Material Safety Data Sheet

Issuing Date December 30, 2009 **Revision Date** December 29, 2009 **Revision Number** 08

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**AC-®615 Catalyst**
Product Code(s)	AC-615 Catalyst
UN-No	Not regulated
Recommended Use	Hardener .
Company	Advanced Chemistry & Technology, Inc. 7341 Anaconda Avenue Garden Grove, CA 92841
Company Emergency Phone Number	714-373-2839 (8 AM to 5 PM Pacific)
Emergency Telephone Number	Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

CAUTION!

Emergency Overview

May be harmful if inhaled
May cause skin, eye, and respiratory tract irritation
May be harmful if swallowed

Appearance Black **Physical State** Viscous liquid **Odor** Slight

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, Ingestion

Acute Toxicity

Eyes	May cause slight irritation.
Skin	Substance may cause slight skin irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	May be harmful if swallowed.

Chronic Effects Repeated or prolonged skin contact 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 Liver disorders. Kidney disorders. Central nervous system.

Interactions with Other Chemicals No information available.

Environmental Hazard May cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Hydrogenated terphenyls	61788-32-7	25 - 35
Terphenyls	26140-60-3	1 - 5
Manganese dioxide	1313-13-9	55 - 65

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

Skin Contact Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. Remove and wash contaminated clothing before re-use.

Inhalation Move to fresh air. If symptoms persist, call a physician. If breathing is irregular or stopped, administer artificial respiration.

Ingestion Do not induce vomiting without medical advice. Consult a physician. Never give anything by mouth to an unconscious person.

Notes to Physician Treat symptomatically.

Protection of First-aiders Avoid contact with skin, eyes and clothing.

5. FIRE-FIGHTING MEASURES

Flash Point > 110 °C / > 230 °F
Method 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)

Explosion Data
Sensitivity to Mechanical Impact Not sensitive.
Sensitivity to Static Discharge Not sensitive.

Specific Hazards Arising from the Chemical
In the event of fire and/or explosion do not breathe fumes. Do not allow run-off from fire fighting to enter drains or water courses.

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 skin, eyes and clothing.

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 Prevent product from entering drains. Take up mechanically and collect in suitable container for disposal. Use personal protective equipment.

7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

Storage Keep tightly closed in a dry and cool place. Keep away from heat and sources of ignition. Keep at temperatures below 28°C..

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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
Terphenyls 26140-60-3		(vacated) Ceiling: 0.5 ppm (vacated) Ceiling: 5 mg/m^3 Ceiling: 1 ppm Ceiling: 9 mg/m^3	IDLH: 500 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

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing. Wear latex or Nitrile gloves.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black	**Odor**	Slight
Physical State	Viscous liquid	**pH**	Not applicable
Flash Point	> 110 °C / > 230 °F	**Method**	Closed cup
Autoignition Temperature	No information available	**Boiling Point/Range**	Not applicable
		Flammability Limits in Air	No information available
Explosion Limits	No information available		
Specific Gravity	1.97 g/cc	**Solubility**	Slightly soluble
Evaporation Rate	No information available	**Vapor Pressure**	No information available
Vapor Density	Heavier than air	**Weight per Gallon (lbs)**	16.4
Actual VOC (lb/gal)	0	**EPA VOC (lb/gal)**	0
EPA VOC (g/l)	0		

10. STABILITY AND REACTIVITY

Stability Stable.

Incompatible Products Acids. Strong reducing agents.

Conditions to Avoid Excessive heat.

Hazardous Decomposition Products Carbon oxides. Nitrogen oxides (NOx). Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information The product is harmful by inhalation and if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrogenated terphenyls	10200 mg/kg (Rat)	6800 mg/kg (Rabbit)	4.3 mg/L (Rat) 4 h
Terphenyls		12500 mg/kg (Rabbit)	
Manganese dioxide	9000 mg/kg (Rat)		

Chronic Toxicity

Chronic Toxicity Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Target Organ Effects Liver, Kidney, Skin, Central nervous system (CNS)

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated. 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
Terphenyls	EC50 = 0.02 mg/L 96 h	LC50> 0.11 mg/L Lepomis macrochirus 96 h LC50> 0.11 mg/L Oncorhynchus mykiss 96 h LC50> 0.11 mg/L Pimephales promelas 96 h		EC50 > 0.11 mg/L 48 h

Persistence and Degradability No data is available on the product itself.

Chemical Name	Log Pow
Manganese dioxide	< 0 20 °C

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local regulations.

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
Hydrogenated terphenyls - 61788-32-7				
Terphenyls - 26140-60-3				
Manganese dioxide - 1313-13-9				

14. TRANSPORT INFORMATION

DOT Not regulated
UN-No Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies
EINECS/ELINCS Complies
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	55 - 65	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Manganese dioxide	1313-13-9	55 - 65	Present (includes any unique chemical substance that contains Manganese as part of its infrastructure)			

CERCLA

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Hydrogenated terphenyls	X		X		
Terphenyls	X	X	X		
Manganese dioxide		X	X	X	

International Regulations

Mexico - Grade Slight risk, Grade 1

Chemical Name	Carcinogen Status	Exposure Limits
Hydrogenated terphenyls		Mexico: TWA= 0.5 ppm Mexico: TWA= 5 mg/m^3
Terphenyls		Mexico: Ceiling= 0.5 ppm
Manganese dioxide		Mexico: TWA= 0.2 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
D2B Toxic materials

Chemical Name	NPRI
Manganese dioxide	X

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol
			Not regulated

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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