

## 斯應材股份有限公司物質安全資料表 eChem Solutions Corp.

#### **Material Safety Data Sheet**

**Rev. 1.0** 

#### 1 . Identification:

Product name: CPR-SR SR2000

Other names:

Recommended use and restrictions on use: Solvent for consumer and industrial applications.

#### 2 . Hazard(s) identification:

Hazard classification of the product: Flammable liquids 3

Serious eye damage/eye irritation 2

Label content:



Hazards identification information

Inflammable liquid or Vapor.

Serious Eye Damage/Skin Irritation.

Handling Precaution/First Aid:

Wear safety goggles and mask.

Keep away from sparks & flame – No smoking.

Take cloth off if contaminated.

Avoid breathing vapor and smoke or mist.

Other hazards: -

#### 3 . Composition/information on ingredients:

#### Mixtures:

Chemical properties:		
Chinese and English names of the hazardous ingredients		Concentration or concentration ranges (ingredient percentage)
Novolak resin derivative	25085-75-0	20 ~ 40
Propylene glycol monomethyl ether acetate	108-65-6	30 ~ 70

#### 4 · First-aid Measures:

The first-aid measures for different exposure routes:

inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Get medical help.

skin contact: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

eye contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so bymedical personnel.

The most important symptoms and hazardous effects: -

The protection of first-aiders: wear Level C protective clothing

Notes to physicians:



#### **Material Safety Data Sheet**

**Rev. 1.0** 

#### 5 · Fire-fighting measures:

#### Suitable fire extinguishing media:

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

#### Specific hazards may be encountered during fire-fighting:

Flash back possible over considerable distance. Container explosion may occur under fire conditions. Vapours may form explosive mixture with air. May form peroxides of unknown stability.

#### Specific fire-fighting methods:

Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water may not be effective in extinguishing fire. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Eliminate ignition sources. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

#### Special equipment for the protection of firefighters :

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

#### 6 · Accidental release measures :

#### Personal precautions:

Isolate area. Keep unnecessary and unprotected personnel from entering the area. For large spills, warn public of downwind explosion hazard. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Vapor explosion hazard. Keep out of sewers. Check area with combustible gas detector before reentering area. Ground and bond all containers and handling equipment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

#### Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

#### Methods for cleaning up:

Small spills: Absorb with materials such as: Sand. Vermiculite. Collect in suitable and properly labeled containers. Large spills: Contain spilled material if possible. Pump with explosion-proof equipment. If available, use foam to smother or suppress. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.



# 斯應財股份有限公司 物質安全資料表 eChem Solutions Corp.

#### **Material Safety Data Sheet**

**Rev. 1.0** 

#### 7 · Handling and storage:

#### Handling:

Avoid contact with eyes, skin, and clothing. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.

#### Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry place. Keep container closed when not in use. (Storage at At 2 - 8 °C/ Atmospheric / Dark or Yellow Light)

#### 8 · Exposure controls/personal protection:

#### Engineering control:

**Ventilation:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

#### Control parameters:

8 hours time weighted average exposure limits: -

Short-term exposure limits: -

maximum exposure limits: -

biological standards: -

#### Personal protective equipment:

#### Respiratory protection:

Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use an approved air-purifying or positive-pressure supplied-air respirator depending on the potential airborne concentration. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply. The following should be effective types of air-purifying respirators: Organic vapor cartridge.

#### Hand protection:

Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber. Polyethylene. Chlorinated polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR").

Eye protection: Use safety glasses.

#### Skin and body protection:

When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly.

#### Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.



## 斯應村股份有限公司 物質安全資料表

#### **Material Safety Data Sheet**

**Rev. 1.0** 

#### 9 · Physical and chemical properties:

Appearance ( physical state, color, etc ) : colourless,clear liquid	Odor : Acetate -like
Odor threshold: —	Melting point:—
pH value:4	Boiling point / Boiling point range : 146℃
Flammability (Solid, gas ): -	Flash point:47 ℃
Decomposition temperature : $-$	Test method: Closed cup
Auto-ignition temperature: 272°C	Explosion limits: 1.5% –10%
Vapor pressure: 3.8 mmHg @20℃	Vapor density: 4.6
Density : 1.02 @20°C	Solubility:220g/100g water@20℃
Partition coefficient(n-octanol/water,log Kow): -	Evaporation rate: 0.4

#### 10 . Stability and reactivity:

Stability: Thermally stable at typical use temperatures.

Possible hazardous reactions occurring under specific conditions:

Conditions to avoid: Do not distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Materials to avoid: Strong acids. Strong bases. Strong oxidizers.

Hazardous decomposition products: —

#### 11 . Toxicological information:

Routes of exposure: inhalation , ingestion , eye contact , skin contact

Symptoms: -

Acute toxicity:

Ingestion: LD50,Rat 8532 mg/kg Inhalation: LC50,Rat 4345 ppm/6H

Chronic toxicity or long term toxicity: Did not cause cancer in laboratory animals.

#### 12 · Ecological information:

Ecotoxicity: LC50(Fish): 5000µg/L/24 yr(Petromyzon marinus)

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

#### 13 · Disposal considerations:

#### Methods of waste disposal:

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local Environmental regulations.



### 斯應材股份有限公司物質安全資料表

### **Material Safety Data Sheet**

**Rev. 1.0** 

#### 14 · Transport information:

United Nation number (UN No): 1993
UN Proper shipping name: Flammable liquids
Transport hazard class(es): 3
Packing group: PG III
Marine pollutant(Yes/No): No
Specific transport measures and precautionary conditions: —

#### 15 Regulatory information:

Applicable regulations:

R.O.C (Taiwan) LABOR SAFETY AND HEALTH LAW

R.O.C (Taiwan)DANGEROUS AND PERMICIOUS MATERIALS REGULATION

#### 16 · Other information:

Literature references	1. RTECS,TOMES PLUS,Vol.71,2007 2. ChemWatch,2007-1 3. HSDB,TOMES PLUS, Vol.71,2007 4. OHS MSDS,2007	
	Name: eChem	
14 14000	Address/telephone number:	
	No. 455, Sinhe Rd., Sanhe Village, Longtan 325, Taoyuan, Taiwan (R.O.C.). 886-3-4072100	
Person who prepared the MSDS	Title: Engineer Name (signature): Peggy Huang	
Date that the MSDS was prepared:	2012/08/24	

To the best of our knowledge, the information contained herein is accurate. However, neither eChem Solutions Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.

Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.