



0=Minimal, 1=Slight, 2= Moderate, 3=Serious, 4=Sever

## MATERIAL SAFETY DATA SHEET

### SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name:</b> ACU-FLEX:70
<b>Product Composition/ Use:</b> Single component moisture cure silicone roof coating
<b>CAS Number:</b> Mixture
<b>Manufacturer Name:</b> Advanced Coating Systems, Inc.
<b>Street Address:</b> 2230 Towne Lake Pkwy, Bldg.1000 Ste.150
<b>City:</b> Woodstock <b>State:</b> GA <b>Zip Code:</b> 30189
<b>Emergency Telephone:</b> INFOTRAC 24hrs, (800)535-5053

### SECTION 2- COMPOSITION AND INFORMATION ON INGREDIENTS

Components	Cas No.	% by Wt
Polydimethylsiloxane, Dihydroxy Terminated	70131-67-8	35% to 40%
Crystalline Sodium Potassium Aluminosilicate	14808-60-7	30% to 35%
Petroleum Spirits	64475-85-0	15% to 20%
Titanic Anhydride	13463-67-7 / 21645-51-2 / 7631-86-9	5% to 10%
N-[3-(Trimethoxysilyl)propyl]ethylenediamine	1760-24-3 / 67-56-1	0% to 5%

### SECTION 3- HAZARDS IDENTIFICATION

<b>EMERGENCY OVERVIEW</b>
<b>PHYSICAL APPEARANCE :</b> Colored liquid
<b>IMMEDIATE CONCERNS :</b> None
<b>POTENTIAL HEALTH EFFECTS</b>
<b>EYES :</b> May cause eye irritation
<b>SKIN :</b> May cause skin irritation
<b>SKIN ABSORPTION :</b> Causes skin irritation.
<b>INGESTION :</b> Harmful if swallowed.
<b>INHALATION :</b> Harmful if inhaled.
<b>CHRONIC :</b> Prolonged or repeated skin contact may cause dryness, defatting, and dermatitis.
<b>CARCINOGENICITY :</b> The ingredients of this product are known to the state of California to be carcinogenic. The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP. No significant exposure to any ingredient is thought to occur during the use in which the ingredients are bound to other materials in the liquid state as in paints and coatings
<b>MUTAGENICITY :</b> There is no substantial evidence of mutagenic potential.
<b>REPRODUCTIVE TOXITY</b>
<b>REPRODUCTIVE EFFECTS :</b> Not Applicable
<b>TERATOGENIC EFFECTS :</b> Not Applicable
<b>IRRITANCY:</b> Not Applicable
<b>CLASSIFICATION :</b> Not Applicable
<b>SIGNAL WORD :</b> Warning
<b>HAZARD STATEMENTS :</b> Flammable.
<b>PRECAUTIONARY STATEMENTS :</b> Keep away from sources of ignition. Use personal protective equipment as required.

### SECTION 4- FIRST-AID MEASURES

<b>EYES :</b> In case of contact, flush eyes with large amounts of running water for at least 15 min. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention
<b>SKIN :</b> Remove as much of the material as possible using mechanical/waterless methods before washing with water. Seek medical attention for any burns or irritation resulting from contact with cure by-products
<i>Section 4 – First Aid Measures continued</i>

**INGESTION** : Never give an unconscious person anything to drink. If unconscious, treat for shock. Notify a physician or the nearest poison control center immediately. If conscious, have the person rinse his mouth with cold water. Do not attempt to induce vomiting (vomiting may occur naturally, but should be avoided if possible). If unconscious and vomiting, turn the person to his side to avoid choking.

**INHALATION** : If inhaled, remove to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

**SYMPTOMS** : Not Applicable

**EFFECTS** : Not Applicable

**NOTES TO PHYSICIAN** : Not Applicable

**SECTION 5- FIRE AND EXPLOSION HAZARDS**

**SUITABLE EXTINGUISHING MEDIA** : Use foam, dry chemical, CO<sub>2</sub>, or water.

**FIRE FIGHTING PROCEDURES** : As appropriate for surrounding materials/equipment. If electrical equipment is involved, the use of foam should be avoided. Use water spray to cool non-involved containers.

**UNUSUAL FIRE AND EXPLOSION HAZARD** : There are no known unusual fire or explosion hazards.

**COMBUSTION PRODUCTS** : Carbon monoxide, carbon dioxide, nitrogen oxides

**SECTION 6- ACCIDENTAL RELEASE MEASURES**

**SMALL SPILL** : Remove all sources of ignition. Ventilate area. Absorb spill with absorbent material such as sawdust, vermiculite or sand, and place in a closed container. In case of large spill, dike the area to prevent this material from entering water systems or sewers.

**LARGE SPILL** : For major spills call Chemtrec (800-424-9300).

**ENVIRONMENTAL PRECAUTIONS**

**WATER SPILL** : Not Applicable

**LAND SPILL** : Not Applicable

**PERSONAL PRECAUTIONS** : Wear protective gloves/protective clothing/eye protection/face protection.

**PROTECTIVE EQUIPMENT** : Not Applicable

**EMERGENCY PRECAUTIONS** : Not Applicable

**METHOD OF CLEANING UP** : Collect spillage.

**SECTION 7- HANDLING AND STORAGE**

**PRECAUTIONS FOR SAFE HANDLING** : Avoid breathing aerosols, spray mists and heated vapors. Avoid prolonged or repeated skin contact.

**CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES** : Keep containers properly sealed when stored indoors, in a cool well-ventilated area. Keep contents away from moisture. Keep away from heat, sparks and open flame. As standard practice, never use welding or cutting torch on or near any container (even empty) as an explosion may occur. Care should be taken to prevent moisture condensation in the container. Avoid storage above 100°F.

**SECTION 8- EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**OSHA TABLE COMMENTS:**

NL = Not Listed

**EXPOSURE LIMITS** : Not Applicable

**ENGINEERING CONTROLS** : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s). General ventilation is recommended. Additional local exhaust ventilation is recommended where vapors, mists, or aerosols may be released.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE** : Wear protective eyeglasses or chemical safety goggles, per OSHA eye and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protection devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

**SKIN** : Wear chemical resistant gloves. Wear protective clothing to prevent skin contact. Keep exposed skin area to a minimum. Eye wash station and safety shower should be available.

**RESPIRATORY** : If exposure can exceed the PEL/TLV, use only NIOSH/MSHA approved air purifying or supplied air respirator operated in a positive pressure mode per the NIOSH/OSHA occupational health guidelines for chemical hazards. If it is possible to generate significant levels of vapors or mists, a NIOSH approved or equivalent respirator is recommended.

**WORK HYGIENIC PRACTICES** : Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work, using plenty of soap and water. Open containers of food and beverages should be kept away from areas where the product is used or stored. Eating, drinking, smoking and application of cosmetics should be prohibited in areas where the product is being used.

**OTHER USE PRECAUTIONS** : Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

**COMMENTS** : Not Applicable

## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE** : Viscous liquid  
**COLOR** : White, Gray, Tan, ect.  
**ODOUR** : Petroleum odor  
**ODOUR THRESHOLD** : Not Applicable  
**pH** : Not Applicable  
**MELTING POINT** : Not Applicable  
**BOILING POINT** : 310 - 385°F  
**FLASH POINT AND METHOD** : >108°F (COC) ASTM D-92  
**EVAPORATION RATE** : Slower than ether  
**FLAMMABILITY(Solid/Gas)** : Not Applicable  
**FLAMMABLE LIMITS** : Not Applicable TO Not Applicable  
**VAPOUR PRESSURE** : Not Determined  
**VAPOUR DENSITY** : Heavier than air  
**SPECIFIC GRAVITY** : Not Applicable  
**% SOLUBILITY IN WATER** :  
**OCTANOL/WATER PARTITION COEFFICIENT** : Not Applicable  
**AUTO-IGNITION TEMPERATURE** : Not Applicable  
**DECOMPOSITION TEMPERATURE** : Not Applicable  
**POUR POINT** : Not Applicable  
**MOLECULAR FORMULA** :  
**% VOLATILE** : Not Applicable  
**VISCOSITY** : Not Applicable  
**VOC**: <250 Grams/Liter EPA Method 24

## SECTION 10- STABILITY AND REACTIVITY

**STABLE** : Yes  
**HAZARDOUS POLYMERIZATION** : Will not occur.  
**CONDITIONS TO AVOID** : Keep away from heat, sparks, or flames  
**STABILITY** : This is a stable product.  
**POLYMERIZATION** : Not Applicable  
**HAZARDOUS DECOMPOSITION PRODUCTS**: By high heat or fire: Carbon Monoxide, Oxides of Nitrogen and various hydrocarbon fragments.  
**INCOMPATIBLE MATERIALS** : Avoid strong oxidizing agents, concentrated nitric and sulfuric acids, halogen, and molten sulfur.  
**POSSIBILITY OF HAZARDOUS REACTIONS** : Not Applicable

## SECTION 11- TOXICOLOGICAL INFORMATION

**SIGNS AND SYMPTOMS OF OVEREXPOSURE** : Dizziness and shortness of breath.  
**ACUTE EFFECTS** :  
**EYE** : Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, and swelling.  
**SKIN** : Exposure causes skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking. Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.  
**INHALATION** : Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.  
Symptoms are more likely seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include: Irritation (nose, throat, and respiratory tract), metallic taste in mouth, impaired coordination, confusion, CNS depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, and unconsciousness).  
**INGESTION** : Single dose or oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.  
Symptoms may include: Gastrointestinal irritation (nausea, vomiting, and diarrhea) and possible liver damage. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.  
**TARGET ORGAN** : Not Applicable  
**CHRONIC EFFECTS** : Not Applicable  
**ACUTE TOXICITY VALUES** : Not Applicable  
**SYMPTOMS OF RELATED**  
**PHYSICAL** : Not Applicable  
**CHEMICAL** : Not Applicable  
**TOXICOLOGICAL CHARACTERISTICS** : Not Applicable  
**DELAYED AND IMMEDIATE EFFECTS** : Not Applicable

## SECTION 12- ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION**: Not Applicable  
**PERSISTENCE AND DEGRADABILITY** : Not Applicable

Section 12 – Ecological Information continued

**BIO-ACCUMULATIVE POTENTIAL** : Not Applicable  
**MOBILITY** : Not Applicable

**SECTION 13- DISPOSAL CONSIDERATIONS**

**WASTE TREATMENT METHODS**

**DISPOSAL METHOD:** This product has been tested and found to have a flash point above 140°F . If discarded in liquid form, this product may be treated as hazardous waste based on the characteristic of ignitability as defined under the federal RCRA regulations (40 CFR261).

For further, information contact your state or local solid waste agency or the United States Environmental Protection Agency's RCRA hotline (1-800-434-9300 or 202-382-3000). Chemical waste, even small quantities should never be poured down drains, sewers or waterways. Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

**EMPTY CONTAINER** : Not Applicable

**SECTION 14- TRANSPORT INFORMATION**

**DOT (DEPARTMENT OF TRANSPORTATION)**

**TECHNICAL NAME** : Not Applicable

**UN NUMBER** : Not Applicable

**UN PROPER SHIPPING NAME** : Not Applicable

**TRANSPORT HAZARD CLASS** : Not Applicable

**PACKING GROUP** : Not Applicable

**MARINE POLLUTANT** : Not Applicable

**SPECIAL PRECAUTIONS** : Not Applicable

**SECTION 14- REGULATORY INFORMATION**

**UNITED STATES**

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** This material does not contain any substances in the list of Toxic Chemicals subject to Section 313 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III), in excess of the applicable de minimis concentrations as specified in Section 372.38 (a).

**FIRE** : Yes      **PRESSURE GENERATING** : No

**REACTIVITY** : No    **ACUTE** : Yes    **CHRONIC** : Not Applicable

**313 REPORTABLE INGREDIENTS:** Reportable

<u>Component</u>	<u>CAS No</u>	<u>Weight % (± 2%)</u>
Crystalline Silica	14808-60-7	31 (as respirable dust only, not while in liquid form)

**302/304 EMERGENCY PLANNING**

**EMERGENCY PLAN:** Not Applicable

**OTHER REGULATION** : Not Applicable

**SECTION 15- OTHER INFORMATION**

**Glossary:** ACGIH- American Conference of Governmental Industrial Hygienist

IARC- International Agency for Research on Cancer

MSHA- Mine Safety and Health Administration

NIOSH- National Institute for Occupational Safety and Health

NTP- National Toxicology Program

OSHA- Occupational Safety and Health Administration

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**End of Material Safety Data Sheet**