

**Welcome to  
Hastings Plastics  
Material Safety Data Sheets for Polyester Products**

<a href="#"><u>STYRENE DILUENT</u></a>	<a href="#"><u>HAPOL 1310-10</u></a>
<a href="#"><u>MEK PEROXIDE CATALYST</u></a>	<a href="#"><u>HAPOL 1310-1A</u></a>
<a href="#"><u>COBALT NAPHTHENATE ACCELERATOR</u></a>	<a href="#"><u>HAPOL 1310-2A</u></a>
<a href="#"><u>WAX SOLUTION</u></a>	<a href="#"><u>HAPOL 1340-1</u></a>

\*Click on underlined link to go to MSDS\*

You can print the data by selecting the sheets you want and printing that selection.

# HASTINGS PLASTICS COMPANY

PRODUCT DATA  
MSDS 1310-10  
\*REVISED 5/21/99  
REPLACES 5/5/98

1704 Colorado Ave. Santa Monica, CA 90404 310-829-3449 FAX 310-828-6820

[Back to Index](#)

## HAPOL 1310-10

### SECTION I - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	- HASTINGS PLASTICS COMPANY
PRODUCT INFORMATION AND SALES	- (310) 829-3449
EMERGENCY PHONE NO.	- (800) 424-9300
PRODUCT NAME	- Hapol 1310-10
CAS NUMBER	- 100-42-5
UN NUMBER	- 2055
DOT SHIPPING NAME	- Styrene Monomer - Inhibited
DOT HAZARD	- Flammable Liquid
CLASSIFICATION GENERIC I.D.	- Aromatic Hydrocarbon

### SECTION II - HAZARDOUS COMPONENTS

INGREDIENT	- Styrene (100-42-5)
% PER WEIGHT	- 100
PEL	- 50 ppm
TLV	- 50 ppm

### SECTION III - PHYSICAL DATA

BOILING POINT	- 293 °F 145 °C @ 760 mmHg
EVAPORATION RATE	- (Butyl Acetate = 1) .49
LIQUID DENSITY	- 7.530 lbs/gal @ 77.00 °F & .904kg/l @ 25.00 °C
PERCENT VOLATILES	- 100 %
SPECIFIC GRAVITY	- .902-.906 @ 77.00 °F 25.00 °C
VAPOR DENSITY	- (Air = 1) 3.6
VAPOR PRESSURE	- 4.500 mmHg @ 68.00 °F 20.00 °C

### SECTION IV- FIRE AND HAZARD EXPLOSION DATA

EXPLOSIVE LIMIT	- Upper 6.1% Lower 1.1%
EXTINGUISHING MEDIA	- Regular foam or water fog or carbon dioxide or dry chemical
FLASH POINT	- 88.0 °F 31.1 °C
NFPA RATING	- Health-2, Flammability-3, Reactivity-1

Hazardous Decomposition Products: May form toxic materials, carbon dioxide and carbon monoxide, various hydrocarbons, etc.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus with a full facepiece operated in pressure - demand or other positive mode when fighting fires.

Unusual Fire And Explosion Hazards: Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use a welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. All five gallon pails and larger metal containers should be grounded and/or bonded when material is transferred.

#### **SECTION V - HEALTH HAZARD DATA**

PERMISSIBLE EXPOSURE LEVEL - 50 PPM

THRESHOLD LIMIT VALUE - 50 PPM

#### **EFFECTS OF ACUTE OVEREXPOSURE:**

EYES: Can cause severe irritation, redness, tearing, blurred vision.

SKIN: Can cause skin irritations. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

BREATHING: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation.

SWALLOWING: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

SYMPTOMS OF EXPOSURE: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, gastrointestinal irritation (nausea, vomiting, & diarrhea), irritation (nose, throat, & respiratory track), central nervous system (CNS) depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, & unconsciousness) and other CNS effects, impaired coordination, confusion, & liver damage.

TARGET ORGAN EFFECTS: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: mild, reversible kidney effects, effects on hearing, respiratory tract damage (nose, throat, and airways), testis damage, liver damage. Overexposures to this material (or its components) has been suggested as a cause of the following effects in humans, and may aggravate pre-existing disorders of these organs: central nervous system effects, mild effects on color vision effects on hearing, respiratory tract damage (nose, throat, and airways).

DEVELOPMENTAL INFORMATION: This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

CANCER INFORMATION: In 1993, the International Agency for Research on Cancer (IARC) classified styrene in group 2B (possibly carcinogenic to humans). IARC concluded that there was no convincing evidence for carcinogenic action of styrene in animals based on the animal studies which existed at the time. Rather, the IARC

2B listing was based on data for styrene oxide, a metabolite of styrene. Two recent lifetime studies with styrene, one in rats and one in mice, have been completed since the 1993 review. There was no increase in cancer in styrene-exposed rats. However, there was an increase in lung cancer in styrene-exposed mice. The relevance of the mouse lung cancer to humans is uncertain. Styrene exposure has not been associated with an increased incidence of cancer in workers including those in the reinforced plastics and composites plastics industries.

OTHER HEALTH EFFECTS: Styrene readily reacts with low concentrations of halogens (for example, fluorine, chlorine, bromine, or iodine) to form a tear-producing substance.

PRIMARY ROUTE (S) OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

**SECTION VI - EMERGENCY & FIRST AID PROCEDURES**

SKIN - Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

EYES - Flush with large amounts of water, lifting upper and lower lids occasionally, get medical attention.

SWALLOWED - Do not induce vomiting, keep person warm, quiet and get medical attention. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

INHALATION - If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped give artificial respiration. Keep person warm, quiet and get medical attention.

NOTE TO PHYSICIANS - This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (see section 3 - swallowing) when deciding whether to induce vomiting. Pre-existing disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin, lung (for example, asthma-like conditions), liver, central nervous systems, male reproductive system, and auditory system.

**SECTION VII - REACTIVITY DATA**

STABILITY - Stable

INCOMPATIBILITY - Avoid contact with halogens, strong alkalis, strong mineral acids.

HAZARDOUS POLYMERIZATION - Can occur. Avoid exposure to excessive heat peroxides and polymerization catalysts.

**SECTION VIII - SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

**SMALL SPILL**

Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to hood.

Eliminate all sources of ignition such as flares, flames (including pilot lights) and electrical sparks. Ventilate area.

**LARGE SPILL**

Eliminate all ignition sources (flares, flames, including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed, stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

WASTE DISPOSAL METHOD:

**SMALL SPILL**

Allow volatile portion to evaporate in hood. Allow sufficient time for vapors to completely clear hood duct work. Dispose or remaining material in accordance with applicable regulations.

**LARGE SPILL**

Destroy by liquid incineration in accordance with applicable regulations.

**SECTION IX - PROTECTIVE EQUIPMENT TO BE USED**

**RESPIRATORY PROTECTION:** If TLV of the product or any component is exceeded, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions (See your safety equipment supplier). Engineering or administrative controls should be implemented to reduce exposure.

**VENTILATION:** Provide sufficient mechanical (General and/or local exhaust) Ventilation to maintain exposure below TLVs.

**PROTECTIVE GLOVES:** Wear resistant gloves such as polyethylene.

**EYE PROTECTION:** Chemical splash goggles in compliance with OSHA regulations are advised, however OSHA regulations also permit other type safety glasses. (Consult your safety equipment supplier).

**OTHER PROTECTIVE EQUIPMENT:** To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**SECTION X-TRANSPORT INFORMATION**

**DOT DESCRIPTION:** Styrene monomer, Inhibited, 3, un2055, III.

**DOT Information** - 49 CFR 172.101

**Reportable Quantity** - 49 CFR 172.101

Product quantity (lbs) Component 1000 styrene monomer

**SECTION XI-REGULATORY INFORMATION**

<b>CERDCLA RQ</b>	- 40 CFR 302.4(a)	
	Component	RQ (lbs)
	STYRENE	1000

**SARA 302 COMPONENTS** - 40 BCFR 355 Appendix A  
(None)

**Section 311/312 Hazard Class** - 40 CFR 370.2  
Immediate(x) Delayed(x) Fire(x) Reactive(x) Sudden release of pressure( )

<b>SARA 313 COMPONENTS</b>	- 40 CFR 372.65		
	Section 313 Component(s)	Cas#	Max %
	Styrene	100-42-5	100.00

**INTERNATIONAL REGULATIONS INVENTORY STATUS:** DSL (Canada) The intentional ingredients of this product are listed . EINECS (Europe) The intentional ingredients of this product are listed.

**STATE AND LOCAL REGULATIONS CALIFORNIA PROPOSITION 65:** The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer. (BENZENE)

**NEW JERSEY RTK LABEL INFORMATION:** Styrene Monomer 100-42-5

**PENNSYLVANIA RTK LABEL INFORMATION:** Benzene, Ethenyl 100-42-5

**DISCLAIMER OF LIABILITY**

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim liability for any use of this material. Information contained herein is believed to be true and accurate but all statements are made without warranty, express or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. It is the user's obligation

Prepared By: Joe Morales

F#170-21A

# HASTINGS PLASTICS COMPANY

1704 Colorado Ave. Santa Monica, CA 90404 310-829-3449 FAX 310-828-6820

PRODUCT DATA  
MSDS 1310-1A  
\*REVISED 10/03/01  
REPLACES 05/21/99

[Back to Index](#)

## HAPOL 1310-1A

### SECTION I - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME - THE NORAC COMPANY INC  
PRODUCT INFORMATION AND SALES - (310) 829-3449  
EMERGENCY PHONE NUMBER - (800) 424-9300  
PRODUCT NAME - HAPOL 1310-1A  
PRODUCT CODE NUMBER - 1310-1A  
CHEMICAL FAMILY - ORGANIC PEROXIDE  
CHEMICAL NAME - METHYL ETHYL KETONE PEROXIDE (MEKP)  
(in solution with not more than 9% active oxygen)  
FORMULA - Proprietary  
CAS NO. - 1338-23-4

### SECTION II - HAZARDOUS INGREDIENTS

<u>COMPONENTS</u>	<u>CAS NO</u>	<u>%</u>	<u>HAZARD DATA</u>
METHYL ETHYL KETONE PEROXIDES	1338-23-4	34	ORAL--RAT LD50:484 mg/kg
DIMETHYL PHTHALATE	131-11-3	43	ORAL--RAT LD50:6900 mg/kg
PROPRIETARY PHLEGMATIZER		20	ORAL--RAT LD50:>3200 mg/kg
HYDROGEN PEROXIDE	7722-84-1	01	SKIN--RAT LD50:4060 mg/kg
METHYL ETHYL KETONE	78-93-3	02	ORAL--RAT LD50:2737 mg/kg

### SECTION III - PHYSICAL DATA

APPEARANCE AND COLOR - Water white liquid.  
ODOR - Slight odor.  
BOILING POINT - Unknown  
VAPOR PRESSURE - Unknown  
VAPOR DENSITY (Air=1) - >1  
SOLUBILITY IN WATER - Slight  
PERCENT VOLATILE (By Volume) - Unknown  
EVAPORATION RATE - Unknown  
SPECIFIC GRAVITY - 1.1  
THRESHOLD LIMIT VALUE - 1.5 mg/M<sup>3</sup> for Methyl Ethyl Ketone Peroxides.

### SECTION IV - FIRE HAZARD AND EXPLOSION DATA

FLASH POINT - (COC) >200°F  
FLAMMABLE LIMITS - Unknown  
EXTINGUISHING MEDIA - Water from safe distance - preferably with a fog nozzle.  
In case of very small fires, other means such as carbon dioxide, foam or dry chemical extinguishers may be effective. **Dry chemical combined with MEKP may re-ignite.** Light water additives may be particularly effective at extinguishing MEKP fires.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Firemen should be equipped with protective clothing and SCBA's. In case of fire near storage area, cool the containers with water spray. If dry chemicals is used to extinguish an MEKP fire, the extinguished area must be thoroughly wetted down with water to prevent re-ignition.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

The heat of decomposition of the peroxides adds to the heat of the fire. Dry chemical fire extinguishing agents may catalyze the decomposition.

**SECTION V - HEALTH HAZARD DATA****EFFECTS OF OVEREXPOSURE:****ROUTES OF EXPOSURES:**

SKIN: Severe skin irritation, causes redness, blistering and edema.

EYES: Eye contact causes severe corrosion and may cause blindness.

INGESTION: Human systemic effects by ingestion; changes in structure or function of esophagus, nausea, or vomiting and other gastro-intestinal effects.

INHALATION: Moderately toxic by inhalation.

**EFFECTS OF OVEREXPOSURE:**

Prolonged inhalation of vapors may cause mucous membrane irritation and vertigo. There are no known medical conditions which are recognized as being aggravated by exposure.

**SECTION VI - EMERGENCY AND FIRST AID PROCEDURES****EYE CONTACT:**

Immediately flush eyes with water for 30 minutes and seek medical attention.

**SKIN CONTACT:**

Wash contaminated area thoroughly with soap and water.

**INGESTION:**

Take large quantities of milk or water and immediately call a physician. For aid to physician, suggest Poison Control Center (213) 222-8086.

**SECTION VII - PERSONAL PROTECTION INFORMATION****EYE PROTECTION:**

Safety goggles recommended. A permanent eye wash is highly recommended.

**RESPIRATORY PROTECTION:**

None

**VENTILATION:**

Mechanical, General.

**HAND PROTECTION:**

Protective gloves recommended (solvent resistant).

**OTHER:**

A safety shower is recommended when the risk of a significant exposure exists.

**SECTION VIII - REACTIVITY DATA**

## STABILITY

- Stable when kept original, closed container, out of direct sunlight at temperature below 80°F.

## HAZARDOUS DECOMPOSITION PRODUCTS

- Acid smoke and irritating fumes.

## HAZARDOUS POLYMERIZATION

- Will not occur.

## INCOMPATIBILITY (materials to avoid)

- Dimethylaniline, cobalt naphthenate and other promoters, accelerators, reducing agents, or any hot material.

**SECTION IX - SPILL OR LEAK PROCEDURE**

## STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE:

Dike to prevent runoff from entering drains, sewers, streams, etc., and transfer into containers. spilled materials should be swept up with an insert, moist diluent such as perlite, vermiculic, or sand, and placed in a clean polyethylene lined drum or a polyethylene drum.

## WASTE DISPOSAL METHOD:

Immediately dispose of wastes material in accordance with federal, state and local regulations.

**SECTION X - SPECIAL PRECAUTIONS AND STORAGE DATA**

## HANDLING AND STORING:

Keep containers closed to prevent contamination. Rotate stock using the oldest material first. Storage at or below 80°F is required to ensure product safety. Prolonged storage at elevated temperatures will result in product degradation. Cooler storage is recommended for longer shelf life.

## OTHER PRECAUTIONS:

MEKP should never be added to hot solvents or monomers as a violent decomposition and/or reaction may result. When using spray equipment, never spray raw MEKP onto curing or into raw resin or flues. Keep MEKP in its original container. **DO NOT STORE WITH FOOD OR DRINK. DO NOT USE NEAR FOOD OR DRINK.** Unmixed, uncontaminated material, remaining at the end of the day, shall be returned to a proper organic peroxide storage area. Under no circumstances should material be returned to the original container.

**SECTION XI - REGULATORY INFORMATION**

The following chemicals are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Re-authorization Act of 1986 and 40 CFR Part 372.

CHEMICAL NAME	CAS NUMBER	PERCENT
Dimethyl Phthalate	131-11-3	43
Methyl Ethyl Ketone	78-93-3	02

## VOC INFORMATION:

Using ASTM Test Method D-2369-87, but at 40°C (since MEKP decomposes rapidly above 100°C and is not a VOC). MEKP contains 2.4% VOC by weight or 27 grams per liter. For more information, call NORAC.

## TSCA STATUS:

The ingredients in this product are listed in the US Toxic Substances Control Act (TSCA) Inventory.

## SHIPPING DESCRIPTION:

ORGANIC PEROXIDE TYPE-D LIQUID (METHYL ETHYL KETONE PEROXIDE, ≤45%) CLASS 5.2, UN3105, PGII, RQ

<b>Health</b>	<b>3</b>
<b>Fire Hazard</b>	<b>2</b>
<b>Reactivity</b>	<b>2</b>
<b>Personal Protection</b>	<b>X</b>

**DISCLAIMER OF LIABILITY**

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim liability for any use of this material. Information contained herein is believed to be true and accurate but all statements are made without warranty, express or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use and the suitability of the material for the user's purpose.

Prepared By: Joe Morales  
Revised: 10/03/01

# HASTINGS PLASTICS COMPANY

1704 Colorado Ave. Santa Monica, CA 90404 310-829-3449 FAX 310-828-6820

PRODUCT DATA  
MSDS HAPOL 1310-2A  
\*REVISED 5/20/99  
REPLACES 3/18/93

[Back to Index](#)

## HAPOL 1310-2A

### SECTION I - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	- HASTINGS PLASTICS COMPANY
PRODUCT INFORMATION AND SALES	- (310) 829-3449
EMERGENCY PHONE NUMBER	- (800) 424-9300
CHEMICAL FAMILY	- Cobalt Soap in Solvent
CHEMICAL NAME	- Cobalt Naphthenate Solution
SYNONYMS	- Cobalt Naphthenate Accelerator
TRADE NAME	- Hapol 1310-2A

### SECTION II - HAZARDOUS INGREDIENTS

COMPONENTS	CAS NUMBER	%	ACGIH, TLV* (OSHA, PEL)
MINERAL SPIRITS	8052-41-3	52	100 PPM (500 PPM) as stoddard solvent
**COBALT 2-ETHYLHEXANOATE	136-52-7	22	N/E
**COBALT NAPHTHENATE	61789-51-3	21	N/E
2-ETHYLHEXANOIC ACID	149-57-5	4	N/E
TRIETHANOLAMINE	102-71-6	1	N/E

\*\*Denotes a toxic chemical subject to the reporting requirements of sec 313 of the emergency planning and community right-to-know act of 11986 and of 40cfr372.

### SECTION III - PHYSICAL DATA

APPEARANCE, COLOR & ODOR	- Red-Violet Liquid, Mineral Spirits Odor
BOILING POINT	- Greater than 300°F
VAPOR PRESSURE (mm Hg)	- Less than 10
VAPOR DENSITY (Air = 1)	- Greater than air
SPECIFIC GRAVITY (H <sub>2</sub> O=1)	- .91
MELTING POINT	- N/A
SOLUBILITY IN WATER	- Negligible
PERCENT VOLATILE (% By Volume)	- 52
EVAPORATION RATE	- Slower than GU/AC

### SECTION IV - FIRE AND HAZARD EXPLOSION DATA

FLASH POINT, °F - 108°F TCC

FLAMMABLE LIMITS - 0.9 - 6.0

EXTINGUISHING MEDIA - Water Spray, Foam, Carbon Dioxide or Dry Chemical.

SPECIAL FIRE FIGHTING PROCEDURES - Burning will produce toxic fumes. Wear self-contained breathing apparatus and full turn-out gear to fight fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS - Exposure to heat builds up pressure in closed containers. Cool with water spray.

HMIS RATING - HEALTH - 2 FIRE - 3 REACTIVITY - 1

**SECTION V - HEALTH HAZARD DATA**

ACGIH,TLV (OSHA,PEL) - Mixture - See Section II

EFFECTS OF OVEREXPOSURE: WARNING--causes eye irritation. May cause skin irritation. Ingestion causes gastrointestinal irritation, vomiting, depression inhalation of concentrated vapors may cause respiratory tract irritation, headache, incoordination, narcosis and nervous system effects. Aspiration hazard if swallowed--can enter lungs and cause damage.

**SECTION VI - EMERGENCY & FIRST AID PROCEDURES**

INGESTION - Call a physician. Do not induce vomiting. Contains petroleum distillates. Aspiration may lead to pneumonitis.

CONTACT - Flush eyes with plenty of water for 15 minutes. Skin with soap and water. Call a physician if irritation persists

INHALATION - Remove to fresh air; give artificial respiration or oxygen if needed. Call a physician.

**SECTION VII - REACTIVITY DATA**

STABILITY

- Stable

INCOMPATIBILITY

- Strong Oxidants

HAZARDOUS DECOMPOSITION PRODUCTS

- Burning will produce toxic fumes.

HAZARDOUS POLYMERIZATION

- Will not occur

**SECTION VIII - SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove sources of ignition and ventilate area, cover with an inert absorbent material and remove to disposal container. Observe all relevant Federal, State, and Local laws.

WASTE DISPOSAL METHOD: Observe relevant Federal, State and Local laws. Do not contaminate any lakes, streams, ponds or underground water supply.

**SECTION IX - SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION - If exposure exceeds TLV, use appropriate NIOSH-Approved respiratory protective equipment.

VENTILATION - Local Exhaust - Recommended - Mechanical - Recommended

PROTECTIVE GLOVES - Impermeable gloves to minimize skin contact

EYE PROTECTION - Chemical splash goggles or face shield.

OTHER PROTECTIVE EQUIP. - Eye wash fountain, safety shower. Wash contaminated clothing before reuse.

**SECTION X - SPECIAL PRECAUTIONS**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: CAUTION! Combustible liquid - keep away from heat and flame. May be harmful if swallowed. May cause irritation. Avoid breathing vapor or spray mists. Use with adequate ventilation. Avoid contact with eyes or skin. HMIS ratings: Health - 1, Flammability - 2, Reactivity - 0 (Health rating applies only to acute effects as defined by National Paint and Coatings Association).

NOTE: California proposition 65 requires warning of the presence of certain listed chemicals. We have been informed by our supplier(s) that mineral spirits may contain small quantities of benzene, cas number 71-43-2. Since the quantity present is not controlled by us and may vary significantly, we have not made a determination whether that presence represents a significant risk as defined in the regulations. Given this uncertainty, we fell obligated to state the following warning:

THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER

**DISCLAIMER OF LIABILITY**

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim liability for any use of this material. Information contained herein is believed to be true and accurate but all statements are made without warranty, express or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use and the suitability of the material for the user's purpose.

Prepared By: Joe Morales

F#170-21A

# HASTINGS PLASTICS COMPANY

1704 Colorado Ave. Santa Monica, CA 90404 310-829-3449 FAX 310-828-6820

PRODUCT DATA  
MSDS 1340-1  
\*REVISED 5/21/99  
REPLACES 11/25/92

[Back to Index](#)

## HAPOL 1340-1

### SECTION I - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	- HASTINGS PLASTICS COMPANY
PRODUCT INFORMATION AND SALES	- (310) 829-3449
EMERGENCY PHONE NUMBER	- (800) 424-9300
CHEMICAL FAMILY	- Aromatic Monomers
TRADE NAME & SYNONYMS	- Hapol 1340-1

### SECTION II - HAZARDOUS INGREDIENTS

<u>COMPONENTS</u>	<u>CAS #</u>	<u>%</u>	<u>TLV(units)</u>
STYRENE	100-42-5	45-50	50-PPM
XYLENE (MIXED ISOMERS)	1330-20-7	38-39	100-PPM
ETHYL BENZENE	100-41-4	9-10	100-PPM

### SECTION III - PHYSICAL DATA

APPEARANCE, COLOR & ODOR	- Styrene Odor
BOILING POINT (°F)	- 146°C
VAPOR PRESSURE (mm Hg.)	- 13 @ 85°F
VAPOR DENSITY (Air = 1)	- 3.6
SPECIFIC GRAVITY (H <sub>2</sub> O=1)	- .87
SOLUBILITY IN WATER	- Negligible
PERCENT VOLATILE	
BY VOLUME (%) EVAPORATION RATE	- 97%
(N-BUTYL ACETATE = 1)	- .50

### SECTION IV - FIRE AND HAZARD EXPLOSION DATA

FLASH POINT, (°F) - 85 °F  
FLAMMABLE LIMITS - Lel 1 Uel 7

EXTINGUISHING MEDIA - Use Water Fog, Foam, Dry Chemical or CO<sub>2</sub>. Do not use a direct stream of water. Product will float and can be reignited on surface of water.

SPECIAL FIRE FIGHTING PROCEDURES - WARNING! FLAMMABLE. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear (Helmet with face shield, Bunker coats, Gloves and Rubber Boots), including a positive pressure Niosh approved self-contained breathing apparatus. Cool fire exposed containers with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS - Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

**SECTION V - HEALTH HAZARD DATA**

PERMISSIBLE EXPOSURE LEVEL - 100 PPM

THRESHOLD LIMIT VALUE - 50 PPM

EFFECTS OF ACUTE OVEREXPOSURE FOR PRODUCT:

EYE EFFECTS - Can cause severe irritation, redness, tearing, blurred vision.

SKIN EFFECTS - Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis.

INHALATION - Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation.

SWALLOWING - Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

TARGET ORGAN EFFECTS - Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: mild, reversible kidney effects, effects on hearing, respiratory tract damage (nose, throat and airways), testis damage and liver damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans and may aggravate pre-existing disorders of these organs: central nervous system effects, mild effects on color vision, effects on hearing, respiratory tract damage (nose, throat and airways).

DEVELOPMENTAL INFORMATION - This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to human is uncertain.

CANCER INFORMATION - In 1993, the International Agency for Research on Cancer (IARC) classified styrene in group 2B (possibly carcinogenic to humans). IARC concluded that there was no convincing evidence for carcinogenic action of styrene in animals based on the animal studies which existed at that time. Rather, the IARC 2B listing was based on data for styrene oxide, a metabolite of styrene. Two recent lifetime studies with styrene, one in rats and one in mice, have been completed since the 1993 review. There was no increase in cancer in styrene-exposed rats. However, there was an increase in lung cancer in styrene-exposed mice. The relevance of the mouse lung cancer to humans is uncertain. Styrene exposure has not been associated with an increased incidence of cancer in workers included those in the reinforced plastics and composites plastics industries.

OTHER HEALTH EFFECTS - Styrene readily reacts with low concentrations of halogens (for example, fluorine, chlorine, bromine, or iodine) to form a tear-producing substance.

**SECTION VI - EMERGENCY & FIRST AID PROCEDURES**

INHALATION - If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped give artificial respiration. Keep person warm, quiet and get medical attention.

EYE CONTACT - Flush with large amounts of water, lifting upper and lower lids occasionally, get medical attention.

SKIN CONTACT - If on skin thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

INGESTION OF FLUID - Do not induce vomiting, keep person warm, quiet and get medical attention.

Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

PRIMARY ROUTE(S) OF ENTRY - Inhalation. Skin Contact.

EFFECTS OF CHRONIC OVEREXPOSURE - Overexposure to styrene has apparently been found to cause the following effects in laboratory animals, liver abnormalities, kidney damage and lung damage.

**SECTION VII - SPILL OR LEAK PROCEDURES****STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

**SMALL SPILLS** - Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to hood. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Ventilate area.

**LARGE SPILLS** - Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

**WASTE DISPOSAL METHOD:**

**SMALL SPILL** - Allow volatile portion to evaporate in hood. Allow sufficient time for vapors to completely clear hood duct work. Dispose of remaining material in accordance with applicable regulations.

**LARGE SPILL** - Destroy by liquid incineration in accordance with applicable regulations.

**SECTION VIII - REACTIVITY DATA****STABILITY**

- Stable

**CONDITIONS TO AVOID**

- Prolonged storage above 100°F

**HAZARDOUS POLYMERIZATION** - May occur

**INCOMPATIBILITY (MATERIALS TO AVOID)**

- Avoid contact with strong mineral acids

**HAZARDOUS DECOMPOSITION PRODUCTS**

- May produce Hazardous Fumes of Carbon Monoxide, Aldehydes Organic Acids, Heavy Smoke.

**CONDITIONS TO AVOID**

- Excessive heat, peroxide and polymerization catalyst.

**SECTION IX - PROTECTIVE EQUIPMENT TO BE USED**

**RESPIRATORY PROTECTION** - If TLV of the product or any component is exceeded, a NIOSH/OSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/OSHA respirators under specified conditions. (See your safety equipment supplier). Engineering or administrative controls should be implemented to reduce exposure.

**VENTILATION** - Provide sufficient mechanical (General and/or local exhaust). Ventilation to maintain exposure below TLV(s).

**PROTECTIVE GLOVES** - Wear resistant gloves such as, Polyethylene

**EYE PROTECTION** - Chemical splash goggles in compliance with OSHA regulations are advised, however, OSHA regulations also permit other type safety glasses. (Consult your safety equipment supplier).

**OTHER PROTECTIVE EQUIPMENT** - To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**SECTION X - TRANSPORTATION REQUIREMENTS**

DEPARTMENT OF TRANSPORTATION CLASSIFICATION: FLAMMABLE LIQUID

D.O.T. PROPER SHIPPING NAME: SOLVENT N.O.S., NON-POISONOUS, UN-1993

**DISCLAIMER OF LIABILITY**

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim liability for any use of this material. Information contained herein is believed to be true and accurate but all statements are made without warranty, express or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use and the suitability of the material for the user's purpose.

Prepared By: Joe Morales

F#170-21A