



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

MATERIAL 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
Emergency Telephone: INFOTRAC 24hrs, (800)535-5053

SECTION 2- COMPOSITION AND INFORMATION ON INGREDIENTS

Components	Cas No.	% by Wt
Crystalline Silica	14808-60-7	31 ± 2%
OSHA PEL:TWA 10 mg/m3	(as respirable dust – not in liquid form)	
ACGIH PEL:TWA 0.1 mg/m3	(as respirable dust – not in liquid form)	
Petroleum Hydrocarbon Distillates	64742-47-8	Less than 17%
500 ppm 8 hrs TWA (OSHA)		
100 ppm 8 hrs. TWA (ACGIH)		

SECTION 3- HAZARDS IDENTIFICATION

Health Hazards: Irritating to eyes, respiratory system and skin. Common irritation symptoms- headache, nausea, nose and throat irritation-may result from overexposure.
Appearance: Viscous Liquid
Odor: Petroleum odor
 Read the entire MSDS for a more thorough assessment to the hazard information on this product.

SECTION 4- FIRST-AID MEASURES

General: In case of accident or if you feel unwell, seek medical advice IMMEDIATELY. (Show the label where possible.)
Eye contact: 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.
Skin Contact: 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.
Inhalation: If inhaled, remove to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.
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.

SECTION 5- FIRE AND EXPLOSION HAZARDS

Fire and Explosion Hazards: This product is considered combustible and is a fire hazard. It supports combustion and decomposes under fire conditions to give off toxic materials. Do not pour, spill or store near heat, spark sources or open flame.
Extinguishing Media: Use foam, dry chemical, CO₂, 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.
Fire Fighting Protective Equipment: Wear self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode and full protective clothing (Bunker Gear) when fighting fires.

SECTION 5- FIRE AND EXPLOSION HAZARDS - continued

Flash Point: >108 °F **Method Used:** TCC

Flammable Limits in Air by Volume (Lower): 1.1

Flammable Limits in Air by Volume (Upper): 5.0

Rate of Burning: N/A

Explosive Power: N/A

Sensitivity to Static Discharge: Slight

Combustion Products: Carbon monoxide, carbon dioxide, nitrogen oxides

SECTION 6- ACCIDENTAL RELEASE MEASURES

For major spills call Infotrack (800-535-5053).

Spills, Leaks, or Releases: 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. (See section 12: Disposal Considerations)

SECTION 7- HANDLING AND STORAGE

Handling: Avoid breathing aerosols, spray mists and heated vapors. Avoid prolonged or repeated skin contact. (See Section 8—Exposure Control for details).

Storage Requirements: 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.

Storage Temperature: Avoid storage above 100°F.

SECTION 8- EXPOSURE CONTROLS AND PERSONAL PROTECTION

PREVENTATIVE MEASURES:

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

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.

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:

Eye Protection: 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 Protection: 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 Protection: 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.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance: (color-White, Lt Grey, Dark Grey, Tan) viscous liquid

Odor: Petroleum odor.

Flash Point: >108 °F

Vapor Pressure (mm Hg at 20°C): Not Determined

Vapor Density (Air=1): Heavier than air

Boiling Point: 310 - 385°F

Melting Point: Not Determined

Solubility (Water): Negligible

Specific Gravity: (H2O=1) 1.23

Evaporation Rate: Slower than ether

VOC: <250 Grams/Liter EPA Method 24

SECTION 10- STABILITY AND REACTIVITY

Hazardous Decomposition or Byproducts: By high heat or fire: Carbon Monoxide, Oxides of Nitrogen and various hydrocarbon fragments.

Chemical Stability: This is a stable product.

Conditions to Avoid: Keep away from heat, sparks, or flames

Incompatibility with other Substances: Avoid strong oxidizing agents, concentrated nitric and sulfuric acids, halogen, and molten sulfur.

Hazardous Polymerization: Will not occur.

SECTION 11- TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

No significant exposure to any ingredient is thought to occur during use in which the ingredients are bound to other materials in the liquid state as in paints and coatings.

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).

Skin Contact: 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.

Eye Contact: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, and swelling.

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.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing respiratory and skin disorders.

Chronic Effects: Prolonged or repeated skin contact may cause dryness, defatting, and dermatitis.

Carcinogenicity: 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.

Mutagenicity: There is no substantial evidence of mutagenic potential.

SECTION 12- DISPOSAL CONSIDERATIONS

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).

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.

SECTION 13- TRANSPORT INFORMATION

DOT: Roof Coating, Not Regulated.

Transportation Emergency Telephone Number: 1-800-535-5053 (INFOTRAC)

SECTION 14- REGULATORY INFORMATION

OSHA: Not Regulated

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. One or more of the components may be exempt from listing on the TSCA Inventory.

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 MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

MA right to know Extraordinarily Hazardous Substance List:

Reportable Component	CAS No	Weight % (+ 2%)	
Crystalline Silica	14808-60-7	31	(as respirable dust only, not while in liquid form)

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	14808-60-7	31	(as respirable dust only, not while in liquid form)

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

For Your Protection: Advanced Coatings Systems, Inc. warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTY, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. THE USER SHOULD CONDUCT SUFFICIENT INVESTIGATION TO ESTABLISH THE SUITABILITY OF ANY PRODUCT FOR ITS INTENDED USE. Liability of Advanced Coatings Systems, Inc. for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with proper shipping, handling, and storage procedures, and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made known to handlers, processors, and end users.

End of Material Safety Data Sheet