



SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Arizona Chemical Company
P.O. Box 550850
Jacksonville, FL 32255

24 Hour Emergency Assistance:
Chemtrec: 800/424-9300
Other Information: 800/733-1374

Product Name: SYLVABLEND® SF75

Chemical Identity: Complex mixture of turpentine oil (containing mainly alpha-pinene, beta-pinene and dipentene) and tall-oil fatty acids, low-boiling fraction (containing mainly fatty acids and esters).

Chemical Family: Mixture of terpenes and fatty acids.

CAS Number: Mixture of 8006-64-2 and 65997-03-7

SECTION 2 COMPOSITION/INFORMATION OF INGREDIENTS

COMPONENT	CAS NUMBER	WT. %	ACGIH TLV		OSHA PEL	
			TWA	STEL	TWA	STEL
Turpentine oil	8006-64-2	75-80	20 ppm	NE	100 ppm	NE
Fatty acids, tall-oil, low-boiling	65997-03-7	20-25	NE	NE	NE	NE

TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
TWA = Time-Weighted Average (8 hours)
STEL = Short Term Exposure Limit (15 minutes)
NE = Not Established

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Dark brown liquid with an acrid odor.

WARNING! FLAMMABLE LIQUID AND VAPOR.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
CHRONIC EXPOSURE MAY CAUSE KIDNEY DAMAGE.
KEEP AWAY FROM HEAT, SPARKS, FLAME, STATIC ELECTRICITY OR OTHER IGNITION SOURCES.
GROUND ALL TRANSFER EQUIPMENT.
DO NOT CUT, WELD OR DRILL ON OR NEAR CONTAINER.
"EMPTY" CONTAINER RETAINS RESIDUE WHICH MAY EXPLODE IN HEAT OF A FIRE.

SECTION 3 HAZARDS IDENTIFICATION CONT'D

POTENTIAL HEALTH EFFECTS:

EYE: Product is severely irritating to the eyes. Contact may cause severe pain, burns and corneal injury. Vapors may also cause eye irritation.

SKIN: Product is irritating to skin. Irritation may be severe. Product may be absorbed through the skin. Prolonged or repeated absorption may produce central nervous system depression associated with nausea, headache, dizziness, and respiratory depression. Prolonged or repeated contact may cause drying/defatting of the skin. Chronic skin contact may cause allergic skin sensitization.

INHALATION: Vapors and mists are irritating to mucous membranes and respiratory system. Excessive inhalation may result in pneumonitis, pulmonary edema, rapid heart rate, and central nervous system depression. Continued inhalation may produce seizures, kidney and bladder damage. Aspiration into lungs may cause severe damage, including chemical pneumonitis and pulmonary edema. Repeated exposure may lead to respiratory sensitization reactions, producing an asthma-like condition.

INGESTION: Ingestion may cause gastrointestinal irritation, including burning, nausea, vomiting and diarrhea. Ingestion of large amounts may cause ataxia, confusion, rapid heartbeat, kidney and bladder damage, seizures, respiratory depression, coma and death.

SECTION 4 FIRST AID MEASURES

EYE CONTACT: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Remove material from skin and clothing.

SKIN CONTACT: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing. Call a physician. Wash clothing before reuse.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

INGESTION: If swallowed, contact a physician or poison control center immediately. DO NOT induce vomiting.

SECTION 5 FIRE FIGHTING MEASURES

Flash point: 90°F (Pensky-Martens)

Lower/Upper flammable limits: Unknown

Autoignition temperature: Unknown

Flammability classification: Flammable liquid (Class IC)

Flame propagation rate: Not applicable

Extinguishing media: Water fog, foam, carbon dioxide or dry chemical.

Special precautions: Toxic gases such as carbon monoxide may be released during fire.
Use positive-pressure, self-contained breathing apparatus and full protective clothing.

Unusual Fire and Explosion

Hazards: Keep away from all ignition sources.

SECTION 6 ACCIDENTAL RELEASE MEASURES

CONTAINMENT: Contain the discharged material. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Do not allow product to enter public drainage systems or open water courses.

CLEAN-UP PROCEDURES: Spills may present a slipping (physical) hazard. Wear appropriate protective equipment and clothing during clean-up. Avoid skin and eye contact. Ventilate contaminated area. Absorb spill with inert material. Use spark proof tools. Shovel material into appropriate container for disposal.

WATER SPILL: Product may be regulated as an oil under the Clean Water Act. Follow all applicable regulations. Follow all Local, State, Federal and Provincial regulations for disposal.

EVACUATION PROCEDURES: Isolate area. Keep unnecessary personnel away. In case of large spills, follow all facility emergency response procedures.

SPECIAL INSTRUCTIONS: Do not allow product to come into contact with skin or eyes. Do not breathe vapors or mists from the spilled material. Remove soiled clothing and launder before reuse.

SECTION 7 HANDLING AND STORAGE

HANDLING: Avoid eye and skin contact. Avoid breathing vapors or mists of this material. Use only with adequate ventilation. Keep away from ignition sources. Do not use air pressure or apply heat with open flame to remove contents of drum. After emptied, drum may retain solid, liquid and/or vapor residues. Continue to observe all precautions on label as if drum were full. Do not cut, puncture, torch or weld on or near the emptied drum. Do not use for other purposes. Empty drums should be triple-rinsed and reprocessed or disposed of in compliance with Local, State, Federal, and Provincial Environmental Regulations. Electrically ground all equipment and containers when handling this product and use non-sparking tools. Vapor space above liquid may be flammable/explosive unless blanketed with inert gas. Follow guidelines as established for NFPA Class I Flammable Liquids, NFPA 30 Flammable and Combustible Liquids Code, and NFPA 325M Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids. Maintain good housekeeping. Some porous materials such as clothing, rags, paper, insulation, or clay when wetted with this product may undergo spontaneous combustion. Keep such wetted materials well ventilated to prevent possible heat buildup. An explanation of spontaneous combustion is available in Technical bulletin #2. Please contact customer service to request a copy. Wash thoroughly after handling. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet or applying cosmetics.

STORAGE: Store at ambient temperature and atmospheric pressure. Store in tightly closed/properly vented containers. Do not store in opened or unlabeled containers. Protect containers against physical damage. Store in cool, dry, well-ventilated area away from strong oxidizers and corrosives. Outside or detached storage is preferable; inside storage should be in a standard flammable liquids storage room or cabinet. Follow guidelines as established for NFPA Class I Flammable Liquids, NFPA 30 Flammable and Combustible Liquids Code, and NFPA 325M Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EYES: Wear chemical goggles and face shield. Ensure compliance with OSHA personal protective equipment (PPE) standard for eye and face protection, 29 CFR 1910.133.

SKIN: Use impervious gloves. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Ensure compliance with OSHA personal protective equipment (PPE) standard, 29 CFR 1910.132 (general) and 138 (hand protection).

INHALATION: GAS/VAPOR: Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit-testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage, must be implemented. For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH-approved half-face piece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in Publication No. 87-116 or ANSI Z88.2-1992. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

ENGINEERING CONTROLS: Provide local exhaust and general ventilation systems to maintain airborne concentrations below OSHA, ACGIH, and manufacturer recommended exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into work areas by controlling it at its source. Use electrically grounded, explosion-proof equipment for ventilation or any handling of this product.

GENERAL: Remove contaminated clothing immediately and do not reuse without laundering. Eye wash fountains and emergency showers are recommended. Use good industrial hygiene practices in handling this material.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/state: Dark brown liquid
Odor: Acrid
Ph: Not applicable
Vapor Pressure: 3 mm Hg at 20°C (68°F) (pinenes)
Vapor density: 4.7 (pinenes)
Boiling point: Unknown
Melting point: Not applicable
Solubility in water: <1% at 25°C (77°F)
Specific gravity: 0.89 at 37°C/37°C (water=1.00)
Evaporation rate: < 1 (n-BuAc=1) (pinenes)
% Volatile by weight: 75-80

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SECTION 10 STABILITY AND REACTIVITY
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Chemical stability: Stable

Conditions to avoid: Keep away from ignition sources. Avoid prolonged storage in hot areas. Avoid strong oxidizing and porous agents.

Chemicals to avoid: May react with strong oxidizing agents. Can react violently with calcium hypochlorite, chlorine, chromium trioxide, chromyl chloride, tin chloride, hexachloromelamine and dichloromelamine. Incompatible with nitrosyl perchlorate.

Hazardous Polymerization: Polymerization may occur from contamination with acids.

Hazardous Decomposition Products: Upon decomposition, product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

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SECTION 11 TOXICOLOGICAL INFORMATION
=====**TOXICITY TO ANIMALS:****Alpha- (and Beta-) Pinene:**

ORAL, rat, LD50 = 3500 mg/kg.

Alpha-Pinene:

DERMAL, rabbit, LD50 = >5000 mg/kg.

Alpha-pinene was shown to be a primary skin irritant in rabbits. Little eye irritation was shown in rabbits exposed to 0.1 ml of undiluted alpha-pinene for 72 hours.

Beta-Pinene:

ORAL, rat, LD50 = 4700 mg/kg

Beta-pinene was shown to be a moderate skin irritant in rabbits.

Sulfate Turpentine: (58%-65% alpha-pinene)

INHALATION, rat, LC50 = 12,000 mg/m³.

ORAL, rat, LD50 = 1400 to 5700 mg/kg.

Symptoms following inhalation exposure of sulfate turpentine in rats include central nervous system depression, increased respiration rate, and decreased tidal volume. Female rats died following exposure to 5000 mg/m³ (900 ppm) for 6 hours/day, 5 days/week for 12 weeks. Slight lung damage was seen. There were no deaths in exposed male rats and guinea pigs. Minor liver and kidney changes were seen in guinea pigs exposed 45-58 times, for 4 hours at a time, to 715 ppm. Increased mortality (59%), severe CNS depression and low body weight was seen in newborn rats born to mothers that had been exposed twice daily for 10 minutes to a saturated atmosphere during days 17 to 21 days of pregnancy.

Palmitic Acid:

INTRAVENOUS, mouse, LD50 = 5700 mg/kg

IMPLANT, mouse, TDLo = 1000mg/kg Kidney, ureter and bladder tumors.

Oleic Acid:

ORAL, rat, LD50 = 7400 mg/kg

SUBCUTANEOUS, rabbit, TDLo = 390 mg/kg/17W Tumors formed at the site of application.

Oleic acid was shown to be a mild eye and skin irritant in rabbits

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SECTION 11 TOXICOLOGICAL INFORMATION CONT'D
=====**Linoleic Acid:**

ORAL, rat, LD50 = >3200 mg/kg

ORAL, mouse, LD50 = >3200 mg/kg

DERMAL, guinea pig, LD50 = >20 ml/kg

Linoleic acid was shown to be a mild eye and skin irritant in rabbits.

TOXICITY TO HUMANS:**Alpha-Pinene:**

Contact with liquid or vapors can irritate the eyes, nose, and throat. Based on sulfate turpentine: throat irritation was seen at 125 ppm and eye and nose irritation was seen at 175 ppm in humans. Product is irritating to the skin. Material may be absorbed through intact skin. A clinical study showed that a topical exposure of undiluted alpha-pinene produced severe skin irritation. Higher levels of alpha-pinene can cause headaches, dizziness, and rapid pulse and central nervous system depression. Aspiration may cause chemical pneumonitis and pulmonary edema/hemorrhage.

Chronic exposure may cause skin sensitization. Skin sensitization, characterized by redness, inflammation, itching and/or burning may result from prolonged or repeated contact. Kidney and bladder damage may occur following repeated contact. Based on turpentine, repeated or chronic occupational exposures to vapors or mist may cause respiratory sensitization.

Palmitic Acid:

Skin, human = Mild irritation

Oleic Acid:

Skin, human = 15mg/3D Moderate irritation

Linoleic Acid:

Skin, human = 75mg/3D Moderate irritation

CARCINOGENIC EFFECTS: None of this product's components are listed as carcinogens by ACGIH, IARC, NIOSH, NTP or OSHA. An association between respiratory cancer and chronic exposure to certain terpene compounds in the wood industry has been demonstrated; however, the evidence is insufficient to conclude that chronic exposure to this product may result in an increased risk of cancer. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Based on turpentine, occupational exposure may affect the development of the embryo and fetus. No information available on the toxicity of this product to the reproductive system.

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SECTION 12 ECOLOGICAL INFORMATION
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A spill of this product may produce significant toxicity to aquatic organisms and ecosystems. Based on turpentine, concentrations of approximately 100 ppm have been demonstrated to be toxic to fish (species and exposure time were not specified). However, some studies have shown that certain bacteria and fungus have the ability to degrade terpenes and thus decrease their toxicity to fish. When spilled, this product may act as an oil, causing a film, sheen, emulsion, or sludge at or beneath the surface of a body of water. Oils of any kind can cause: (a) drowning of waterfowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility; (b) lethal effect on fish by coating gill surfaces, preventing respiration; (c) potential fish kills resulting from alteration in biochemical oxygen demand; (d) asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom; and (e) adverse aesthetic effects of fouled shoreline and beaches.

SECTION 13 DISPOSAL CONSIDERATIONS

Wastes may be classified as an ignitable waste (DOO1). Do not allow this material to drain into sewers/water supplies. Wastes must be tested using methods described in 40 CFR 261 to determine if it meets applicable definitions of hazardous waste. No EPA Waste Numbers are applicable for this product's components. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Write to the address listed in Section 1 for information on heavy metals analysis and other disposal information.

SECTION 14 TRANSPORT INFORMATION

DOT - Department of Transportation Hazardous Materials Regulations

DOT Hazard Class: Class 3
DOT Proper Shipping Name: Terpene hydrocarbons, n.o.s.
Technical Name: Contains alpha-Pinene
DOT Identification Number: UN2319
Surface Freight Classification: Pinene
Packing Group: PG III
Marine Pollutant: None

SECTION 15 REGULATORY INFORMATION

Toxic Substances Control Act (TSCA): This product is defined as a mixture of turpentine oil (CASRN 8006-64-2) and tall-oil fatty acids low-boiling fraction (CASRN 65997-03-7) both of which are listed on the TSCA Inventory.

SARA, Title III, Section 313 (40 CFR 372): This product contains no toxic chemical at a level which is reportable under SARA Toxic Chemical Release Reporting Regulations.

EPA - SARA 311/312 Hazard Categories: This product has the following hazard categories: Fire; Immediate Health; Delayed Health.

New Jersey Worker and Community Right To Know Act: This product contains alpha-pinene which is listed as a hazardous substance under the Act.

Pennsylvania Worker and Community Right To Know Act: This product contains alpha-pinene which is listed as a hazardous substance under the Act.

International Inventory Status: This product is either listed or exempt from listing on the following inventories: Canada DSL, Europe EINECS, Korea ECL, Australia AICS and China IECS.

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SECTION 16 OTHER INFORMATION
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Hazard Ratings: NFPA: 2 Health 3 Fire 0 Reactivity

Revision Note: Revision 5. Revised Section 15.

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Title: Product Regulatory Technologist

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