



# Material Safety Data Sheet

**Issuing Date** December 23, 2009

**Revision Date** December 22, 2009

**Revision Number** 03

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** AC-@370 Class B Base

**Product Code(s)** AC-370 Class B-1/2 and B-2 Base

**Recommended Use** Aircraft 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** Off-white

**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, Eye contact, Inhalation

**Acute Toxicity**

**Eyes** Contact with eyes may cause irritation.

**Skin** Substance may cause slight skin 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 with the unexposed coating 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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Calcium carbonate	471-34-1	15 - 20
Titanium dioxide	13463-67-7	0 - 1
Formaldehyde	50-00-0	0.001-0.06
Phenol	108-95-2	0.0001-0.04

#### 4. FIRST AID MEASURES

<b>General Advice</b>	If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician. Remove and wash contaminated clothing before re-use.
<b>Inhalation</b>	Remove from exposure, lie down. If symptoms persist, call a physician. If not breathing, give artificial respiration.
<b>Ingestion</b>	Call a physician immediately. Do not induce vomiting without medical advice.
<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>	> 110 °C / > 230 °F Closed cup				
<b>Suitable Extinguishing Media</b>	Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.				
<b>Hazardous Combustion Products</b>	Carbon oxides, Carbon monoxide, Carbon dioxide (CO <sub>2</sub> ), Sulfur oxides				
<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>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.				
<b>NFPA</b>	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Health Hazard 1</td> <td style="text-align: center;">Flammability 1</td> <td style="text-align: center;">Stability 0</td> <td style="text-align: right;">Physical and Chemical Hazards N/A</td> </tr> </table>	Health Hazard 1	Flammability 1	Stability 0	Physical and Chemical Hazards N/A
Health Hazard 1	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.
<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.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not smoke.
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**Storage**

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

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium carbonate 471-34-1		TWA: 5 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup>	IDLH: 5000 mg/m <sup>3</sup>
Formaldehyde 50-00-0		TWA: 0.75 ppm	IDLH: 20 ppm Ceiling: 0.1 ppm TWA: 0.016 ppm
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>

**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. Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Off-white	<b>Odor</b>	Sulphurous
<b>Physical State</b>	Paste/Gel	<b>pH</b>	Not applicable
<b>Flash Point</b>	> 110 °C / > 230 °F	<b>Method</b>	Closed cup
<b>Autoignition Temperature</b>	No information available	<b>Boiling Point/Range</b>	No information available
<b>Explosion Limits</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Solubility</b>	No information available	<b>Evaporation Rate</b>	No information available
<b>Vapor Pressure</b>	No information available	<b>Vapor Density</b>	No information available.
<b>Density</b>	1.23	<b>Weight per Gallon (lbs)</b>	10.24
<b>Actual VOC (lb/gal)</b>	0.02	<b>EPA VOC (lb/gal)</b>	0.02
<b>EPA VOC (g/l)</b>	3		

**10. STABILITY AND REACTIVITY****Stability**

Hazardous polymerization does not occur.

**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** The product itself has not been tested.

**Irritation** May cause skin and eye irritation.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium carbonate	6450 mg/kg ( Rat )		
Titanium dioxide	10000 mg/kg ( Rat )		
Formaldehyde	100 mg/kg ( Rat )	270 mg/kg ( Rabbit )	0.578 mg/L ( Rat ) 4 h 250 ppm ( Rat ) 4 h
Phenol	317 mg/kg ( Rat )	525 mg/kg ( Rat ) 630 mg/kg ( Rabbit )	

**Chronic Toxicity**

**Chronic Toxicity** Repeated or prolonged skin contact with the unexposed coating may cause skin irritation and/or dermatitis and sensitization of susceptible persons.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		X
Formaldehyde	A2	Group 1	Reasonably Anticipated	X

**Legend:**

**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

## 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 <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

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

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method** Dispose of contents/container in accordance with local regulation.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Calcium carbonate - 471-34-1				
Titanium dioxide - 13463-67-7				
Formaldehyde - 50-00-0				
Phenol - 108-95-2				

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

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

### 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	0.001-0.06	0.1
Phenol	108-95-2	0.0001-0.04	1.0

**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
Formaldehyde 50-00-0 ( 0.001-0.06 )	100 lb			X
Phenol 108-95-2 ( 0.0001-0.04 )	1000 lb	X	X	X

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Formaldehyde	50-00-0	0.001-0.06	Present	Group I		
Phenol	108-95-2	0.0001-0.04	Present	Group III		

**CERCLA**

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Formaldehyde	100 lb	100 lb
Phenol	1000 lb	1000 lb

**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
Titanium dioxide	X	X	X		X
Formaldehyde	X	X	X	X	X
Phenol	X	X	X	X	X

**International Regulations**

Mexico - Grade

Slight risk, Grade 1

Chemical Name	Carcinogen Status	Exposure Limits
Calcium carbonate		Mexico: TWA= 10 mg/m <sup>3</sup>
Titanium dioxide		Mexico: TWA= 10 mg/m <sup>3</sup>
Formaldehyde	A2	
Phenol		Mexico: TWA= 5 ppm Mexico: TWA= 19 mg/m <sup>3</sup>

### 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



Chemical Name	NPRI
Formaldehyde	X
Phenol	X

## 16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>1</td> </tr> <tr> <td>Fire Hazard</td> <td>1</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health Hazard	1	Fire Hazard	1	Reactivity	0		Not regulated
Health Hazard	1								
Fire Hazard	1								
Reactivity	0								

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Director of R&D

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Revision Note (M)SDS sections updated. 1. 3. 11. 12. 15. 16.

### Disclaimer

The information provided on this MSDS 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**

