

<b>GRADE</b>	<b>PL-1000S</b>	<b>M S D S</b> (MATERIAL SAFETY DATA SHEET)	<b>CREATION DATE</b>	<b>2000.6.10</b>
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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT DETAILS

PRODUCT NAME : HIRENOL **PL-1000S**.

TRADE NAMES : Phenol modified aromatic hydrocarbon resin.

CHEMICAL NAME : Mixture of several components including indane, pentene, heptene  
and cumylphenol compounds.

CHEMICAL FAMILY : Polymers, hydroxyls, aromatic.

MOLECULAR WEIGHT : 240 (weight average)

USAGE : Epoxy coatings, flooring adhesives, sealants.

### COMPANY IDENTIFICATION

MANUFACTURER : Kolon Industries Chemical Organization

14th Floor, Kolon Tower B/D, 1-23, Byeoryang-Dong, Gwacheon-City,

Gyeonggi-Do, 427-040, KOREA

Tel.: +82-2-3677-6134 Fax.: +82-2-3677-6189

EMERGENCY TELEPHONE NUMBER : +82-2-3677-6134

### CONTACT POINT

DESIGNATION : Mr. Jerry Lee, Business division 6

TEL. : +82-2-3677-6134

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### MAIN INGREDIENTS

Chemical Name	CAS No.	EINEC No.	%	IECSC
Phenol, methylstyrenated	68512-30-1	270-966-8	100	Listed

CAS REGISTRY NUMBER:

68512-30-1

EINECS No. 270-966-8

INVENTORY NAME(S):

Phenol, methylstyrenated (TSCA, DSL, EINECS)

Phenols comportant des groupements methylstyrene (French) (DSL, EINECS)

Phenol, methylstyrolisiert (German) (EINECS)

REACH Pre-registration : Yes

### INFORMATION ON HAZARDOUS INGREDIENTS

To present knowledge of the supplier, this product does not contain any hazardous ingredients in according to EU regulations (91/155/EEC)

FORM B811-2(Rev.0)

 **KOLON INDUSTRIES** CHEMICAL ORGANIZATION

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### **3. HAZARD IDENTIFICATION**

#### **HAZARD IDENTIFICATION**

PHYSICAL/CHEMICAL HAZARDS : The data available do not support any physical/chemical hazards.

HUMAN HEALTH HAZARDS : May be mildly irritating.

ENVIRONMENTAL HAZARDS : No informations have been reported or known.

NFPA RATINGS (SCALE 0-4) : HEALTH=1 FIRE=1 REACTIVITY=0

EC CLASSIFICATION (CALCULATED) : No Classification assigned

EMERGENCY OVERVIEW : COLOR : colorless to light yellowish

PHYSICAL FORM : liquid

ODOR : distinct odor

MAJOR HEALTH HAZARDS : respiratory tract irritation,  
skin irritation, eye irritation

#### **POTENTIAL HEALTH EFFECTS**

INGESTION :

SHORT TERM EXPOSURE : No information on significant adverse effects.

LONG TERM EXPOSURE : No information is available.

SKIN CONTACT :

SHORT TERM EXPOSURE : No information on significant adverse effects.

LONG TERM EXPOSURE : Allergic reactions, rash.

EYE CONTACT :

SHORT TERM EXPOSURE : No information on significant adverse effects.

LONG TERM EXPOSURE : No information is available.

INHALATION :

SHORT TERM EXPOSURE : No information on significant adverse effects.

LONG TERM EXPOSURE : No information on significant adverse effects

**CARCINOGEN STATUS** : OSHA : N, NTP : N, IARC : N

### **4. FIRST AID MEASURES**

**EFFECTS AND SYMPTOMS** : Prolonged or repeated skin contact may result in redness.

Eye contact may result in redness.

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**FIRST AID MEASURES** : Consult a doctor in the event of any complaints.

**INHALATION** : Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed.  
Get medical attention.

**SKIN CONTACT** : Remove contaminated clothing, jewelry, and shoes immediately.  
Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes).  
Get medical attention, if needed.

**EYE CONTACT** : Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains.  
Get medical attention, if needed.

**INGESTION** : If vomiting occurs, keep head lower than hips to help prevent aspiration.  
Get medical attention, if needed.

## **5. FIRE FIGHTING MEASURES**

**FLASH POINT : 183 °C**

### **EXTINGUISHING MEDIA**

**SUITABLE** : Regular dry chemical, carbon dioxide, water, regular foam.  
**NOT SUITABLE** : Water as solid streams may be ineffective.

### **FIRE FIGHTING PROCEDURE**

: Move container from fire area if it can be done without risk.  
Do not scatter spilled material with high-pressure water streams. Dike for later disposal.  
Use extinguishing agents appropriate for surrounding fire.  
Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

### **HAZARDOUS THERMAL (DE)COMPOSITION PRODUCTS**

: Burning may produce carbon monoxide.

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## **6. ACCIDENTAL RELEASE MEASURES**

### **OCCUPATIONAL RELEASE**

- Stop leak if possible without personal risk.
- Small spills : Absorb with sand or other non-combustible material.
- Collect spilled material in appropriate container for disposal.
- Keep unnecessary people away, isolate hazard area and deny entry

## **7. HANDLING AND STORAGE**

- Store and handle in accordance with all current regulations and standards.
- Store in a tightly closed container.
- Avoid contact with light.
- Store in a cool, dry place.
- Keep separated from incompatible substances.

## **8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

ENGINEERING MEASURE : Ventilation recommended. Local exhaust recommended.

HYGIENE MEASURE : Follow good housekeeping practices.

When using do not eat, drink or smoke.

OCCUPATIONAL EXPOSURE LIMITS : No occupational exposure limits have been established-United Kingdom.

### **PERSONAL PROTECTIVE EQUIPMENT**

- Respiratory system : In case of insufficient ventilation, wear suitable respiratory equipment ; filter mask (Type-A)
- Skin and body : Wear protective clothing and safety shoes.
- Hands : Wear suitable gloves.  
(Neoprene gloves, Rubber gloves or PVC coated gloves)
- Eyes : Wear safety glasses.

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE : Liquid

COLOR : Colorless to pale yellow

ODOR : Distinct odor

BOILING POINT : Above 200 °C

MELTING : Not available

VAPOR PRESSURE : Not available

VAPOR DENSITY : Not available

SPECIFIC GRAVITY (water=1) : 1.02-1.04

VISCOSITY : 900-1200 cps at 25 °C

WATER SOLUBILITY : Insoluble

EVAPORATION RATE : Not available

FLAMMABLE LIMIT : Not available

AUTOIGNITION TEMPERATURE : Not available

COEFFICIENT OF WATER/OIL DISTRIBUTION : Not available

SOLVENT SOLUBILITY : Soluble in ether, toluene, xylene, n-hexane, ketone etc.

## **10. STABILITY AND REACTIVITY**

STABILITY : Stable at normal temperatures and pressure.

REACTIVITY : Stable at normal temperatures and pressure.

CONDITIONS : Avoid heat, flames, sparks and other sources of ignition.

Avoid contact with incompatible materials.

INCOMPATIBILITIES : Oxidizing materials, acids

HAZARDOUS DECOMPOSITION PRODUCTS : Carbon monoxide

POLYMERIZATION : Not will polymerize

## **11. TOXICOLOGICAL INFORMATION**

ACUTE TOXICITY - ORAL : LD<sub>50</sub>(rat)>2000mg/Kg

ACUTE TOXICITY - DERMAL : LD<sub>50</sub>(rabbit)>2000mg/Kg

SKIN IRRITATION : Mildly irritating

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## **12. ECOLOGICAL INFORMATION**

No ecological information is known on the product.

## **13. DISPOSAL CONSIDERATIONS**

METHODS OF DISPOSAL : Disposal according to the local registration.

Combustion in an incinerator.

## **14. TRANSPORT INFORMATION**

### **INTERNATIONAL TRANSPORT REGULATIONS**

LAND-ROAD/RAILWAY : Not classified according to ADR/RID.

INLAND-WATERWAYS : Not classified according to ADN.

SEA : Not classified according to IMDG.

AIR : Not classified according to IATA.

### **NATIONAL TRANSPORT REGULATIONS**

UNITED KINGDOM : No additional transport regulations are known to supplier.

## **15. REGULATORY INFORMATION**

### **U.S. REGULATIONS**

TOSCA INVENTORY STATUS : Y

TOSCA 12(b) EXPORT NOTIFICATION : Not listed.

CERCLA SECTION 103 (40CFR302.4) : N

SARA SECTION 302 (40CFR355.30) : N

SARA SECTION 304 (40CFR355.40) : N

SARA SECTION 313 (40CFR372.65) : N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE : Y

CHRONIC : N

FIRE : N

REACTIVE : N

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SUDDEN RELEASE : N

OSHA PROCESS SAFETY (29CFR1910.119) : N

**STATE REGULATIONS**

California Proposition 65 : N

**EUROPEAN REGULATIONS**

EU CLASSIFICATION (67/548/EEC-88/379/EEC) : Not classified.

**UNITED KINGDOM**

No additional national regulations are known to the supplier.

**16. OTHER INFORMATION**

The information contained in the safety data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guides for the safe use, handling, disposal, storage and transportation and is not intended as warranty or as a specification.

The information relates only to the product specified. the information may not be suitable for combinations with other materials.

**CONFORMS TO 93/112/EC AND ISO 9002**

**HISTORY**

DATE OF PRINTING : 09-06-2000

DATE OF PREVIOUS ISSUE : 27-10-1999

DATE OF ISSUE : 09-06-2000