

MATERIAL SAFETY DATA SHEET



Manufacturer: S.T.A.R., INC. **Emergency Phone No.** CHEM-TEL 800-255-3924
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 Columbus, Ohio 43228 Date Of Preparation 4.17.03
 Date Supersedes

SECTION 1- IDENTIFICATION

Product Name: STAR PERMALINE –SAFETY RED
ALKYD TRAFFIC PAINT, Federal Specification TT-P-115F.
Trade Name: Alkyd Traffic Marking Paint
Chemical Family: Oil Based Traffic Paint H.M.I.S
Chemical Name: Alkyd, Air Dry Health = 2
Prepared by: G.C. Dubey Fire = 3
 Reactivity = 0

N/A= DATA NOT AVIALABLE N/AP= NOT APPLICABLE,
 N/D =NOT DETERMINED
 PEL= permissible Exposure Limit TLV= Threshold Limit Value

SECTION 2- HAZARDOUS INGREDIENTS

Ingredients	CAS NO.	WT%	Exposure Limits		Vapor . Pres. (mm/Hg @ 20 C)
			OSHA PEL	ACGIH TLV	
Quartz	14808-60-7	7	0.1 mg/m3 (dust)	0.05 mg/m3 (dust)	N/AP
Talc	14807-96-6	27	2 mg/m3 (both as respirable dust)	2 mg/m3	N/AP
Mica	12001-26-2	1	3 mg/m3 (dust)	3 mg/m3 (dust)	N/AP
Aliphatic Hydrocarbons	64742-89-8	10	100 ppm	100 ppm	53 mm
VM & P Naptha	64742-89-8	9	300 400 STEL	300 ppm	12 mm
Xylene	1330-20-7	1	100 ppm 150 STEL	100 ppm 150 STEL	5.9 mm
Toluene	108-88-3	5	100 ppm (skin)	50 ppm (skin)	22 mm
Ethylbenzene	100-41-4	0.2	150 (skin) STEL 100ppm 125 STEL	100 ppm 125 STEL	5.9 mm

SECTION 3- PHYSICAL DATA

<u>Boiling Range</u>	<u>Vapor Pressure</u> (mm Hg)	<u>Vapor Density</u> (Air=1)	<u>Appearance</u>
200-325 ° F	N/A	More than 1	Opaque, bright yellow liquid paint with mild solvent odor.
<u>Evaporation Rate</u>	<u>Specific Gravity</u>	<u>% Volatile</u>	<u>Freezing Point</u>
Slower than ether	1.41	47% vol.	N/AP
<u>Miscibility With Water</u>	<u>Threshold Odor</u>	<u>pH</u>	<u>VOC</u>
None	Approx. 200 ppm	N/AP	2.99 lb./gal (358g/liter), less exempt solvents 2.99 lb./gal (358g/liter), Emitted V.O.C.

SECTION 4- FIRE AND EXPLOSION HAZARD DATA

<u>Flammability Classification</u>	<u>Flash Point</u>	<u>Flammable Limits</u>
RED LABEL EXTREMELY FLAMMABLE, FLASH BELOW 21 F	(method used) 16 ° F, PMCC	LEL UEL 0.9 Vol. 7.1.vol.

<u>Combustion products</u>	<u>Extinguishing Media</u>
CO, CO2,	Alcohol Foam, Dry Chemical, CO2

Unusual Fire and Explosion Hazards: Keep containers tightly closed and away from heat, open flame and sparks. Closed containers may rupture when exposed to intense heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain special attention.

Special Fire Fighting Procedures: Wear self-contained breathing equipment and protective clothing. Water may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool exposed containers to prevent pressure build up and possible auto-ignition or explosion when exposed to extreme heat.

SECTION 5- HEALTH HAZARD DATA

Threshold Limit Value	- See section 2
Routes Of Entry	- Skin, eyes, inhalation, ingestion.
Effects Of Overexposure	- Irritation of eyes, skin and upper respiratory system.

Eyes- May cause severe irritation.

Skin - May cause irritation and rash.

Inhalation- May cause nausea and headache. Prolonged and repeated inhalation may be harmful to respiratory system.

Ingestion- May cause nausea, cramps, vomiting, diarrhea or acute effects. Large dosage may be fatal.

Extreme overexposure may result in unconsciousness and possibly death.

Signs & symptoms of overexposure- headache, dizziness, nausea, and loss of coordination are indications of

excessive exposure to vapors or spray mist.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

Medical conditions prone to be aggravated by exposure: None

Carcinogenic: See section 7

SECTION 6- 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. Remove and wash contaminated clothing.

Consult a physician if irritation persists.

Inhalation- Move to fresh air, Restore breathing if required. Treat symptomatically. Consult a physician.

Ingestion- DO NOT INDUCE VOMITTING. Consult a physician immediately or Poison Control Center. Treat symptomatically. Show M.S.D.S. or label.

SECTION 7- TOXICOLOGICAL INFORMATION

Chronic Health Hazards

Ethylbenzene is classified by IARC as a possible carcinogen to humans, based on insufficient data with humans and sufficient data with laboratory animals. Lifetime inhalation of Ethylbenzene by rats and mice resulted in increases in certain type of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed at lower level exposures. There is no evidence that Ethylbenzene causes cancer in humans.

Prolonged exposure to solvents in section 2 may cause adverse effects to the liver, urinary, cardiovascular and reproductive systems.

Rats exposed to titanium dioxide dust at 250 mg/m³ developed lung cancer, however such exposure levels are not attainable in the workplace.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

Ingredients	CAS NO.	RAT	4 HR.	Comments
Quartz	14808-60-7	LC50 LD50		NOT AVAILABLE NOT AVAILABLE
Talc	14807-96-6	LC50 LD50		NOT AVAILABLE NOT AVAILABLE
Mica	12001-26-2	LC50 LD50		NOT AVAILABLE NOT AVAILABLE
Aliphatic Hydrocarbons	64742-89-8	LC50 LD50		NOT APPLICABLE NOT APPLICABLE
VM & P Naptha	64742-89-8	LC50 LD50		NOT AVAILABLE NOT AVAILABLE

Xylene	1330-20-7	LC50	5000 ppm
		LD50	4300 mg/kg
Toluene	108-88-3	LC50	4000 ppm
		LD50	5000 mg/kg
Ethylbenzene	100-41-4	LC50	NOT AVAILABLE
		LD50	3500 mg/kg

SECTION 8- STABILITY & REACTIVITY DATA

<u>Stability</u>	<u>Conditions to Avoid</u>	<u>Incompatibility</u>
Stable	Heat, spark and open Flame.	(Materials to avoid) None special noted.

Hazardous Polymerization

Will not occur.

Hazardous decomposition Products

Carbon dioxide, carbon monoxide.

SECTION 9- SAFE HANDLING AND STORAGE

Storage category- DOL Storage Class 1B

Precautions to be taken in handling and storage

Contents are extremely flammable. Keep away from heat, sparks and open flame.
Vapors will accumulate rapidly and may ignite explosively.

During use and until all the vapors are gone:

- Keep the area well ventilated
- Do not smoke
- Extinguish all flames, and turn off all pilot lights, heaters and stoves, electrical tools, appliances or any other source of ignition.
- Consult NFPA Code. Use approved Bonding and Grounding procedures.
- Keep containers closed when not in use. Transfer only to approved containers with complete and accurate labeling.
- Do not take internally
- KEEP OUT OF REACH OF CHILDREN.

SECTION 10- EXPOSURE CONTROLS/PERSONAL PROTECTION.

Precautions to be taken in use

- Use only with adequate ventilation. Use local exhaust ventilation to control mists or vapors generated when using this product. Ventilation must be adequate to keep exposure below regulated limits as noted in section II.
- Avoid contact with skin and eyes.
- Avoid breathing vapor and spray mist.
- This coating may contain materials classified as nuisance particulates (listed as dust in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limit for nuisance dusts are ACGIH 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction) OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction) dust. Before initial use, consult OSHA's standard 1910.94,

1910.107, 1910.108

Respiratory Protection: Appropriate respiratory protection should be selected by a qualified person if exposure is expected to be excessive.

Protective Gloves: Rubber Gloves, chemically resistant.

Eye Protection: Wear safety glasses, goggles (side shields shall be unperforated), face shield.

Other Protective Equipment: Wear suitable protective clothing. Remove and wash contaminated clothing before re-use. A source of clean water shall be available for washing eyes and skin.

Wash hands after each use.

Hygienic Practices: Wash hands before eating, smoking or using washrooms. Smoke only in designated areas.

SECTION 11- SPILL OR LEAK PROCEDURES **Steps to be Taken in Case Material is Released or Spilled**

- Remove sources of heat, sparks or open flames.
- Limit spread of leak or spill.
- Ventilate the area.
- Soak up with an inert absorbent material like sand or earth and pick up waste material. Put in a sealed approved container.
- Keep material out of sewers, drains and bodies of water.
- Wear approved respiratory protection.
- Wear suitable protective clothing, gloves and eye/face protection.

SECTION 12- DISPOSAL CONSIDERATIONS

Waste Disposal Method

Waste from this product may be considered hazardous under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA Hazardous waste numbers

Incinerate in approved facility. Do not incinerate closed containers

Dispose of according to all applicable local, state, and federal regulations, regarding pollution.

SECTION 13- ECOLOGICAL INFORMATION

Ecotoxicological Information- No data available.

SECTION 14- TRANSPORT INFORMATION

No data available.

SECTION 15- REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION.

CHEMICAL/COMPOUND	CAS NUMBER	% by Wt.	% Element
Xylene	1330-20-7	1	
Toluene	108-88-3	5	
Ethylbenzene	100-41-4	0.1	

CALIFORNIA PROPOSTION 65

WARNING: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed or exempt from listing on the TSCA inventory.

SECTION 16- OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the CFR and the MSDS contains all the information required by the CFR.

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