

**Section 1 Identification**

**Product identifiers**

Product name: Polyester Thinning Agent

**Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: For Industrial Use Only

**Details of the supplier of the safety data sheet**

Freeman Manufacturing and Supply Company  
 1101 Moore Road, Avon, OH 44011  
 Phone (440) 934-1902  
 FAX (440) 934-7200

HMIS	
H	2
F	3
R	0
PPE	
Sec. 8	

**24 Hour emergency telephone number: CHEMTREC (800) 424-9300**

**Section 2 Hazards Identification**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture**

- Flammable liquids, Category 3
- Skin corrosion/irritation, Category 2
- Serious eye damage/eye irritation, Category 2
- Acute toxicity, Inhalation Category 4
- Specific target organ toxicity, single exposure Category 3
- Reproductive toxicity, Category 2
- Carcinogenicity, Category 2
- Specific target organ toxicity, repeated exposure Category 1
- Aspiration hazard, Category 1

**GHS Label elements**



Signal word

Danger

**Hazard statements**

- Flammable liquid and vapor.
- Harmful if inhaled.
- Suspected of damaging the unborn child.
- Suspected of causing cancer.
- Causes serious eye irritation.
- May cause respiratory irritation.
- Causes damage to organs through prolonged or repeated exposure if inhaled.
- May be fatal if swallowed or enters airways.

**Section 2 Hazards Identification** continued

**Precautionary statements**

**Prevention**

- Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
- Keep container tightly closed.
- Do not breathe vapor or mist.
- Wash skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only in a well-ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

- If swallowed: Immediately call a POISON CENTER or doctor/physician.
- Do not induce vomiting. Get medical attention.
- If inhaled: Remove person to fresh air and call doctor/physician if not feeling well.
- If on skin: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.
- If in eyes: Rinse continuously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical advice/attention.

**Storage**

Store in a well-ventilated place. Keep cool. Keep container tightly closed.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified (HNOC) or not covered by GHS**

None known

**Section 3 Composition/Information on Ingredients**

Ingredient Name	CAS Number	Concentration (%)
Styrene	100-42-5	30-35
N,N-Dimethylaniline	121-69-7	<1

**Section 4 First-Aid Measures**

**Description of first aid measures**

**If inhaled:** Move the victim to a safe area as soon as possible. Allow the victim to rest in a well-ventilated area. If breathing is difficult, give oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

**In case of skin contact:** Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. If irritation persists, seek medical attention. Wash contaminated clothing before reuse.

**In case of eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Use of buffered baby shampoo will aid in removal. If irritation persists, get medical attention.

**If swallowed:** Wash out mouth with water. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Seek immediate medical attention.

**Section 4 First-Aid Measures continued**

**Most important symptoms and effects, both acute and delayed**

Eye contact: Causes serious eye irritation.

Inhalation: Harmful if inhaled. May cause respiratory irritation.

Skin contact: Causes skin irritation.

Ingestion: Irritating to mouth, throat and stomach.

**Indication of any immediate medical attention and special treatment needed**

Eye contact: Adverse symptoms may include pain or irritation, watering, redness.

Inhalation: Adverse symptoms may include respiratory tract irritation, coughing.

Skin contact: Adverse symptoms may include irritation, redness.

Ingestion: Adverse symptoms may include irritation to mouth, throat and stomach.

**Notes to physician:** Treat symptomatically.

**Section 5 Fire-Fighting Measures**

**Suitable extinguishing media**

Use dry chemical, carbon dioxide, water spray (fog), or alcohol-resistant foam.

**Unsuitable extinguishing media**

Do not use water jet.

**Special hazards arising from the substance or mixture**

In a fire or if heated, a pressure increase may occur and the container may burst, with the risk of a subsequent explosion.

**Hazardous thermal decomposition products**

During combustion, decomposition products may include: carbon dioxide, carbon monoxide, sulfur oxides, halogenated compounds, metal oxide/oxides

**Special protective equipment for fire-fighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

**Section 6 Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

Avoid breathing vapors, mist or gas.

For personal protection see Section 8.

**Environmental precautions**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

**Methods and materials for containment and cleaning up**

Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

**Section 7 Handling and Storage**

**Precautions for safe handling**

Use normal precautions when handling flammable materials. Do not breathe fumes or vapor. Do not allow material to contact skin. Provide appropriate exhaust ventilation.

**Conditions for safe storage, including any incompatibilities**

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from food and drink. Eliminate all ignition sources. Segregate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

**Section 8 Exposure Controls/Personal Protection**

**Components with occupational exposure limits**

Ingredient	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
Styrene	50 ppm	100 ppm	20 ppm	40 ppm
N,N-Dimethylaniline	5 ppm	10 ppm	5 ppm	10 ppm

**Appropriate engineering controls**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits.

**Personal protective equipment**

**Eye/face protection**

Use safety eyewear complying with an approved standard when a risk assessment indicates this is necessary. Vented goggles are recommended.

**Hand Protection**

Use disposable gloves to prevent skin contact. Contaminated gloves should be replaced.

**Body Protection**

Prevent skin contact when handling material.

**Respiratory Protection**

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, use a properly fitted, air-purifying or air-fed respirator complying with an approved standard

**General Hygienic Practices**

Avoid breathing vapor or mist. Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Amber to purple liquid
<b>Odor</b>	Styrene
<b>Odor Threshold</b>	0.01-0.1 ppm (styrene)
<b>pH</b>	Not applicable
<b>Melting Point</b>	-30.6°C (-23.8°F)
<b>Boiling Point</b>	145°C (293°F)
<b>VOC Content</b>	3.2 lb./gallon
<b>Flash Point</b>	31°C (88°F)

**Section 9 Physical and Chemical Properties continued**

<b>Evaporation rate</b>	< 1
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper/lower flammability</b>	Upper: 6.1%, Lower: 1.1%
<b>Vapor Pressure</b>	5.0 mm Hg at 20°C
<b>Vapor density</b>	3.6
<b>Relative density (g/cc)</b>	1.1
<b>Water Solubility</b>	Slight
<b>Coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	490°C (914°F)
<b>Viscosity</b>	No data available

**Section 10 Stability and Reactivity**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions

**Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**

Avoid all possible sources of ignition.

**Incompatible materials**

Oxidizing agents

**Hazardous decomposition products**

Thermal oxidative decomposition can produce carbon monoxide and carbon dioxide.

**Section 11 Toxicological Information**

**Information on toxicological effects**

<b>Acute oral toxicity</b>	LD50 (Rat) 2,650 mg/kg (Styrene)
<b>Acute inhalation toxicity</b>	LC50 (Rat) 12,000 mg/m <sup>3</sup> , 4 hours (Styrene)
<b>Acute dermal toxicity</b>	LD50 (Rat) >2,000 mg/kg (Styrene)
<b>Skin corrosion/irritation</b>	Mild skin irritant
<b>Serious eye damage/eye irritation</b>	Mild eye irritant
<b>Respiratory or skin sensitization</b>	May cause sensitization
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	
<b>IARC:</b>	Group 2B: Possibly carcinogenic to humans (Styrene)
<b>NTP:</b>	Reasonably Anticipated to be a Human Carcinogen (Styrene).
<b>OSHA:</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child
<b>Specific target organ toxicity</b>	
<b>- single exposure</b>	Possible respiratory tract irritation
<b>Specific target organ toxicity</b>	
<b>- repeated exposure</b>	A study of long term effects of workers exposed to styrene levels in the range of 25-35 ppm, 8 hour TWA, indicated a possible mild hearing loss.
<b>Aspiration hazard</b>	May be fatal if swallowed or enters airways

**Section 12 Ecological Information**

<b>Toxicity</b>	No data available
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT &amp; vPvB assessment</b>	No data available

**Section 13 Disposal Considerations**

Use safety containers for disposal. Contact a licensed contractor for detailed recommendations. Follow applicable Federal, State, and local regulations.

**Section 14 Transport Information**

**DOT**

**Shipping Name** Resin Solution  
**Hazard Class:** 3  
**ID No.:** UN1866  
**Packing Group:** III

**IMDG**

**Emergency Schedule:** F-E, S-E

**Section 15 Regulatory Information**


**Inventories**

United States TSCA Inventory Status: All ingredients are listed or exempted.

**US Federal Regulations**

RCRA Hazardous Waste Number (40 CFR 261.33): Not listed  
 RCRA Hazardous Waste Classification (40 CFR 261): Not classified  
 SARA 311/312 Codes: Acute Health Hazard, Chronic Health Hazard, Fire Hazard  
 SARA 313 Toxic Chemicals (40 CFR 372.65): Styrene 100-42-5, CERCLA RQ - 1000 lb.

**US State Regulations**

California Proposition 65:  **WARNING:** This product can expose you to chemicals including Styrene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Section 16 Other Information**

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