

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

**Product name:** Chlorinated Polyolefin 730-1 (20% Solids in Aromatic 100)

**Product No.:** EAN 978652. E2493808

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

**Identified uses:** Adhesion promoter

**Uses advised against:** None known.

### Details of the supplier of the safety data sheet

#### Manufacturer / Supplier

Eastman Chemical Company  
200 South Wilcox Drive  
Kingsport, TN 37660-5280 US  
+14232292000

Visit our website at [www.EASTMAN.com](http://www.EASTMAN.com) or email [emnmsds@eastman.com](mailto:emnmsds@eastman.com)

### Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

## SECTION 2: Hazards identification

### Hazard Classification:

#### Physical Hazards

Flammable liquids Category 3

#### Health Hazards

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2A

Specific Target Organ Toxicity -  
Single Exposure Category 3

Specific Target Organ Toxicity -  
Repeated Exposure Category 2

Aspiration Hazard Category 1

**OSHA Specified Hazards:** not applicable

### Warning label items including precautionary statement:

#### Pictogram:



**Signal Words:** DANGER!

**Hazard Statement(s):** H226: Flammable liquid and vapor.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.  
H373: May cause damage to organs (auditory organ) through prolonged or repeated exposure.  
H304: May be fatal if swallowed and enters airways.

**Precautionary Statement:**

**Prevention:** P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233: Keep container tightly closed.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting/equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P260: Do not breathe dust/fume/gas/mist/vapors/spray.  
P271: Use only outdoors or in a well-ventilated area.  
P264: Wash hands thoroughly after handling.

**Response:** P370 + 378: In case of fire: Use water spray, carbon dioxide, dry chemical or foam for extinction.  
P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P332+P313: If skin irritation occurs: Get medical advice/attention.  
P363: Wash contaminated clothing before reuse.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical advice/attention.  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P331: Do NOT induce vomiting.

**Storage:** P403+P235: Store in a well-ventilated place. Keep cool.  
P405: Store locked up.

**Disposal:** P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

Can decompose at elevated temperatures.

### SECTION 3: Composition/information on ingredients

#### Substances / Mixtures

##### General information:

| Chemical name                             | Concentration | Additional identification   | Notes |
|---|---------------|-----------------------------|-------|
| light aromatic solvent naphtha, petroleum | >50%          | CAS-No.: 64742-95-6         |       |
| 1,2,4-trimethylbenzene                    | 25.6%         | CAS-No.: 95-63-6            | #     |
| modified chlorinated polyolefin           | >18.0%        | CAS-No.: CAS-No: 68609-36-9 |       |
| epoxidized oil                            | <3%           | CAS-No.: 61789-01-3         |       |
| chlorobenzene                             | <3%           | CAS-No.: 108-90-7           | #     |
| xylene                                    | 1.8%          | CAS-No.: 1330-20-7          | #     |
| cumene                                    | 1.2%          | CAS-No.: 98-82-8            | #     |
| ethylbenzene                              | 0.6%          | CAS-No.: 100-41-4           | #     |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

### SECTION 4: First aid measures

#### Description of first aid measures

##### Inhalation:

Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

##### Eye contact:

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.

##### Skin Contact:

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

##### Ingestion:

Call a physician or poison control center immediately. Do NOT induce vomiting. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than the hips to help prevent aspiration.

#### Most important symptoms and effects, both acute and delayed:

May irritate and cause redness and pain. Respiratory tract irritation. Symptoms may be delayed.

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

##### Hazards:

None known.

##### Treatment:

Treat symptomatically.

### SECTION 5: Firefighting measures

|   |   |
|---|---|
| <b>General Fire Hazards:</b>                                  | Flammable liquid and vapor. USE WATER WITH CAUTION. Material will float and may ignite on surface of water.   |
| <b>Extinguishing media</b>                                    |   |
| <b>Suitable extinguishing media:</b>                          | Water spray. Dry chemical. Carbon Dioxide. Foam.  |
| <b>Unsuitable extinguishing media:</b>                        | None known.   |
| <b>Special hazards arising from the substance or mixture:</b> | Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Elevated temperatures can cause decomposition. |
| <b>Advice for firefighters</b>                                |   |
| <b>Special fire fighting procedures:</b>                      | Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool.  |
| <b>Special protective equipment for fire-fighters:</b>        | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.   |

## SECTION 6: Accidental release measures

|   |   |
|---|---|
| <b>Personal precautions, protective equipment and emergency procedures:</b> | Wear appropriate personal protective equipment.   |
| <b>Environmental Precautions:</b>   | Avoid release to the environment.   |
| <b>Methods and material for containment and cleaning up:</b>                | Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal. |
| <b>Notification Procedures:</b>   | In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.   |

## SECTION 7: Handling and storage:

|  |  |
|--|--|
| <b>Precautions for safe handling:</b>                                | Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Exercise caution if heating, especially in a closed container.  |
| <b>Conditions for safe storage, including any incompatibilities:</b> | Keep container tightly closed and in a well-ventilated place. Keep away from food, drink and animal feeding stuffs. Storage of solutions near 25°C will minimize haze and gel formation. Warming the contents, while keeping away from sparks and open flame, to approximately 38-49°C Resolution of thickening or separating may be accomplished through warming with agitation. Solutions may become hazy, partially precipitate from solution, or gel with time on exposure to low temperature. |
| <b>Specific end use(s):</b>  | Adhesion promoter  |

**SECTION 8: Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

Country specific exposure limits have not been established or are not applicable unless listed below.

| Chemical name                        | type | Exposure Limit Values | Source  |
|--------------------------------------|------|-----------------------|---|
| 1,2,4-Trimethylbenzene               | TWA  | 25 ppm                | US. ACGIH Threshold Limit Values (01 2010)                                  |
| chlorobenzene                        | TWA  | 10 ppm                | US. ACGIH Threshold Limit Values (01 2010)                                  |
|                                      | PEL  | 75 ppm 350 mg/m3      | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| xylene, m-xylene, o-xylene, p-xylene | TWA  | 100 ppm               | US. ACGIH Threshold Limit Values (01 2010)                                  |
|                                      | STEL | 150 ppm               | US. ACGIH Threshold Limit Values (01 2010)                                  |
|                                      | PEL  | 100 ppm 435 mg/m3     | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| cumene                               | TWA  | 50 ppm                | US. ACGIH Threshold Limit Values (01 2010)                                  |
|                                      | PEL  | 50 ppm 245 mg/m3      | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| ethylbenzene                         | TWA  | 20 ppm                | US. ACGIH Threshold Limit Values (12 2010)                                  |
|                                      | PEL  | 100 ppm 435 mg/m3     | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

**Biological Limit Values**

| Chemical name   | Exposure Limit Values          | Source              |
|---|--------------------------------|---------------------|
| chlorobenzene (4-Chlorocatechol, with hydrolysis: Sampling time: End of shift at end of work week.) | 100 mg/g (Creatinine in urine) | ACGIH BEL (01 2010) |
| chlorobenzene (p-Chlorophenol, with hydrolysis: Sampling time: End of shift at end of work week.)   | 20 mg/g (Creatinine in urine)  | ACGIH BEL (01 2010) |

**Exposure controls**

**Appropriate engineering controls:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**General information:**

Eye bath. Safety shower. Washing facilities.

**Eye/face protection:**

Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.

**Skin protection****Hand Protection:**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Other:**

No data available.

**Respiratory Protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:**

Observe good industrial hygiene practices.

**Environmental Controls:**

No data available.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

|   |                                     |
|---|-------------------------------------|
| <b>Physical state:</b>                          | liquid                              |
| <b>Form:</b>                                    | liquid                              |
| <b>Color:</b>                                   | Yellow                              |
| <b>Odor:</b>                                    | Aromatic                            |
| <b>Odor Threshold:</b>                          | Not determined.                     |
| <b>pH:</b>                                      | No data available.                  |
| <b>Melting Point</b>                            | No data available.                  |
| <b>Boiling Point:</b>                           | 155 °C                              |
| <b>Flash Point:</b>                             | 40.0 °C (Pensky-Martens Closed Cup) |
| <b>Evaporation Rate:</b>                        | Not determined.                     |
| <b>Flammability (solid, gas):</b>               | No data available.                  |
| <b>Flammability Limit - Upper (%)-:</b>         | No data available.                  |
| <b>Flammability Limit - Lower (%)-:</b>         | No data available.                  |
| <b>Vapor pressure:</b>                          | Not determined.                     |
| <b>Vapor density (air=1):</b>                   | No data available.                  |
| <b>Specific Gravity:</b>                        | < 1                                 |
| <b>Solubility(ies)</b>                          |                                     |
| <b>Solubility in Water:</b>                     | Negligible                          |
| <b>Solubility (other):</b>                      | No data available.                  |
| <b>Partition coefficient (n-octanol/water):</b> | No data available.                  |
| <b>Autoignition Temperature:</b>                | No data available.                  |
| <b>Decomposition Temperature:</b>               | 300 °C (HPDSC) 134 J/g              |
| <b>Dynamic viscosity:</b>                       | No data available.                  |
| <b>Kinematic viscosity:</b>                     | Not determined.                     |

**Explosive properties:** No data available.  
**Oxidizing properties:** No data available.

## SECTION 10: Stability and reactivity

**Reactivity:** None known.

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** Can decompose at elevated temperatures.

**Conditions to Avoid:** Heat, sparks, flames.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon Dioxide. Carbon Monoxide. hydrogen chloride Chlorinated compounds.

## SECTION 11: Toxicological information

### Information on likely routes of exposure

**Inhalation:** May cause respiratory irritation.

**Ingestion:** May be fatal if swallowed and enters airways.

**Skin Contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

### Information on toxicological effects

#### Oral

**Product:** No data available.

**Specified substance(s):**  
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified  
Oral LD-50: (Rat): > 5,000 mg/kg

**Specified substance(s):**  
1,2,4-Trimethylbenzene  
Oral LD-50: (Rat, Male.): 6,000 mg/kg

**Specified substance(s):**  
epoxidized oil  
Oral LD-50: (Rat): > 3,200 mg/kg  
Oral LD-50: (Mouse): > 3,200 mg/kg

**Specified substance(s):**  
chlorobenzene  
Oral LD-50: (Rat): 2,262 mg/kg

**Specified substance(s):**  
xylene, m-xylene, o-xylene, p-xylene  
Oral LD-50: (Rat, Male.): 3,523 mg/kg  
Oral LD-50: (Rat, Female.): > 4,000 mg/kg

**Specified substance(s):**  
cumene  
Oral LD-50: (Rat): 2,910 mg/kg

**Specified substance(s):**  
ethylbenzene  
Oral LD-50: (Rat): 3,500 mg/kg

#### Dermal

|  |   |
|--|---|
| <b>Product:</b>  | No data available.  |
| <b>Specified substance(s):</b><br>Solvent naphtha<br>(petroleum), light arom.;<br>Low boiling point naphtha<br>- unspecified | Dermal LD-50: (Rabbit): > 2,000 mg/kg                                     |
| <b>Specified substance(s):</b><br>1,2,4-Trimethylbenzene   | Dermal LD-50: (Rat): > 3,440 mg/kg<br>Read-across from a similar material |
| <b>Specified substance(s):</b><br>chlorobenzene  | Dermal LD-50: (Guinea Pig): > 20,000 mg/kg                                |
| <b>Specified substance(s):</b><br>xylene, m-xylene, o-<br>xylene, p-xylene   | Dermal LD-50: (Rabbit): > 4,200 mg/kg                                     |
| <b>Specified substance(s):</b><br>cumene   | Dermal LD-50: (Rabbit): > 10,000 mg/kg                                    |
| <b>Specified substance(s):</b><br>ethylbenzene   | Dermal LD-50: (Rabbit): 15,400 mg/kg                                      |

#### Inhalation

|  |  |
|--|--|
| <b>Product:</b>  | No data available.                                     |
| <b>Specified substance(s):</b><br>Solvent naphtha<br>(petroleum), light arom.;<br>Low boiling point naphtha -<br>unspecified | LC50 (Rat, 4 h): > 76.3 mg/l                           |
| <b>Specified substance(s):</b><br>1,2,4-Trimethylbenzene   | LC50 (Rat, 4 h): 18 mg/l Respiratory tract irritation. |
| <b>Specified substance(s):</b><br>chlorobenzene  | LC50 (Rat, 4 h): 29.7 mg/l                             |
| <b>Specified substance(s):</b><br>xylene, m-xylene, o-xylene,<br>p-xylene  | LC50 (Rat, 4 h): 6700 ppm                              |
| <b>Specified substance(s):</b><br>cumene   | LC50 (Rat, 4 h): 41.6 mg/l                             |
| <b>Specified substance(s):</b><br>ethylbenzene   | LC50 (Rat, 4 h): 4000 ppm                              |

#### Repeated dose toxicity

|   |   |
|---|---|
| <b>Product:</b>   | No data available.  |
| <b>Specified substance(s):</b><br>xylene, m-xylene, o-xylene,<br>p-xylene | NOAEL (Rat(Male and Female), Oral Study): 250 mg/kg<br>NOAEC (Rat(Male.), Inhalation): 3515 mg/m <sup>3</sup> |

#### Skin Corrosion/Irritation

|                 |                    |
|-----------------|--------------------|
| <b>Product:</b> | No data available. |
|-----------------|--------------------|



|  |  |
|--|--|
| <b>Specified substance(s):</b><br>Solvent naphtha<br>(petroleum), light arom.;<br>Low boiling point naphtha<br>- unspecified | (Rabbit, 72 h): moderate                                     |
| <b>Specified substance(s):</b><br>1,2,4-Trimethylbenzene   | (Rabbit, 72 h): moderate Read-across from a similar material |
| <b>Specified substance(s):</b><br>epoxidized oil   | (Guinea Pig, 24 h): Slight                                   |
| <b>Specified substance(s):</b><br>chlorobenzene  | (Guinea Pig, 24 h): moderate                                 |
| <b>Specified substance(s):</b><br>xylene, m-xylene, o-<br>xylene, p-xylene   | (Rabbit, 24 h): moderate                                     |
| <b>Specified substance(s):</b><br>cumene   | (Rabbit, 72 h): Slight                                       |
| <b>Specified substance(s):</b><br>ethylbenzene   | (Rabbit, 24 h): moderate                                     |

### Serious Eye Damage/Eye Irritation

|  |                                    |
|--|------------------------------------|
| <b>Product:</b>  | No data available.                 |
| <b>Specified substance(s):</b><br>Solvent naphtha<br>(petroleum), light arom.;<br>Low boiling point naphtha<br>- unspecified | (Rabbit): none                     |
| <b>Specified substance(s):</b><br>1,2,4-Trimethylbenzene   | (Rabbit): moderate                 |
| <b>Specified substance(s):</b><br>epoxidized oil   | (Rabbit): Slight                   |
| <b>Specified substance(s):</b><br>chlorobenzene  | (Rabbit): moderate                 |
| <b>Specified substance(s):</b><br>xylene, m-xylene, o-<br>xylene, p-xylene   | (Rabbit, 24 h): slight to moderate |
| <b>Specified substance(s):</b><br>cumene   | (Rabbit, 72 h): slight             |
| <b>Specified substance(s):</b><br>ethylbenzene   | (Rabbit): moderate to strong       |

### Respiratory or Skin Sensitization

|  |   |
|--|---|
| <b>Product:</b>  | No data available.                                |
| <b>Specified substance(s):</b><br>Solvent naphtha<br>(petroleum), light arom.;<br>Low boiling point naphtha<br>- unspecified | Skin Sensitization: (Guinea Pig): non-sensitizing |

|  |   |
|--|---|
| <b>Specified substance(s):</b><br>1,2,4-Trimethylbenzene               | Skin Sensitization: (Guinea Pig): non-sensitizing |
| <b>Specified substance(s):</b><br>epoxidized oil                       | Skin Sensitization: (Guinea Pig): non-sensitizing |
| <b>Specified substance(s):</b><br>chlorobenzene                        | Skin Sensitization: (Guinea Pig): non-sensitizing |
| <b>Specified substance(s):</b><br>xylene, m-xylene, o-xylene, p-xylene | OECD 429: LLNA (mouse): non-sensitizing           |
| <b>Specified substance(s):</b><br>cumene                               | Skin Sensitization: (Guinea Pig): non-sensitizing |
| <b>Specified substance(s):</b><br>ethylbenzene                         | Skin Sensitization: (Human): non-sensitizing      |

### Carcinogenicity

**Product:** No data available.

**Specified substance(s):**  
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified  
**Specified substance(s):**  
chlorobenzene

IARC Not Listed. NTP Not Listed. OSHA Not Listed.

**Specified substance(s):**  
chlorobenzene

IARC Not Listed. NTP Not Listed. OSHA Not Listed.

**Specified substance(s):**  
cumene

IARC 2B: possibly carcinogenic to humans. NTP reasonably anticipated to be a carcinogen. OSHA Not Listed. Expert judgment and weight of evidence determination: Not classified

**Specified substance(s):**  
ethylbenzene

IARC 2B: possibly carcinogenic to humans. NTP Not Listed. OSHA Not Listed. Expert judgment and weight of evidence determination: Not classified

### Toxicity to reproduction

**Product:** No data available.

### Developmental toxicity

**Product:** No data available.

### Germ Cell Mutagenicity

#### In vitro

**Product:** No data available.

**Specified substance(s):**  
xylene, m-xylene, o-xylene, p-xylene

Salmonella typhimurium assay (Ames test) (Bacterial Reverse Mutation Assay): negative

**In vivo****Product:** No data available.**Specified substance(s):**xylene, m-xylene, o-xylene,  
p-xylene Chromosomal aberration (Genetic Toxicology: Rodent Dominant Lethal Test)  
intraperitoneal injection (Rat): negative**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specified substance(s):**

chlorobenzene Inhalation: Narcotic effect.

**Specified substance(s):**xylene, m-xylene, o-xylene,  
p-xylene Inhalation: Respiratory tract irritation.**Specified substance(s):**

ethylbenzene Inhalation: Narcotic effect.

**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Specified substance(s):**Solvent naphtha  
(petroleum), light arom.; Low  
boiling point naphtha -  
unspecified May be fatal if swallowed and enters airways.**Specified substance(s):**

1,2,4-Trimethylbenzene May be harmful if swallowed and enters airways.

**Specified substance(s):**

chlorobenzene May be harmful if swallowed and enters airways.

**Specified substance(s):**xylene, m-xylene, o-xylene,  
p-xylene May be fatal if swallowed and enters airways.**Specified substance(s):**

cumene May be fatal if swallowed and enters airways.

**Specified substance(s):**

ethylbenzene May be fatal if swallowed and enters airways.

**Other effects:** May cause internal organ effects.**SECTION 12: Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Solvent naphtha  
(petroleum), light arom.;  
Low boiling point naphtha -  
unspecified LC-50 (Fathead Minnow, 96 h): 8.2 mg/l

|   |   |
|---|---|
| 1,2,4-Trimethylbenzene                  | LC-50 (Fathead Minnow, 96 h): 7.72 mg/l   |
| chlorobenzene                           | LC-50 (goldfish, 96 h): 73.03 mg/l  |
| xylene, m-xylene, o-xylene,<br>p-xylene | LC-50 (Oncorhynchus mykiss, 96 h): 2.6 mg/l Read-across from a similar material   |
| cumene                                  | LC-50 (Common Carp, 96 h): 4.8 mg/l<br>LC-50 (Fish, 96 h): 4.918 mg/l   |
| ethylbenzene                            | LC-50 (Sheepshead Minnow, 96 h): 275 mg/l<br>LC-50 (Fathead Minnow, 96 h): 42.3 - 48.5 mg/l<br>LC-50 (Guppy, 96 h): 97.1 mg/l |

**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**

|  |                                    |
|--|------------------------------------|
| Solvent naphtha<br>(petroleum), light arom.;<br>Low boiling point naphtha -<br>unspecified | EC-50 (Water Flea, 48 h): 4.5 mg/l |
|--|------------------------------------|

|                        |                                    |
|------------------------|------------------------------------|
| 1,2,4-Trimethylbenzene | LC-50 (Water Flea, 48 h): 3.6 mg/l |
|------------------------|------------------------------------|

|               |                                 |
|---------------|---------------------------------|
| chlorobenzene | EC-50 (daphnid, 48 h): 4.3 mg/l |
|---------------|---------------------------------|

|   |                                      |
|---|--------------------------------------|
| xylene, m-xylene, o-xylene,<br>p-xylene | EC-50 (Water Flea, 24 h): > 3.4 mg/l |
|---|--------------------------------------|

|        |                                     |
|--------|-------------------------------------|
| cumene | EC-50 (Water Flea, 48 h): 2.14 mg/l |
|--------|-------------------------------------|

**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**

|   |  |
|---|--|
| xylene, m-xylene, o-xylene,<br>p-xylene | NOEC (Oncorhynchus mykiss, 56 d): > 1.3 mg/l |
|---|--|

|        |                                    |
|--------|------------------------------------|
| cumene | NOEC (Zebra Fish, 28 d): 0.38 mg/l |
|--------|------------------------------------|

**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**

|  |                                   |
|--|-----------------------------------|
| Solvent naphtha<br>(petroleum), light arom.;<br>Low boiling point naphtha -<br>unspecified | EC-50 (Water Flea, 21 d): 10 mg/l |
|--|-----------------------------------|

|   |                                   |
|---|-----------------------------------|
| xylene, m-xylene, o-xylene,<br>p-xylene | NOEC (Water Flea, 7 d): 0.96 mg/l |
|---|-----------------------------------|

|        |                                    |
|--------|------------------------------------|
| cumene | NOEC (Water Flea, 21 d): 0.35 mg/l |
|--------|------------------------------------|

**Toxicity to Aquatic Plants**

|   |   |
|---|---|
| <b>Product:</b>   | No data available.  |
| <b>Specified substance(s):</b>  |   |
| Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified | EC-50 (Selenastrum capricornutum, 72 h): 3.1 mg/l   |
| 1,2,4-Trimethylbenzene  | EC-50 (Alga, 96 h): 2.356 mg/l  |
| xylene, m-xylene, o-xylene, p-xylene  | EC-50 (Selenastrum capricornutum, 72 h): 2.2 mg/l<br>NOEC: (Selenastrum capricornutum, 72 h): 0.44 mg/l |
| cumene  | ErC50 (Scenedesmus subspicatus, 72 h): 2.01 mg/l<br>NOEC (Scenedesmus subspicatus, 72 h): 1.49 mg/l     |

**Persistence and Degradability****Biodegradation**

|   |                       |
|---|-----------------------|
| <b>Product:</b>   | No data available.    |
| <b>Specified substance(s):</b>  |                       |
| Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified | 74 % (28 d)           |
| 1,2,4-Trimethylbenzene  | 8 - 14 % (28 d)       |
| xylene, m-xylene, o-xylene, p-xylene  | Readily biodegradable |
| cumene  | 70 % (20 d)           |
| ethylbenzene  | Readily biodegradable |

**BOD/COD Ratio**

|                                |                    |
|--------------------------------|--------------------|
| <b>Product:</b>                | No data available. |
| <b>Specified substance(s):</b> |                    |
| chlorobenzene                  | 7.32 %             |

**Bioaccumulative Potential****Bioconcentration Factor (BCF)**

|                                |   |
|--------------------------------|---|
| <b>Product:</b>                | No data available.                      |
| <b>Specified substance(s):</b> |   |
| 1,2,4-Trimethylbenzene         | Bioconcentration Factor (BCF): 33 - 275 |
| cumene                         | Bioconcentration Factor (BCF): 94.69    |

**Partition Coefficient n-octanol / water (log Kow)**

|                                      |                      |
|--------------------------------------|----------------------|
| <b>Product:</b>                      | No data available.   |
| <b>Specified substance(s):</b>       |                      |
| xylene, m-xylene, o-xylene, p-xylene | Log Kow: 3.12 - 3.20 |

ethylbenzene Log Kow: 3.15

**Mobility in Soil:** No data available.**Known or predicted distribution to environmental compartments**

|   |                    |
|---|--------------------|
| Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified | No data available. |
| 1,2,4-Trimethylbenzene  | No data available. |
| modified chlorinated polyolefin   | No data available. |
| epoxidized oil  | No data available. |
| chlorobenzene   | No data available. |
| xylene, m-xylene, o-xylene, p-xylene  | No data available. |
| cumene  | No data available. |
| ethylbenzene  | No data available. |

**Other Adverse Effects:** No data available.**SECTION 13: Disposal considerations****Waste treatment methods****General information:** No data available.**Disposal methods:** Dispose of waste and residues in accordance with local authority requirements. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.**SECTION 14: Transport information**

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

**DOT**

Class combustible liquid, Packing Group III for quantities greater than or equal to the Reportable Quantity amount, not regulated if less than 450 liters (119 gallons) and less than the Reportable Quantity amount in one package.

Reportable Quantity: 1,513 kg (chlorobenzene)  
Possible Shipping Description(s):

not regulated

NA 1993 Combustible liquid, n.o.s. (light aromatic solvent naphtha, petroleum) III

**IMDG - International Maritime Dangerous Goods Code**

Possible Shipping Description(s):

UN 1139 COATING SOLUTION 3 III

**IATA**

Possible Shipping Description(s):

UN 1139 Coating solution 3 III

**SECTION 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture.:**

**This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.**

**WHMIS (Canada) Status:** controlled**WHMIS (Canada) Hazard Classification:** B/3, D/2/A, D/2/B**SARA 311-312 Hazard Classification(s):**immediate (acute) health hazard  
delayed (chronic) health hazard  
fire hazard**US EPCRA (SARA Title III) Section 313 - Toxic Chemical List**1,2,4-TRIMETHYLBENZENE  
CHLOROBENZENE  
XYLENE (MIXED ISOMERS)  
CUMENE  
ETHYLBENZENE**OSHA:** hazardous

**TSCA (US Toxic Substances Control Act):** All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

**DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act):** All components of this product are listed on the DSL. Any impurities present in this product are exempt from listing.

**AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme):** All components of this product are listed on AICS or otherwise comply with NICNAS.

**MITI (Japanese Handbook of Existing and New Chemical Substances):** All components of this product are listed in the Handbook or have been approved in Japan by new substance notification.

**ECL (Korean Toxic Substances Control Act):** All components of this product are listed on the Korean inventory or otherwise comply with the Korean Toxic Substances Control Act.

**Philippines Inventory (PICCS):** All components of this product are listed on the Philippine inventory or otherwise comply with PICCS.

**Inventory of Existing Chemical Substances in China:** All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

## SECTION 16: Other information

**HMIS® Hazard Ratings:** Health - 2\*, Flammability - 2, Chemical Reactivity - 1

*HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.*

**Revision Information:** Not relevant.

**Key literature references and sources for data:** No data available.

**Training information:** No data available.

**Issue Date:** 05/06/2015

**SDS No.:**

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.