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SECTION I - IDENTIFICATION
TRADE NAME: STYPOL LHPA-3200
DESCRIPTION: UNSATURATED POLYESTER RESIN IN MONOMER
PRODUCT CODE IDENTITY: LHPA3200B2
NPCA HMIS RATING: H 2* F 3 R 1
                                               LAST REVISED: 10/03/2011
                                                PRINT DATE: 09/25/2014
COMPANY NAME: CCP COMPOSITES US LLC
ADDRESS: 820 E. 14TH AVE.
                                                  CCP COMPOSITES US LLC
                                               PRODUCT STEWARDSHIP
             N. KANSAS CITY MO 64116
CUSTOMER:
                                             INFORMATION TELEPHONE:
                                              1-800-821-3590
 ATTENTION:
        24 HOUR RESPONSE NUMBER (CHEMTREC): 1-800-424-9300 (NORTH AMERICA)
                       001-703-527-3887 (INTERNATIONAL)
      ______
  CCP certifies that its products comply with all the provisions of the
  Toxic Substances Control Act (TSCA), unless otherwise stated by
  ingredient in Section II.
 ______
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      The percent by weight composition data given in Sections II
      and X are NOT SPECIFICATIONS, but are based on 'target'
     formula values for each ingredient in the product. The data
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     are presented as ranges for low hazard ingredients and single
point values for ingredients of regulatory concern. Actual batch concentrations will vary within limits consistent with separately established product consistent.
      point values for ingredients of regulatory concern. Actual
                                                                       * * *
                                                                       * * *
      separately established product specifications.
SECTION II INGREDIENTS
 1
CAS# 027253-31-2
COBALT NEODECANOATE, 26% COBALT
PCT BY WT: .0360
EXPOSURE LIMIT:
    ACGIH TLV/TWA: .05 MG/CU.M. AS COBALT METAL, DUST & FUME OSHA PEL/TWA: .05 MG/CU.M. AS COBALT METAL, DUST & FUME
    ACGIH TLV/TWA:
 2
CAS# 000136-52-7
COBALT 2-ETHYLHEXANOATE, 12% COBALT
PCT BY WT: .1820
EXPOSURE LIMIT:
    ACGIH TLV/TWA: .05 MG/CU.M. AS COBALT METAL, DUST & FUME OSHA PEL/TWA: .05 MG/CU.M. AS COBALT METAL, DUST & FUME
                        .05 MG/CU.M. AS COBALT METAL, DUST & FUME
CAS# 000100-42-5
STYRENE MONOMER
PCT BY WT: 32.3490 VAPOR PRESSURE: 4.500 MMHG @ 68F
EXPOSURE LIMIT:
    ACGIH TLV/TWA: 20 PPM (85 MG/CU.M.)
ACGIH TLV/STEL: 40 PPM (170 MG/CU.M.)
OSHA PEL/TWA: 100 PPM (8 HR TWA)
OSHA PEL/CEILING: ACCEPTABLE MAX. PEAK: 600 PPM (5 MIN IN ANY 3 HRS)
OSHA PEL/STEL: ACCEPTABLE CONCENTRATION: 200 PPM (15 MIN TWA)
LD50, Oral: 4.37 G/KG (RAT)
LD50, Dermal: >5 G/KG (RABBIT)
OTHER: LCLo: 5000 PPM/8H (RAT)
    OTHER (cont.): NIOSH TWA: 50 PPM (215 MG/M3)
OTHER LIMITS:
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* MATERIAL SAFETY DATA SHEET  * LHPA3200B2  *********************************
IARC - Group 2B See Section V NTP - Reasonably Anticipated to be a Human Carcinogen
4 UNSATURATED POLYESTER RESIN ON TSCA AND DSL INVENTORIES CAS# PROPRIETARY PCT BY WT: 50 - 60
UNSATURATED POLYESTER RESIN ON TSCA INVENTORY/ON CANADIAN DSL PCT BY WT: 5 - 10 EXPOSURE LIMIT: ACGIH TLV/TWA: NONE ESTABLISHED OSHA PEL/TWA: NONE ESTABLISHED
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SECTION III PHYSICAL DATA
Boiling Range: High: -N/A F Low: 293.0 F Vapor Pressure: See Section II Theoretical Weight per Gallon, Calculated: 9.2731 LB/GL Theoretical Specific Gravity, Calculated: 1.114 Theoretical VOC, Calculated: 3.224 LB/GLIf applicable, see Section X for further VOC information Physical State: LIQUID Appearance: LIGHT AMBER Odor: STYRENE Odor Threshold: -N/A pH: -N/A Freezing Point: -N/A Water Solubility: INSOLUBLE Coefficient of Water/Oil Distribution: -N/A Mechanical Impact Explosion: NO KNOWN HAZARD Static Electricity Explosion: AVOID STATIC CHARGE % HAP BY WEIGHT 32.426 % MONOMER BY WEIGHT 32.349
SECTION IV FIRE AND EXPLOSION HAZARD DATA
FLAMMABILITY CHARACTERISTICS: Lowest Closed Cup Flashpoint: 88.0 F

Page 5 Or 0

\* STYPOL LHPA-3200

MATERIAL SAFETY DATA SHEET

For Flash Points <73F:</pre>

OSHA Flammability Classification: Class IB

DOT Flammability Classification: Flammable Liquid Lower Flammable Limit in Air: 1.1 % by volume

For Flash Points >=73F and <100F:

OSHA Flammability Classification: Class IC

DOT Flammability Classification: Flammable Liquid

DOT SHIPPING NAME:

UN1866, RESIN SOLUTION, 3, PGII (where flash point <73F)
UN1866, RESIN SOLUTION, 3, PGIII (where flash point is >=73 and <=140F)
EXTINGUISHING MEDIA:

Foam, carbon dioxide, dry chemical, water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

If polymerization takes place in a container, there is possibility of violent rupture of the container. Vapors are uninhibited and may form polymers in vents or flame arrestors of storage tanks resulting in stoppage of vents. Vapors may cause flash fire. Keep containers tightly closed and isolate from heat, electrical equipment, sparks and flame. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

SPECIAL FIRE FIGHTING PROCEDURES:

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

ADDITIONAL TRANSPORTATION INFORMATION:

Freight Classification:

NMFC: 149980/SUB 2 RESIN COMPOUNDS, LIQUID LTL CLASS 55

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## SECTION V HEALTH HAZARD DATA

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EFFECTS OF EXCESSIVE OVEREXPOSURE. PRIMARY ROUTES OF ENTRY ARE:

EYE CONTACT:

Irritation. Symptoms are tearing, redness and discomfort.

SKIN CONTACT:

Irritation. Can cause defatting of skin which may lead to dermatitis.  ${\tt INHALATION:}$ 

Irritation to nose and throat. Extended or repeated exposure to concentrations above the recommended exposure limits may cause brain or nervous system depression, with symptoms such as dizziness, headache or nausea and if continued indefinitely, loss of consciousness, liver and kidney damage.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. INGESTION:

May cause mouth, throat, esophagus and stomach irritation, nausea, vomiting and diarrhea. Aspiration into lungs can cause pneumonitis which can be fatal.

MEDICAL CONDITIONS THAT MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. Preexisting eye, skin, liver, kidney and respiratory disorders. EMERGENCY AND FIRST AID PROCEDURES:

In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly

\* STYPOL LHPA-3200

MATERIAL SAFETY DATA SHEET

with soap and water. If affected by inhalation of vapors or spray mist, remove to fresh air. If swallowed, get medical attention immediately.

Based on the presence of components (\*\*, \*\*, 03)

CALIFORNIA PROPOSITION 65 INFORMATION:

WARNING - This product contains a chemical(s) known to the State of California to cause cancer.

OTHER HEALTH HAZARDS:

STYRENE MONOMER

The 12th Report on Carcinogens issued by the National Toxicology Program lists styrene as a "reasonably anticipated" carcinogen, but the Report cautions that the NTP listing does not mean that styrene presents a risk to persons in their daily lives. The Styrene Information and Research Center does not agree with the classification as it did not include a review of all available data. SIRC states: "HHS included styrene in the 12th RoC despite the fact that European Union regulators have determined styrene does not represent a human cancer concern. E.U. scientists reviewed the full styrene database, weighing all of the available data in reaching their conclusion."

The International Agency for Research on Cancer (IARC) has reclassified styrene as Group 2B "possibly carcinogenic to humans". This new classification is not based on new health data relating to either humans or animals, but on a change in the IARC classification system. The Styrene Information and Research Center does not agree with the reclassification and has published the following statement. "Recently published studies tracing 50,000 workers exposed to high occupational levels of styrene over a period of 45 years showed no association between styrene and cancer, no increase in cancer among styrene workers (as opposed to the average among all workers), and no increase in mortality related to styrene."

An increased incidence of lung tumors was observed in mice from a recent inhalation study. The relevance of this finding is uncertain. Data from other long-term animal studies and from epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic.

Lung effects have been observed in the mouse following repeated exposure to styrene.

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## SECTION VI REACTIVITY DATA

STABILITY: Stable

HAZARDOUS POLYMERIZATION: May occur.

CONDITIONS TO AVOID:

Elevated temperatures.

INCOMPATABILITY (MATERIALS TO AVOID):

Oxidizers, reducing agents, peroxides, strong acids, bases, UV light, or any source of free radicals and mild steel.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition or combustion can produce fumes containing organic acids, carbon dioxide and carbon monoxide.

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## SECTION VII SPILL OR LEAK PROCEDURES

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

Remove all sources of ignition (flames, hot surfaces, and electrical, static, or frictional sparks). Avoid breathing vapors. Ventilate area. Contain and remove with inert absorbent and non-sparking tools. WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state and federal regulations. Do not incinerate closed containers. Incinerate in approved facility.

CAS# 000100-42-5 PCT BY WT: 32.3490

STYRENE MONOMER

CCP COMPOSITES US LLC

LIMITED WARRANTY AND LIMITATION OF LIABILITY

LIMITED WARRANTY. Seller warrants that: (i) Buyer shall obtain good title to the product sold hereunder, (ii) at shipment such product shall conform to Seller's specifications for the product; and (iii) the sale or use of such product will not infringe the claims of any U.S. patent covering the product itself, but Seller does not warrant against infringement which might arise by the use of said product in any combination with other products or arising in the operation of any process.

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TO USE, OR PERFORMANCE OF THE PRODUCT.

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