

MATERIAL SAFETY DATA SHEET



Manufacturer: S.T.A.R., INC.	Emergency Phone No. CHEM-TEL 800-255-3924
1150 Milepost Drive	Information Phone No. 614-870-0744
Columbus, Ohio 43228	Date Of Preparation 8/20/99
	Date Supersedes 2/25/92

SECTION I- IDENTIFICATION

Product Name:	STAR PERMALINE –WHITE, 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

SECTION II- HAZARDOUS INGREDIENTS

Ingredients	CAS NO.	WT%	Exposure Limits		Vapor . Pres. (mm/Hg @ 20 C)
			OSHA PEL	ACGIH TLV	
Calcium Carbonate (090)	471-34-1	35-40	5mg/m3	5 mg/m3	N/AP
Kaolin, Clay (040)	66402-68-4	10-15	0.1mg/m3	0.12mg/m3	N/AP
Aliphatic Hydrocarbons	64742-89-8	20-25	300 ppm	300 ppm	15@ 37.7
Xylene (030,130)	1330-20-7	1.47	100 ppm	100 ppm	5.1
Titanium Dioxide (040)	13463-67-7	5-10	5mg/m3	5mg/m3	N/AP

Notes:

- '030 This chemical is subject to reporting requirements of section 313, SARA TITLE III.
- '040 As a respirable mist or dust would occur from spraying paint or sanding the dried film
- '090 Limits based on particulates not otherwise classified (PNOC)
- '0130 Xylene contains 18-20% Ethyl Benzene, CAS 100-41-4, TLV/PEL 100 ppm (125ppm STEL). Ethyl Benzene is a SARA 313, Tittle III chemical.

PEL= permissible Exposure Limit

TLV= Threshold Limit Value

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 Range</u>	<u>Vapor Pressure</u> (mm Hg)	<u>Vapor Density</u> (Air=1)	<u>Appearance</u>
240-279 ° F	N/A	MORE THAN 1	Opaque, bright white paint with mild solvent odor
<u>Evaporation Rate</u>	<u>Specific Gravity</u>	<u>% Volatile</u>	<u>Freezing Point</u>
Slower than ether	1.44	51.90	N/AP
<u>Miscibility With Water</u>	<u>Threshold Odor</u>	<u>VOC,gm/Lit.</u>	<u>VOC Lb/Gal</u>
None	Approx. 200 ppm	396	3.31

SECTION IV- FIRE AND EXPLOSION HAZARD DATA

<u>Flammability Classification</u>	<u>Flash Point</u> (method used)	<u>Flammable Limits</u>
OSHA- CLASS 1B	(method used)	LEL UEL
DOT- FLAMMABLE LIQUID	50-55 ° F	0.9 Vol. N/A
UN- 1263		air.

<u>Combustion Products</u>	<u>Extinguishing Media</u>
CO, CO2, Oxides of Nitrogen and others.	Foam, Dry Chemical, CO2, Water.

Unusual Fire and Explosion Hazards: Keep containers tightly closed and away from heat, open flame, electrical equipment and sparks. Application to hot surfaces requires special precautions. Closed containers may explode when exposed to extreme heat. During emergency conditions, overexposure to combustion products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. Vapors are heavier than air and may travel considerable distances to point of ignition and then flash back.

Special Fire Fighting Procedures: Water may be used to Cool exposed containers to prevent pressure build up and possible rupture. Wear self-contained breathing equipment and protective clothing. Water may be ineffective to control fires. If water is used, fog nozzles are preferred.

<u>Explosive Power:</u>	<u>Burning Rate:</u>	<u>NFPA rating:</u>
N/A	N/A	Health=2, Fire=3, Reactivity=0

SECTION V- HEALTH HAZARD DATA

Threshold Limit Value	- Estimated 200 ppm
Routes Of Entry	- Skin, eyes, inhalation, ingestion.
Effects Of Overexposure	- Acute: YES Chronic: Yes

ACUTE

Eyes- May cause severe irritation.

Skin - May cause irritation.

Inhalation- Anesthetic. Irritation of the respiratory tract or acute nervous system depression characterized by the following progressive steps, headache, dizziness, staggering gait, confusion, unconsciousness, coma, or asphyxiation.

Ingestion- May cause nausea, cramps, vomiting, diarrhea or acute effects.

CHRONIC

Overexposure to this material (or its components) has been suggested to cause the following effects in humans;

1. Cardiac Abnormalities.
2. Lung damage.

Medical conditions prone to aggravation by exposure: Asthma

Carcinogenic: IARC – YES NTP – YES OSHA – YES

IARC has classified crystalline silica as a probable carcinogen for humans (A2). This classification is based on findings with laboratory animal studies that were considered sufficient and data from epidemiological studies that were limited for carcinogenicity.

Crystalline silica is not classified as a carcinogen by NTP and OSHA.

Emergency and first aid procedures:

Eyes –	Immediately flush with plenty of water for 15 minutes, including under eyelids. Call a physician if irritation 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 -	Consult a physician immediately or Poison Control Center. Treat symptomatically. Show M.S.D.S. or label.

SECTION VI- REACTIVITY DATA

<u>Stability</u>	<u>Conditions to Avoid</u>	<u>Incompatibility</u>
Stable	Heat, spark and open Flame.	(Materials to avoid) Peroxides and strong Oxidizing agents.

Hazardous Polymerization : Will not occur.

Hazardous decomposition Products: May produce fumes when heated to decomposition, as in welding or fire. Fumes may contain CO, CO₂, OXIDES of Nitrogen and other products of combustion.

SECTION VII- 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. Wear approved respiratory protection. Wear suitable protective clothing, gloves and eye/face protection. 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.

Waste Disposal Method: Do not incinerate and dispose of in accordance with local, state and federal regulations. Approved Hazardous waste site.

SECTION VIII- SAFE HANDLING AND PROTECTION INFORMATION

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. An exhaust filter system may be required to avoid environmental contamination. Comply with all local, state and federal regulations on emission to atmosphere.

Respiratory Protection: Since vapors or mists may be encountered, a respirator with both dust and organic vapor filter is recommended.

Protective Gloves: Rubber Gloves, chemically resistant.

Eye Protection: Wear safety glasses, goggles or 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. Wear chemical resistant shoes.

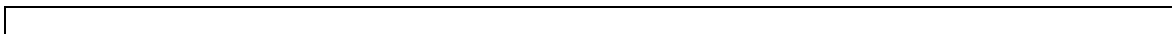
Hygienic Practices: Wash hands before eating , smoking or using washrooms. Smoke only in designated areas.

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. Store away from heat, fire or open flames. Store in accordance with OSHA 1910.106. Store large quantities only in building designed to comply with OSHA 1910.106. Do not store above 100 Deg F/38 Dec C. Keep drums out of direct sun.
5. Keep closures tight and containers upright to prevent leakage. Do not use near heat, sparks and open flame. Drums should be grounded and bonded when pouring. Do not puncture, drag or slide container.
6. Containers of this material may be hazardous when empty, since they may retain product residues (vapors, liquid and/or solids). Serious accidents have resulted from the misuse of emptied containers (drums, 5-gal pails or one gal. cans). Refer to section IV and IX. It is recommended that the containers be either professionally reconditioned for use by certified firms or properly disposed of by certified firm to help reduce the possibility of an accident. Disposal shall be in accordance with all applicable laws and regulations. The empty containers shall not be given to individuals. Never use a welding or cutting torch on or near drum, even when empty as product even just residue can ignite explosively.
7. Use only with adequate ventilation.
8. Do not take internally.
9. Avoid contact with eyes and skin. Liquid penetrates leather and shoes causing delayed burns.
10. Wash thoroughly after using. Practice safe hygiene principles.
11. Additional Technical Data Sheets and/or M.S.D.S.'s are available upon request.

Notice

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



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