



Issuing Date August 30, 2010

Revision Date August 27, 2010

Revision Number 00

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name AC-®736 Class B Mixed
Product Code(s) AC-736 Class B-1/2 and B-2 Mixed
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 irritation and/or dermatitis

Mild eye irritation

May be harmful if swallowed

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

Appearance Black

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

Moderately irritating to the eyes.

Skin

Substance may cause slight skin irritation.

Inhalation

May cause irritation of respiratory tract.

Ingestion

May be harmful if swallowed. Ingestion may cause irritation to mucous membranes.

Chronic Effects

Prolonged exposure may cause 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

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Aggravated Medical Conditions

Skin disorders. Liver disorders. Kidney disorders. Respiratory disorders.

Environmental Hazard

See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Calcium carbonate	471-34-1	15-20
Manganese dioxide	1313-13-9	1-5
Hydrogenated terphenyls	61788-32-7	1-5
Titanium dioxide	13463-67-7	0-0.9
Phenol	108-95-2	0.01-0.08
Formaldehyde	50-00-0	0.001-0.04

Additional Notes All components of this product are listed in the EINECS/ELINCS or are exempt.

4. FIRST AID MEASURES

General Advice	If symptoms persist, call a physician.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	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.
Inhalation	Remove from exposure, lie down. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Ingestion	Do not induce vomiting without medical advice. Call a physician immediately.
Notes to Physician	Treat symptomatically.
Protection of First-aiders	Use personal protective equipment.

5. FIRE-FIGHTING MEASURES

Flash Point Method	> 110 °C / > 230 °F Seta closed cup
Suitable Extinguishing Media	Dry chemical, CO ₂ , water spray or alcohol-resistant foam.
Uniform Fire Code	• Combustible Liquid: III-B
Hazardous Combustion Products	Carbon oxides, Carbon monoxide, Carbon dioxide (CO ₂), Sulfur oxides.
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.
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 out of the reach of children. Keep at temperature not exceeding -40°C.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black	Odor	Sulphurous
Physical State	Paste/Gel	Method	Seta closed cup
Flash Point	> 110 °C / > 230 °F		

Autoignition Temperature	No information available	Boiling Point/Range	No information available
Explosion Limits	No information available	Flammability Limits in Air	No information available
Solubility	No information available	Evaporation Rate	No information available
Vapor Pressure	No information available	Vapor Density	No information available.
Density	1.1 g/cc	Weight per Gallon (lbs)	9.16
Actual VOC (lb/gal)	0.02	EPA VOC (lb/gal)	0.02
EPA VOC (g/l)	2.6		

10. STABILITY AND REACTIVITY

Stability	Hazardous polymerization does not occur.
Incompatible Products	Incompatible with strong acids and bases. Strong reducing agents.
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	Moderately irritating to eyes, skin and respiratory system.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium carbonate	6450 mg/kg (Rat)		
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	Prolonged exposure may cause chronic effects. 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.
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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 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 in accordance with local regulations.

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal.

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

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed
EINECS/ELINCS	Not Listed
ENCS	Not Listed
IECSC	Listed
KECL	Listed
PICCS	Listed
AICS	Not Listed

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	1-5	1.0
Phenol	108-95-2	0.01-0.08	1.0
Formaldehyde	50-00-0	0.001-0.04	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 (0.01-0.08)	1000 lb	X	X	X
Formaldehyde 50-00-0 (0.001-0.04)	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	1-5	Present (includes any unique chemical substance that contains Manganese as part of its infrastructure)			
Phenol	108-95-2	0.01-0.08	Present	Group III		
Formaldehyde	50-00-0	0.001-0.04	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

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Calcium carbonate	X		X		X
Manganese dioxide		X	X	X	
Hydrogenated terphenyls	X		X		
Titanium dioxide	X	X	X		X
Phenol	X	X	X	X	X
Formaldehyde	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 ³
Manganese dioxide		Mexico: TWA= 0.2 mg/m ³
Hydrogenated terphenyls		Mexico: TWA= 0.5 ppm Mexico: TWA= 5 mg/m ³
Titanium dioxide		Mexico: TWA= 10 mg/m ³
Phenol		Mexico: TWA= 5 ppm Mexico: TWA= 19 mg/m ³
Formaldehyde	A2	

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



Chemical Name	NPRI
Manganese dioxide	X
Phenol	X
Formaldehyde	X

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td style="background-color: #0000FF; color: white;">Health Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FF0000; color: white;">Fire Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FFFF00; color: black;">Reactivity</td> <td style="text-align: center; font-weight: bold;">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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Revision Note (M)SDS sections updated. Initial Release.

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