



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

## SAFETY DATA SHEET

### SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** ACU-FLEX:70  
**Product Composition/ Use:** Single component moisture cure silicone roof coating  
**CAS Number:** Mixture  
**Manufacturer Name:** Advanced Coating Systems, Inc.  
**Street Address:** 2230 Towne Lake Pkwy, Bldg.1000 Ste.150  
**City:** Woodstock **State:** GA **Zip Code:** 30189 **Phone:** (678)445-0040  
**Emergency Telephone:** INFOTRAC 24hrs, (800)535-5053

### SECTION 2- HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE :** Viscous liquid

**IMMEDIATE CONCERNS :** Use as directed – For Industrial Use Only

#### POTENTIAL HEALTH EFFECTS

**EYES :** May cause eye irritation.

**SKIN :** May cause skin irritation.

**SKIN ABSORPTION :** None.

**INGESTION :** Harmful if swallowed.

**INHALATION :** N/A

**CHRONIC :** None.

**CARCINOGENICITY :** Contains crystalline silica.

**MUTAGENICITY :** None.

#### REPRODUCTIVE TOXITY

**REPRODUCTIVE EFFECTS :** None

**TERATOGENIC EFFECTS :** None

**IRRITANCY:** None

#### GHS CLASSIFICATION :

**Eye irritation:** Category 2

**Flammable liquid:** Category 4

**Carcinogen:** Category 1

## PICTOGRAMS



**SIGNAL WORD:** Danger

### HAZARD STATEMENTS:

Flammable liquid and vapor.  
Harmful if swallowed and enters airways.  
May cause cancer (crystalline silica is a known carcinogen if inhaled).  
Causes eye irritation.  
Harmful to aquatic life.

### Precautionary Statement

Keep container tightly closed.  
Keep away from heat/sparks/open flame – No Smoking  
Wear protective gloves and eye/face protection.  
Ground/bond container equipment  
For industrial and Institutional use only – For outside use only  
Use explosion-proo electrical/ventilating/lighting/ equipment and non-sparking tools  
Take precautionary measure against static discharge  
Store in cool/well ventilated place  
Avoid release to the environment  
Avoid activities (sanding, crushing) of finished product that can produce airborne fibers

## SECTION 3- COMPOSITION AND INFORMATION ON INGREDIENTS\*

Components	Cas No.	% by Wt
Crystalline Silica **	14808-60-7	30 to 35
Titanium Dioxide **	13463-67-4	5 to 10
Pigment Dispersions (as carbon black**)	1333-86-4	<0.5
Methyl Oximino Silane	22984-54-9	<7

\*The specific chemical identity and exact percentages (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of § 1910.1200.

\*\* These materials are bound in liquid/ paint and are not airborne or in dust form.

\*\* “WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOW TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM”

## SECTION 4- FIRST-AID MEASURES

**EYES :** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**SKIN :** Wash contaminated area with soap and water. Remove contaminated clothing and wash before reuse. If irritation develops, get medical attention.

**INGESTION :** If swallowed, DO NOT induce vomiting. Seek immediate medical attention.

**INHALATION :** Remove person to fresh air. If respiratory irritation, dizziness, nausea, or unconsciousness, see immediate medical assistance. If breathing has stopped, give artificial respiration.

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

**SYMPTOMS :** May cause allergic skin reaction with symptoms of reddening, itching, swelling and rash.

**EFFECTS :** May cause defatting of the skin with symptoms of dryness and cracking.

**NOTES TO PHYSICIAN :** Contains petroleum distillates that may be harmful if swallowed and enters airways.

## SECTION 5- FIRE AND EXPLOSION HAZARDS

**SUITABLE EXTINGUISHING MEDIA :** Foam, extinguishing power, carbon dioxide, water fog. In case of fire, cool endangered containers with water fog.

**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 :** As for petroleum distillates (mineral spirits).

**COMBUSTION PRODUCTS :** Carbon monoxide, carbon dioxide, nitrogen oxides, silicone 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 :** In case of large spill, dike the area to prevent the material from entering water system or sewers. For major spills, call Infotrac (800-535-5053).

### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL :** For major spills, call Infotrac (800-535-5053).

**LAND SPILL :** For major spills, call Infotrac (800-535-5053).

**PERSONAL PRECAUTIONS:** Do not eat, drink or smoke while cleaning up. Use a self-contained respirator, a mask with filter (type A class 3) or a filtering mask (e.g., EN 405). Wear protective clothing, safety glasses and impervious gloves (e.g., neoprene gloves). Ensure adequate ventilation. Avoid all sources of ignition, hot surfaces and open flames.

**PROTECTIVE EQUIPMENT:** Use a self-contained respirator, a mask with filter (type A class 3) or a filtering mask (e.g., EN 405). Wear protective clothing, safety glasses and impervious gloves (e.g., neoprene gloves).

**EMERGENCY PRECAUTIONS :** Avoid all sources of ignition, hot surfaces and open flames.

**METHOD OF CLEANING UP:** Eliminate all ignition sources. Runoff may create fire or explosion hazard in sewer system. Absorb on fire retardant, liquid-absorbing material (treated sawdust, diatomaceous earth, sand). Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

## SECTION 7- HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Avoid contact with eyes. Avoid skin contact and breathing mists/vapors. Use in well-ventilated area away from all ignition sources. Switch off all electrical devices such as parabolic heaters, hotplates, storage heaters etc. in good time for them to have cooled down before commencing work. Do not smoke; do not weld. Do not empty waste into sanitary drains. Take measures to prevent the buildup of electrostatic charge.

**CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:** Storage containers must be grounded and bonded. Store away from all ignition sources in a cool area equipped with an automatic sprinkling system. Ensure adequate ventilation. **Shelf Life 1 Year** when stored (Unopened Containers) at temperatures between +2°C to +30°C (35°F to 85°F) - Store only in the original container.

## SECTION 8- EXPOSURE CONTROLS AND PERSONAL PROTECTION

### OSHA TABLE COMMENTS:

OSHA - Final PELs – Crystalline Silica Table Z-3 Mineral Dusts

Titanium dioxide - 15 mg/m<sup>3</sup> TWA (total dust) U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

**EXPOSURE LIMITS:** Crystalline Silica - U.S. - OSHA - Final PELs - Table Z-3 Mineral Dusts Quartz (30)/(%SiO<sub>2</sub> + 2) mg/m<sup>3</sup> TWA, total dust; (250)/(%SiO<sub>2</sub> + 5) mppcf TWA, respirable fraction; (10)/(%SiO<sub>2</sub> + 2) mg/m<sup>3</sup> TWA, respirable fraction. Titanium dioxide - 15 mg/m<sup>3</sup>

**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 :** For Industrial Use Only – Use only as directed.

**COMMENTS :** Avoid sanding or other activities that may produce airborne fibers from finished product.

## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE** : Viscous liquid  
**COLOR** : White, Lt. Grey, Grey, or Tan  
**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** : LEL 1.1 – UEL 5.0  
**VAPOUR PRESSURE** : Not Determined  
**VAPOUR DENSITY** : Heavier than air  
**SPECIFIC GRAVITY** : Average 1.23 to 1.25  
**% SOLUBILITY IN WATER** : Negligible  
**OCTANOL/WATER PARTITION COEFFICIENT** : Not Applicable  
**AUTO-IGNITION TEMPERATURE** : Not Applicable  
**DECOMPOSITION TEMPERATURE** : Not Applicable  
**POUR POINT** : Not Applicable  
**MOLECULAR FORMULA** :  
**% VOLATILE** : <250 Grams/Liter EPA Method 24  
**VISCOSITY** : Not Applicable  
**MOLECULAR WEIGHT**: Not Applicable

## SECTION 10- STABILITY AND REACTIVITY

**STABLE** : Stable  
**HAZARDOUS POLYMERIZATION** : Will not occur.  
**CONDITIONS TO AVOID** : Keep away from heat, sparks, or flames  
**STABILITY** : Stable under normal conditions of use and storage.  
**POLYMERIZATION** : Will not occur.  
**HAZARDOUS DECOMPOSITION PRODUCTS**: By high heat or fire: Carbon Monoxide, Oxides of Nitrogen and various hydrocarbon fragments.  
**INCOMPATIBLE MATERIALS** : Avoid water, strong oxidizing agents, concentrated nitric and sulfuric acids, halogen, and molten sulfur.  
**POSSIBILITY OF HAZARDOUS REACTIONS** : Does not occur.

## 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** : Crystalline Silica: IARC - Group 1 (Carcinogenic to Humans) Silica, quartz Monograph 100C [2012] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997]  
Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. In animal studies MEKO produced tumors in rats. Provide ventilation during use to control MEKO exposure or use respiratory protection.  
**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:

The coating diluents, petroleum naphtha, is biodegradable and does not accumulate in the food chain. Petroleum naphtha has a very low acute toxicity.

Petroleum Hydrocarbon Distillates: 96hr LC50 Oncorhynchus mykiss 2 mg/L; 48hr EC50 Daphnia magna EC50 1.4 mg/L; 72hr EC50 Pseudokirchnerella subcapitata 1 mg/L

The uncured coating will release methylethylketoxime (MEKO) when in contact with water. MEKO has been determined to be biodegradable and has a static 96 hours LC50 of 48mg/L (bluegill) and 48 hours EC50 of 750 mg/L (daphnia).

**PERSISTENCE AND DEGRADABILITY:** Biodegradation is not applicable to inorganic substances such as crystalline silica, quartz.

**BIO-ACCUMULATIVE POTENTIAL:** There is no evidence to suggest bioaccumulation will occur.

**MOBILITY:** N/A

**OTHER ADVERSE EFFECTS:** N/A

## SECTION 13- DISPOSAL CONSIDERATIONS

### WASTE TREATMENT METHODS

**DISPOSAL METHOD:** This product has been tested and found to have a flash point below 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 CFR 261).

**EMPTY CONTAINER:** Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

## SECTION 14- TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**TECHNICAL NAME:** Roof Coating, Not Regulated

(49CFR: Applicable for domestic transportation by highway and rail, but not air or vessel) (See 49CFR 173.150(F)(1). Non bulk packaging (less than 119 gallons, material ships as not regulated. (See 49CFR 173.150(F)(2).

### Ship Via Air or Vessel ONLY

**UN NUMBER:** UN1993

**UN PROPER SHIPPING NAME:** Flammable liquid, N.O.S. (mineral spirits)

**TRANSPORT HAZARD CLASS:** 3

**PACKING GROUP:** III

**MARINE POLLUTANT:** N/A

**SPECIAL PRECAUTIONS:** N/A

**TRANSPORT HAZARD CLASS :** Not Applicable

**PACKING GROUP :** Not Applicable

**MARINE POLLUTANT :** Not Applicable

**SPECIAL PRECAUTIONS :** Not Applicable

## SECTION 14- REGULATORY INFORMATION

**TSCA (Toxic Substances Control Act) Regulations:** This material or its components are listed on the TSCA Chemical Substance Inventory and is in compliance with all applicable rules and orders.

**SARA:** 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).

### State Right to Know Information:

The following chemicals are specifically listed by individual states; other specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

#### Massachusetts, New Jersey, Pennsylvania:

Right to know Extraordinarily Hazardous Substance Lists:

Reportable Component	CAS No	Weight % (+ 2%)
Crystalline Silica (as respirable dust only, not while in liquid form)	14808-60-7	31
Petroleum Hydrocarbon Distillates	64742-47-8	15 – 20
Methyl Oximo silane	22984-54-9	< 5

#### California Proposition 65:

Warning: This product contains chemicals known to the state of California to be Carcinogenic.

Reportable Component	CAS No	Weight % (+ 2%)
Crystalline Silica (as respirable dust only, not while in liquid form)	14808-60-7	31%
Pigment Dispersion (as carbon black) (as respirable dust only, not while in liquid form)	1333-86-4	<0.5%

## SECTION 15- OTHER INFORMATION

DATE ISSUED:	02/01/2016
REVISION:	12/17/2015
SDS REF. No:	Flex:70
REVISION INDICATOR:	1.2

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**End of Material Safety Data Sheet**