



MATERIAL SAFETY DATA SHEET

STAR AVIATOR

SEALCOATING FOR AIRPORT PROJECTS
SPECIFICATION: FAA P-627

Manufacturer: 3924 S.T.A.R., INC. 1150 Milepost Drive Columbus, Ohio 43228	Emergency Phone No. Information Phone No. Date Of Preparation Date Supersedes	CHEM-TEL 800-255- 800-759-1912 July 24, 2002
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SECTION I - IDENTIFICATION

Product Name:	STAR AVIATOR- Sealcoating for airport projects.		
Chemical Family	- Refined Tar Pitch Emulsion	H.M.I.S	
Chemical Name	- Proprietary		Health = 1
Prepared by	- G.C. Dubey		Fire = 1
			Reactivity = 1

SECTION II- INGREDIENTS

<u>Ingredients</u>	<u>CAS NO.</u>	<u>WT%</u>	<u>Exposure Limits</u>	
			OSHA PEL	ACGIH TLV
<u>Hazardous Ingredients</u>				
Refined Tar Pitch	65996-93-2	27-29%	0.2 mg/m3 (Volatiles)	0.2 mg/m3 (Volatiles)
Listed in SARA Title III, Section 313- No.				
STEL	- N/A*			
LC 50	- N/A			
LD 50	- N/A			
<u>Other Ingredients</u>				
Ethoxylated Amine		1 %		
Specialty Polymers	Proprietary	4-5%	N/D	N/D
Clay	1332-58-7	18-20%	N/A	10mg/m3 (dust)
STEL	- 5 MG/M3 (DUST)			
LC 50	- N/A			
LD 50	- N/A			
Water	7732-18-5	49-50%	N/A	N/A
Listed in SARA Title III, Section 313 - No.				
STEL	- N/A			



LC 50 - N/A
 LD 50 - CTI OVER 320,000
 * N/A = NOT AVAILABLE OR APPLICABLE

Total weight percentage of all the listed ingredients could be below 100, indicating other unlisted ingredients that are not considered hazardous by any federal (OSHA, WHMIS, SARA), any state or province or local Right-To-Know Regulations.

SECTION III, PHYSICAL DATA

<u>Boiling Point</u>	<u>Vapor Pressure</u>	<u>Vapor Density</u>	<u>Appearance</u>
	(mm Hg)	(Air=1)	
Over 212 F Tar	approx. 25	1	Dark Brown Liquid with Refined odor.
<u>Evaporation Rate</u> (Water=1)	<u>Specific Gravity</u>	<u>pH</u>	<u>Freezing Point</u>
1	1.20 - 1.25	7.00-8.00	32 Deg F/ O Deg C
<u>Miscibility</u>	<u>Threshold Odor</u>	<u>Water/Oil Dist Coeff</u>	
Dilutable with water	ppm- N/A	1/1	

SECTION IV- FIRE AND EXPLOSION HAZARD DATA

<u>Flammability Classification</u>	<u>Flash Point</u>	<u>Flammable Limits</u>	
	(method used)	<u>LEL</u>	<u>UEL</u>
N/A	N/A	N/A	N/A
<u>Combustion Products</u>	<u>Extinguishing Media</u>		
CO, CO2, Hydrocarbon compounds	Foam, dry chemical, CO2		

Special Fire Fighting Procedures: Cool exposed containers to prevent steam pressure build up.
 Wear self-contained breathing equipment.

Unusual Fire and Explosion Hazards: Containers may rupture due to steam pressure build-up.

<u>Explosive Power</u>	<u>Burning Rate</u>	
N/A	N/A	
<u>UN/NA/PIN#</u>	<u>Static Sensitive</u>	<u>Impact Sensitive</u>
N/A	NO	NO



SECTION V- HEALTH HAZARD DATA

Threshold Limit Value - 0.2 mg/ m³, refined tar pitch volatiles.

Routes Of Entry- Skin, eyes, inhalation, ingestion.

Effects Of Overexposure - Acute: YES Chronic: YES

Eyes - Overexposure of vapors can cause eye irritation, burning, redness and/or corneal changes, which in absence of recommended first aid may result in severe burns.

Skin - Contact with skin can result in irritation which when accentuated by sunlight may result in photo toxic skin reaction (similar to sunburn). Prolonged and/or repeated contact with the product or volatiles may result in more serious skin disorders including cancer.

Inhalation- The product has very low vapor pressure, therefore, harmful effects are not anticipated. Chronic inhalation overexposure to vapors. Repeated and/or prolonged contact to high levels of vapor concentration may result in respiratory problems, central nervous system (CNS) effects, cardiovascular collapse.

Ingestion- May cause nausea, cramps, vomiting, diarrhea or acute effects. May be fatal in large amounts.

Unusual Chronic Toxicity: May cause cancer of the skin, lungs, kidney and bladder. Prolonged or repeated contact over many years in the absence of good hygiene and personal protection may lead to changes in skin pigmentation and skin tumors.

Conditions aggravated by exposure and additional health hazards: The test results reported in Koppers Industries, Inc. publication "Using Refined Tar Emulsion Safely" conclusively establish that emissions during the manufacturing, as well as application, of sealcoatings based on refined tar are well below the OSHA exposure limits. Refined tar is a complex mixture of thousands of chemical compounds, a majority being closed ring, polynuclear aromatic compounds (PNAs) which range from single ring structure to multiple (30-40) rings in their molecular structure. According to NTP, IARC, or OSHA, some of these PNAs have been found to induce cancer in animals under laboratory conditions.

Cancer warning statements for materials derived from coke oven tar, which includes refined tar RT-12, are based primarily on crude (unrefined) tars. No data has been established on refined tars or sealcoatings based on refined tars as potential carcinogens. The cancer warnings are, therefore, affixed on all refined tar derived products, due to the lack of specific data on these products.

Respirable crystalline silica, also used in conjunction with this product is a suspected carcinogen, however, no exposure is expected through the use of this material. This product and sealcoatings in general, have not been tested for chronic exposure effects.

Carcinogenic: IARC- YES ACGIH- YES

EMERGENCY AND FIRST AID PROCEDURES

Eyes- Immediately flush with plenty of water for 15 minutes, call a physician, if condition persists.

Skin- Wash thoroughly with plenty of water and soap.

Inhalation- Move to fresh air, administer oxygen and call a physician.

Ingestion- Do not induce vomiting. Seek physician immediately and show M.S.D.S. or label.



SECTION VI- REACTIVITY DATA

<u>Stability</u>	Conditions to Avoid	Incompatibility (Materials to avoid)
Stable	Keep from freezing.	Strong oxidizing agents.
Hazardous Decomposition Products	- N/A	
Hazardous Polymerization	- Will not occur.	
Conditions to Avoid	-N/A	

SECTION VII- SPILL OR LEAK PROCEDURES

SARA Title III			
# 302 - No	# 304 -No	# 313 - No.	RCRA-No.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Ventilate the area. Wear approved respiratory protection. Wear suitable protective clothing, gloves and eye / face protection. Contain and pick up waste material. Put in a sealed approved container. Dispose of in accordance with federal, state, and local regulations.

For Small Spills: Absorb with an inert material and place in containers.

For Large Spills: Contain material and pump into tanks or other suitable containers. Spills over 45 gallons should be reported to national, state and local emergency response agencies. The telephone number for the National Response Center is 800-424-8802.

Do not flush into sewers or bodies of water. The material will suffocate fish until it settles to the bottom.

WASTE DISPOSAL

Refined Tar and Refined Tar Sealer is not listed as a hazardous substance as defined by US EPA 40 CFR 261.30-261.35. Refined Tar (RT-12) and Refined Tar Sealer does not meet the definition of a hazardous waste as defined by US EPA.

Reportable Quantity	- N/A
Regulations	- WHMIS, SARA, State and province.
Hazardous Waste	- N/A
TPQ (lb.)	- N/A

SECTION VIII- SAFE HANDLING AND PROTECTION INFORMATION

Ventilation: Use local exhaust ventilation to control mists or vapors generated when using this product.

Special- N/A **Other-** N/A

Respiratory Protection: Use only with adequate ventilation. If ventilation is inadequate, wear approved respiratory equipment.

Protective Gloves: Rubber Gloves, chemically resistant.



Eye Protection: Wear safety glasses, goggles or face shield.

Other Protective Equipment: Wear suitable protective clothing.

Estimated LD50, MG/KG: N/A

Estimated LC50, PPM: N/A

Sensitization: N/A

Irritants: YES

SECTION IX- SPECIAL PRECAUTIONS

1. Keep out of reach of children.
2. For professional and industrial use only.
3. Do not handle until manufacturer's safety precautions have been read and understood.
4. Use only with adequate ventilation.
5. Do not take internally.
6. Avoid contact with eyes and skin.
7. Wash thoroughly after using. Practice safe hygiene principles.
8. Additional Technical Data Sheets and/or M.S.D.S.'s are available upon request.

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