

MATERIAL SAFETY DATA SHEET

FOR COATINGS RESINS AND RELATED MATERIALS

PRODUCT NAME: Randolph 345 Acid Proof Paint

PRODUCT CODE: Tar, Liquid

UN1999 TAR, LIQUID, 3, PG III

FLAMMABLE LIQUID

HMIS CODES: H-2 F-23 R-0 PP-I

PRODUCT CLASS: Flammable Liquid

SECTION I - MANUFACTURER IDENTIFICATION

PREPARED BY: Consolidated Aircraft Coatings
P.O. Box 3129, Riverside, CA 92519

DATE OF PREP:

01/04/11

STREET ADDRESS: 4343 Fort Drive, Riverside CA 92509

NAME OF PREPARER: Greg Albarian

EMERGENCY TELEPHONE NO. - Chemtrec (800) 424-9300, Int'l (703) 527-3887 (International Call Collect)

INFORMATION TELEPHONE NO. - (951) 684-4280 (951) 809-7144 (760) 782-1947

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

Non-Hazardous Component	Weight %	OSHA PEL	ACGIH TLV	Other Limits Recommended
Gilsonite (CAS #12002-43-6)	0-35	N.A.	N.A.	None
Hazardous Components				
Asphalt** (CAS #8052-42-4)	0-70	N.E.	*5mg/m ³	*5mg/m ³ (NIOSH)
Aliphatic Hydrocarbons (Stoddard)** (CAS #8052-41-3)	20-50	100 ppm	100 ppm	350mg/m ³ (NIOSH)
Aromatic Petroleum Distillates** (CAS #64742-95-6)	3-40	100 ppm	N.E.	None

N.A. = Not Applicable

OSHA = Occupational Safety and Health Administration

N.E. = Not Established

ACGIH = American Conference of Governmental Industrial Hygienists

PEL = Permissible Exposure Limits

NIOSH = National Institute for Occupational Safety and Health

TLV = Threshold Limit Value

MSHA = Mine Safety and Health Administration

* = Exposure guidelines for asphalt fumes from heating.

** This material is subject to the reporting requirements of section 313 of the Emergency Planning and the Community Right-To-Know Acts of 1986 and of 40 CFR 372.

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION III - PHYSICAL DATA

BOILING RANGE: 300-335° F.

SPECIFIC GRAVITY (H₂O= 1): 0.85-0.97

VAPOR DENSITY (Air = 1) @ 20°C Volatiles: >4

EVAPORATION RATE (Butyl Acetate=1)@ 77°F: 0.2

APPEARANCE AND ODOR: Brown to Black Liquid. Petroleum odor.

SOLUBILITY IN WATER: Insoluble

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 100°F Min. (38° C Min.)

METHOD USED: TCC

FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA: Foam, carbon dioxide (CO₂), or dry chemical. Water may be used to cool containers exposed to heat.

SPECIAL FIREFIGHTING PROCEDURES: Minimize breathing vapors, gases or fumes of decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Above flash point, material will release flammable vapors that can burn or be explosive in confined spaces if ignited. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen. Combustible liquid and vapor.

SENSITIVITY TO STATIC DISCHARGE: Unknown.

SECTION V - HEALTH HAZARD DATA

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Fumes from hot material can be unpleasant and may cause nausea, headache, eye, and respiratory irritation. Product may cause respiratory irritation, headache, dizziness, nausea and vomiting.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Thermal burns may result from contact with hot material. Prolonged or repeated contact with skin may cause dermatitis.

INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE: Some asphalt contains sulfur compounds that may form hydrogen sulfide (H₂S) when heated. The rotten eggs odor of H₂S is unreliable as an indicator of concentration because it may be entirely masked by the odor of the asphalt. Signs and symptoms of overexposure to H₂S include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbance, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. H₂S concentrations of 700-1000 ppm can be extremely hazardous or fatal.

HEALTH HAZARDS (ACUTE AND CHRONIC): Overexposure may cause anesthesia, headache, nausea or dizziness. Breathing the vapors may irritate the nose and throat. Detectable amounts of chemicals or substances known to the state of California to cause cancer, birth defects, or other reproductive harm may be found in this product. Use care when handling chemical and petroleum products even though they are water reducible.

CARCINOGENICITY: NTP CARCINOGEN: N/A IARC MONOGRAPHS: N/A OSHA REGULATED: N/A MEDICAL

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT: Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: If this product comes in contact with the eyes, flush with plenty of water for at least 15 minutes and seek medical attention.
Skin Contact: If this product comes in contact with skin, remove material with mineral oil or vegetable oil, then wash with soap and plenty of water. If the contact is with hot material over a large area of the body, cool area with water. Do not use iced water or cold packs if burned area covers more than 10% of body—it may contribute to shock. Get medical attention for large burns or if irritation from contact persists. Skin contact with clothing saturated with solvent can cause severe burns. Contaminated clothing should be removed immediately and excess material wiped from the skin.

Inhalation: If breathing difficulties, dizziness, or lightheadedness occurs when working in areas with vapor concentration, victim should seek air free of vapors. If victim experiences continued breathing difficulties, administer oxygen until medical assistance can be rendered. If breathing stops, begin artificial respiration and seek immediate medical attention.

Ingestion: If this product is swallowed. DO NOT INDUCE VOMITING. Seek immediate medical attention. NOTE TO PHYSICIAN: Perform gastric lavage in accordance with procedure for ingestion of petroleum products.

ADDITIONAL HEALTH DATA:

Asphalt: No association has been established between industrial exposure to petroleum asphalt and cancer in humans. There was only limited evidence that steam-refined asphalts were carcinogenic to animals. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate; mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of mists, fumes, or vapors should be reduced to a minimum. We strongly recommend that the precautions outlined in this MSDS be followed when handling this material.

Solvent: Hydrocarbon solvents derived from petroleum may cause irritation when in contact with eyes and skin. Prolonged or repeated contact with skin can cause dermatitis. Systemic effects of these solvents are respiratory tract irritation, central nervous system depression (narcosis) in high concentration, nausea, vomiting, and possible damage to liver and kidneys. No known studies have associated these solvents with carcinogenic activity.

SECTION VI - REACTIVITY DATA

STABILITY: Stable.

CONDITIONS TO AVOID: Heat, sparks, open flames. Auto-ignition temperature unknown.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Combustion: carbon dioxide (CO₂), sulfur oxides (SO_x), hydrogen sulfide (H₂S), smoke, fumes.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate sources of ignition. Add sand, earth, or other suitable absorbent to spill area. Let cool, if hot. Transfer to suitable containers. Avoid sparks or hot metal surfaces. Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

WASTE DISPOSAL METHOD: Dispose of accordance with local, state and federal regulations.

RECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Vapors are heavier than air and may travel along the ground or be moved by ventilation to locations distant from the point of material handling. To prevent ignition, avoid smoking, keep away from heat, open flames, and sources of static or electrical sparking. Use explosion proof motors and equipment. Tank trucks or other containers should be grounded and/or bonded when the material is transferred. Store in a cool, dry place, out of direct sunlight and away from heat, sparks and open flame.

EMPTY CONTAINER PRECAUTIONS: Toxic quantities of hydrogen sulfide (H₂S) may present in storage tanks and bulk transport vessels that contain or have contained this material. Persons opening or entering these compartments should first determine if H₂S is present. See Special Protection Information section. DO NOT ATTEMPT RESCUE WITHOUT WEARING APPROVED SUPPLIED-AIR OR self-contained breathing equipment.

OTHER PRECAUTIONS: Use with adequate ventilation. Avoid open flames. Minimize breathing vapor, mist, and fumes. Avoid prolonged and repeated contact with skin. Adhere to good hygienic practices.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use supplied-air respirator in confined areas or when vapors exceed TLV limits.

VENTILATION: Local Exhaust: In enclosed areas. Mechanical: In enclosed areas.

PROTECTIVE GLOVES: Solvent impervious gloves.

EYE PROTECTION: Safety glasses or face shield for liquid and/or hot material.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Long sleeves and impervious clothing to protect from splashing.

WORK/ HYGIENIC PRACTICES: Wash hands with soap and water before eating. Dispose of contaminated clothing as soon as possible.

SECTION IX- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.