



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® SC100
Chemical Identity: Tall Oil Fractions.
Chemical Family: Organic Acids
CAS Number: Confidential. See Section 15.

SECTION 2 COMPOSITION/INFORMATION OF INGREDIENTS

	ACGIH TLV	OSHA PEL
Exposure limit for total product	Not established	Not established

Observe exposure limits for Oil Mist (NOC):
ACGIH TWA: 5 mg/m³ Respirable; STEL 10 mg/m³ Respirable;
OSHA TWA: 5 mg/m³ Respirable

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Dark amber viscous liquid with a fatty acid odor.

ACCORDING TO ARIZONA CHEMICAL'S INTERPRETATION OF THE OSHA HAZARD COMMUNICATION STANDARD, THIS PRODUCT IS NOT A HAZARDOUS SUBSTANCE.

POTENTIAL HEALTH EFFECTS:

EYE: Direct contact may cause mild irritation. If heated product contacts the eye, thermal burns may result.

SKIN: Direct contact for prolonged periods of time may cause mild skin irritation. When it is heated, this product may cause thermal burns.

INHALATION: Inhalation of vapors from the heated product may cause mild irritation of the nose and throat in sensitive individuals.

INGESTION: Not a probable route of entry into the body.

SUBCHRONIC EFFECTS (Target Organ Effects): No effects known.

CHRONIC EFFECTS: No known effects.

SECTION 4 FIRST AID MEASURES

EYE CONTACT: In case of contact, flush eyes with plenty of water for at least 15 minutes. Call a physician if signs of irritation appear.

SKIN CONTACT: As good industrial hygiene practice, at the end of each work shift, or in case of skin contact wash skin with plenty of soap and water. If irritation develops or persists, get medical attention.

INHALATION: Remove to fresh air if effects occur from inhalation of vapors from the heated product. If affected person is not breathing, apply artificial respiration. Seek medical attention.

INGESTION: Emergency care should not be needed. If swallowed, contact a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by medical personnel.

SECTION 5 FIRE FIGHTING MEASURES

Flash point: >201°F (Cleveland Open Cup)
Upper/lower flammable limits: Unknown
Autoignition temperature: Unknown
Flammability classification: Non-hazardous
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: This product can undergo spontaneous heating or combustion when exposed to heat or sunlight under certain conditions. (See Section 10 also)

SECTION 6 ACCIDENTAL RELEASE MEASURES

Large spills: In a clean area, dike and recover for reuse. Dispose of contaminated material.

Small spills: Mix with non-combustible absorbent material and dispose.

SECTION 7 HANDLING AND STORAGE

Use with adequate ventilation. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid inhalation of mists/vapors/fumes.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EYES: Use safety glasses. An eye wash is recommended.

SKIN: As good industrial hygiene practice, impervious (for example, nitrile) gloves are recommended. Heat resistant gloves and other protective clothing should be worn to prevent body contact when handling heated product.

INHALATION: For normal operations, no respiratory protection is required. For high concentrations of vapors from the heated product, an air purifying respirator designed for organic vapors should provide adequate protection.

ENGINEERING CONTROLS: For the product at ambient temperatures, use adequate ventilation. For the heated product, use exhaust ventilation to remove vapor.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/state: Dark amber liquid
Odor: Fatty acid
Ph: Not applicable
Vapor Pressure: <0.001 mm Hg at 20°C (68°F)
Vapor density: Not applicable
Boiling point: Not available
Melting point: Not applicable
Solubility in water: <0.1% at 25°C (77°F)
Specific gravity: <1.00 at 25°C/25°C (water=1.00)
Evaporation rate: Approx. 0 (n-BuAc=1)
% Volatile by weight: Not available. 0 estimated

SECTION 10 STABILITY AND REACTIVITY

Chemical stability: Stable under normal temperatures and pressures.

Conditions to avoid: This product is not reactive with water. Filter cakes containing this material may autooxidize and autoignite. Keep filter cakes moist with water. Do not blow dry with air.

Chemicals to avoid: Strong oxidizing agents..

Hazardous Polymerization: Will not occur under normal temperatures and pressures.

Hazardous Decomposition Products: Thermal decomposition products include toxic oxides of carbon.

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SECTION 11 TOXICOLOGICAL INFORMATION
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This product is not on the International Agency for Research on Cancer (IARC) or National Toxicology Program (NTP) or OSHA lists of carcinogens or potential carcinogens.

TOXICITY DATA: The following data on test animals indicate that tall oil fractions have low acute toxicity potential and are not skin or eye irritants by OSHA criteria.

COMPONENT	ROUTE-SPECIES	TEST	DOSAGE	UNITS	IRRITATION DATA
Fatty Acids					
-Oleic Acid	Oral-rat	LD50	74	g/kg	Skin-rabbit Mild Eye-rabbit Mild
-Linoleic Acid	Oral-rat	LD50	>3.2	g/kg	Skin-rabbit Mild Eye-rabbit Mild
Rosin Acids					
	Oral-rat	LD50	7.6	g/kg	Skin-rabbit Slight irritant
	Oral-mouse	LD50	4.6	g/kg	
Neutrals					
-beta-Sitosterol	Ipr-mouse	LD50	>3	g/kg	No data available
Crude tall oil					
	Oral -rat	LD50	>2	g/kg	Skin - not irritating
	Dermal - rat	LD50	>2	g/kg	Eye - not irritating
Tall oil fatty acids					
	Oral - rat	LD50	>10	g/kg	Skin - not irritating
	Dermal - rabbit	LD50	>2	g/kg	Eye - not irritating

OTHER: Crude tall oil and tall oil fatty acids were non-mutagenic in AMES test. Tall oil fatty acids were not found to be a skin sensitizer in the Buehler or Guinea Pig Maximization Test (GPMT). Crude tall oil was found to be a weak sensitizer in LLNA study. Tall oil fatty acids showed no evidence of reproductive or developmental toxicity in a full two-generation study (NOEL = 5000 mg/kg/day).

There is some reproductive effects data on beta-Sitosterol. Oral -mouse TDLo 30 mg/kg (1D prep). There is some questionable tumorigenic data on oleic acid. Tumors formed at the site of subcutaneous application- rabbit TDLo 390 mg/kg/17 weeks.

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SECTION 12 ECOLOGICAL INFORMATION
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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 effects 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 12 ECOLOGICAL INFORMATION CONT'D

Following data is available for tall oil fractions:

Tall Oil Fatty Acids:

Growth Inhibition Test, OECD 201 (Alga): AUC, 72-hr EL₅₀ = 854.90 mg/l with
NOELr = 500 mg/l;
Average Specific Growth Rate, 72-hr
EL₅₀ = >1000 mg/l,
NOELr = 500 mg/l at 0 - 48-hr & 750
mg/l at 0 -72-hr
Acute toxicity, OECD 202 (Daphnia): 48-hr EL₅₀ = >1000mg/l, NOELr = 1000
mg/l
Acute Toxicity, OECD 203 (Fathead Minnows): 96-hr LL₅₀ = >1000mg/l, NOELr =
1000 mg/l
Ready Biodegradation (modified Sturm test): 74% after 28 days
Partition coefficient (HPLC): log₁₀ Pow 4.9 to 7.6

EL₅₀ = Median Effective Loading under static conditions to solutions prepared
as Water Accommodated Fractions (WAF) at different loading rates.
AUC = Area Under Growth Curve.
LL₅₀ = Median Lethal Loading under static conditions to solutions prepared as
Water Accommodated Fractions (WAF) at different loading rates.
NOELr = The No Observed Effect Loading Rate under the conditions of the test.

Crude Tall Oil:

Growth Inhibition Test, OECD 201 (Alga): NOELr = 100 mg/l;
Acute toxicity, OECD 202 (Daphnia): 48-hr EL₅₀ = 32->100 mg/l
Acute Toxicity, OECD 203 (Zebra Fish): 96-hr LL₅₀ = 20->100 mg/l
Ready Biodegradation (Manometric
Respirometry Test) 79-83% after 28 days - Readily
biodegradable
Partition coefficient (HPLC): log₁₀ Pow 4.9 to 7.7

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of waste by incineration in accordance with all local, state and
federal regulations.

Resource Conservation and Recovery Act (RCRA): This product is not
included in the lists of hazardous substances (40 CFR 261.33), nor does it
exhibit the characteristics of hazardous waste (40 CFR 261.20-24).

SECTION 14 TRANSPORT INFORMATION

DOT - Department of Transportation Hazardous Materials Regulations

DOT Hazard Class: Not applicable
DOT Proper Shipping Name: Not applicable
Technical Name: Not applicable
DOT Identification Number: Not applicable
Surface Freight Classification: Tall oil

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SECTION 15 REGULATORY INFORMATION
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Toxic Substances Control Act (TSCA): The components of this product are on the TSCA Inventory.

SARA, Title III, Section 313 (40 CFR 372): This product contains the following substances which are reportable under SARA Toxic Chemical Release Reporting Regulations:

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt%</u>
None		

SARA 311/312 Hazard Categories: This product has the following hazard categories: None.

New Jersey Worker and Community Right To Know Act: This product contains the following top five ingredients:

<u>Chemical Name</u>	<u>CAS or NJTS#</u>	<u>Wt%</u>
Proprietary Tall Oil Fractions	NJTS# 7337	100

Pennsylvania Worker and Community Right To Know Act: This product contains the following substances which appear on the Hazardous Substance List:

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt%</u>
None		

International Inventory Status: This product is either listed or exempt from listing on the following inventories: Europe EINECS.

California Prop 65: This product does not contain any materials included on the California Proposition 65 list.

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SECTION 16 OTHER INFORMATION
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Hazard Ratings: NFPA 1 Health 1 Fire 0 Reactivity

Revision Note: Revision 1. Corrected a typo in product's name.

Prepared by: L.M. Krzywanska

Title: Product Regulatory Technologist

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