-0.03	Present	Group I		

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Formaldehyde	100 lb	100 lb

Ethyl acetate	5000 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

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Calcium carbonate	X		X		X
Formaldehyde	X	X	X	X	X
Titanium dioxide	X	X	X		X
Ethyl acetate	X	X	X		X

International Regulations

Mexico - Grade

Moderate risk, Grade 2

Chemical Name	Carcinogen Status	Exposure Limits
Calcium carbonate		Mexico: TWA= 10 mg/m ³
Formaldehyde	A2	
Titanium dioxide		Mexico: TWA= 10 mg/m ³
Ethyl acetate		Mexico: TWA= 400 ppm Mexico: TWA= 1400 mg/m ³

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

B2 Flammable liquid
D2A Very toxic materials
D2B Toxic materials



Chemical Name	NPRI
Formaldehyde	X

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol
			

Prepared ByDavid Jordan
Director of R&D**Issuing Date**

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Revision Note

(M)SDS sections updated. 5. 9. 14. 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