



Issuing Date March 19, 2010

Revision Date March 18,2010

Revision Number 10

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name AC-®160 Adhesion Promoter
Recommended Use Metal adhesion promoter .
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

Severe eye irritation

Appearance Red

Physical State Liquid

Odor Amine

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, Ingestion.

Acute Toxicity

Eyes

Avoid contact with eyes. Moderately irritating to the eyes.

Skin

Irritating to skin.

Inhalation

May cause irritation of respiratory tract. Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion

Ingestion may cause irritation to mucous membranes. Ingestion may cause stomach discomfort.

Chronic Effects

Prolonged exposure may cause 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Water	7732-18-5	95 - 99
3-(Triethoxysilyl) propylamine	919-30-2	1 - 5

4. FIRST AID MEASURES

General Advice	Do not get in eyes, on skin, or on clothing.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician if necessary. Remove and wash contaminated clothing before re-use.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Ingestion	Immediate medical attention is required. Do not induce vomiting without medical advice. 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

Flammable Properties	Not flammable.			
Flash Point Method	> 93 °C / > 200 °F Closed cup			
Suitable Extinguishing Media	CO ₂ , dry chemical, dry sand, alcohol-resistant foam.			
Hazardous Combustion Products	No information available.			
Explosion Data	Not impact sensitive.			
Sensitivity to Mechanical Impact	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
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 0	Stability 0	Physical and Chemical Hazards N/A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes and inhalation of vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Methods for Containment	Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for Cleaning Up	Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. In case of insufficient ventilation, wear suitable respiratory equipment.

Storage Keep tightly closed in a dry and cool place. Keep at temperatures between 5°C and 32°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Water 7732-18-5			
3-(Triethoxysilyl) propylamine 919-30-2			

Engineering Measures Ensure adequate ventilation, especially in confined areas. Eyewash stations.

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 When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures When using, do not eat, drink or smoke. 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	Red	Odor	Amine
Physical State	Liquid	pH	9 - 10
Flash Point	> 93 °C / > 200 °F	Method	Closed cup
Autoignition Temperature	No information available	Boiling Point/Range	No information available
Explosion Limits	No information available	Flammability Limits in Air	No information available
Specific Gravity	1.0	Water Solubility	Miscible with water
Solubility	Soluble in water	Evaporation Rate	No information available
Vapor Pressure	No information available	Vapor Density	No information available.
Weight per Gallon (lbs)	8.33	Actual VOC (lb/gal)	0.007
EPA VOC (lb/gal)	0.007	EPA VOC (g/l)	0.9
Viscosity	Similar to water		

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Products Acids.

Conditions to Avoid Keep away from children. Excessive heat.

Hazardous Decomposition Products None under normal use.

Hazardous Reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity****Product Information** No acute toxicity information is available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	90 mL/kg (Rat)		
3-(Triethoxysilyl) propylamine	1780 mg/kg (Rat)	4 mL/kg (Rabbit)	

Chronic Toxicity**Chronic Toxicity** Prolonged exposure may cause chronic effects. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method** Dispose of in accordance with local regulations.**Contaminated Packaging** Dispose of in accordance with local regulations.**14. TRANSPORT INFORMATION****DOT** Not regulated**IATA** Not regulated**IMDG/IMO** Not regulated

