

===== MATERIAL SAFETY DATA SHEET =====

For chemicals, coatings, and related materials
 'Essentially similar' to form OSHA-20

DATE PREPARED:

11-16-87

===== Manufacturer =====

NAME : C.L. Smith Industrial Company

EMERGENCY PHONE NUMBER

ADDRESS: 1311 South 39th Street

DAY: (314)-771-008

ADDRESS: St. Louis, MO

NIGHT: (314)-771-008

ADDRESS:

ZIPCODE: 63110

INFORMATION PHONE NUMBER

(314)-771-008

===== Section I - Product =====

NUMBER: RX-31341-B

NAME : CLS-773 REGULAR SET -- PART B

CLASS : EPOXY HARDENER

Flammable



Personal Protective

===== Section II - Hazardous Ingredients =====

Ingredient : Percent ; C. A. S. ; LEL ; Vapor Pressure
 Material Description : by weight ; Registry No. ; % ; mm Hg @ 20 C

Ingredient	Percent	C. A. S.	LEL	Vapor Pressure
ALIPHATIC POLYAMINE HARDENER	10 - 30	TRADE SECRET	N/A	N/A
PHENOL	5 - 10	108-95-2	1.5	01.00

===== Section III - Physical Data =====

Boiling Range: N/A - N/A deg F Freezing Point: N/A deg F
 Vapor Pressure: 01.0 mm @ 20 deg C Vapor Density: Lighter than air
 Specific Gravity: 01.56 H2O Soluble: Negligible (< 0.1%)
 Evaporation Rate: Slower % Volatile by Volume: 09.54 %
 (relative to n-butyl acetate)

Appearance and Odor: GREY, "DOUGH-LIKE" VISCOSITY, AMINE ODOR

===== Section IV - Fire and Explosion Hazard Data =====

Flash point: 180.0 deg F Explosive Limits: LEL UEL (%V in air)
 (Method Used) Pensky-Martens 01.5 06.7

FLAMMABILITY CLASSIFICATION

OSHA: Combustible Liquid - Class IIIA

DOT: Combustible Liquid

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical, foam.

SPECIAL FIRE FIGHTING PROCEDURES:

Fire fighters should wear a self-contained breathing apparatus with a full facepiece operated in a positive pressure mode.

Fire fighters should wear full protective clothing to guard against exposure to toxic and irritating fumes.

Spray containers exposed to fire and heat with water to keep cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Do not weld or use a cutting torch on or near drums, even if empty.

Empty drums contain residual material which may ignite explosively.

Empty drums contain residual material which may decompose to emit

toxic or irritating fumes if burned.

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 Section V - Toxicological Information
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Ingredient	PEL	TLV (twa)	LD50(mg/kg)	LC50(ppm)	LC50(ppm)	LC50(ppm)
Material Description	mg/m3	ppm	(rat)	(rbt)	(rat)	(rat)
			ORAL	DERMAL	INHAL	
ALIPHATIC POLYAMINE HARDENER	N/A	N/A	N/A	N/A	N/A	N/A
PHENOL	5.0	19.00	05.00	N/A	N/A	N/A

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 Section VI - Health Hazard Data
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EFFECTS OF OVEREXPOSURE: THRESHOLD LIMIT VALUES: See Section V
 Can cause severe eye irritation or burns.
 Skin contact causes severe irritation or burns, & can be sensitizing.
 Phenol is harmful if inhaled or absorbed through the skin. Repeated exposure to phenol may cause damage to internal organs. In animal test doses which cause maternal toxicity also caused some birth defects. Excessive inhalation of vapors can cause respiratory irritation, headache, dizziness, and/or nausea.
 Overexposure to vapors may also cause respiratory sensitization.

EMERGENCY AND FIRST AID PROCEDURES:
 Flush eyes with large amounts of water for at least 15 minutes.
 Get immediate medical attention!
 Immediately wash skin thoroughly with large amounts of soap and water.
 Get medical attention.
 Remove contaminated clothing and wash before re-use.
 If affected by vapors, remove patient to fresh air and get medical attention. Give oxygen or artificial respiration if necessary.
 If any of this product is accidentally swallowed, immediate treatment is essential!
 If swallowed, drink 2 glasses of water & induce vomiting.
 Get medical attention immediately!

CARCINOGENIC ACCORDING TO NTP, IARC, OR OSHA?
 This product does not contain ingredients listed by NTP, IARC, or OSHA.

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 Section VII - Reactivity Data
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STABILITY: Stable
 STABILITY CONDITIONS TO AVOID:
 Exposure to heat or sparks.
 INCOMPATIBILITY (MATERIALS TO AVOID CONTACT WITH):
 Strong acids, oxidizing agents, or epoxy resins in uncontrolled situations
 HAZARDOUS DECOMPOSITION PRODUCTS:
 CO, CO2
 Nitrogen oxides
 Traces of phenol vapors
 HAZARDOUS POLYMERIZATION: Will not occur
 POLYMERIZATION CONDITIONS TO AVOID:
 None

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 Section VIII - Spill or Leak Procedures
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STEPS FOR MATERIAL SPILLAGE:
 Only properly protected personnel should remain in the area to contain the spill and transfer leaking containers.
 Eliminate all ignition sources from the area.
 Properly protected personnel should contain the spill & soak it up with absorbent material. Shovel the absorbed material into containers for disposal.

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DATE PREPARED:
 11-16-87

===== Manufacturer =====
 NAME : C.L. Smith Industrial Company EMERGENCY PHONE NUMBER
 ADDRESS: 1311 South 39th Street DAY: (314)-771-0080
 ADDRESS: St. Louis, MO NIGHT: (314)-771-0080
 ADDRESS:
 ZIPCODE: 63110 INFORMATION PHONE NUMBER
 (314)-771-0080

===== Section I - Product =====

NUMBER: RX-31341-A H M I S
 NAME : CLS-SERIES -- PART A Health
 CLS-63 Heat resistant, CLS-101 Flammability
 Fast set, CLS-202 Regular, Reactivity
 CLS-303 Regular, Personal Protective Equipment
 CLS-404 Heat resistant
 trowel, CLS-505 Heat resistant trowel,
 CLS-773 Regular set, & CLS-70-4 Fast set
 CLASS : EPOXY BASE

HMIS

H HEALTH	1
F FLAMMABILITY	1
R REACTIVITY	0
PERSONAL PROTECTION HG-LS09 ©1981 NIOSH	B

===== Section II - Hazardous Ingredients =====

Ingredient	Percent	C. A. S.	LEL	Vapor Pressure
Material Description	by weight	Registry No.	%	mm Hg @ 20 C
EPOXY RESIN	> 60	BLEND	N/A	N/A

===== Section III - Physical Data =====

Boiling Range: N/A - N/A deg F Freezing Point: N/A deg F
 Vapor Pressure: N/A mm @ 20 deg C Vapor Density: Lighter than air
 Specific Gravity: N/A H2O Soluble: Negligible (< 0.1%)
 Evaporation Rate: Slower % Volatile by Volume: N/A %
 (relative to n-butyl acetate)

Appearance and Odor: WHITE COMPOUND, "DOUGH-LIKE" VISCOSITY

===== Section IV - Fire and Explosion Hazard Data =====

Flash point: 465.0 deg F Explosive Limits: LEL UEL (%V in air)
 (Method Used) Pensky-Martens N/A N/A

FLAMMABILITY CLASSIFICATION
 OSHA: Combustible Liquid - Class III B
 DOT : Not regulated for flammability

EXTINGUISHING MEDIA:
 Foam, alcohol foam, carbon dioxide, dry chemical, water fog.
 SPECIAL FIRE FIGHTING PROCEDURES:
 Fire fighters should wear a self-contained breathing apparatus with a full facepiece operated in a positive pressure mode.
 Fire fighters should wear full protective clothing to guard against exposure to toxic and irritating fumes.

Spray containers exposed to fire and heat with water to keep cool.
 UNUSUAL FIRE AND EXPLOSION HAZARDS:

Do not weld or use a cutting torch on or near drums, even if empty.
 Empty drums contain residual material which may decompose to emit toxic or irritating fumes if burned.

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 Section V - Toxicological Information
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Ingredient	PEL	TLV (twa)	LD50(mg/kg)	LC50(ppm)	
Material Description	mg/m3	ppm	ORAL	DERMAL	INHAL
EPOXY RESIN	N/A	N/A	N/A	N/A	N/A

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 Section VI - Health Hazard Data
 =====

EFFECTS OF OVEREXPOSURE: THRESHOLD LIMIT VALUES: See Section V
 May cause moderate to severe eye irritation, redness, tearing, or blurred vision.
 Skin contact may cause irritation or drying, and can be sensitizing.

EMERGENCY AND FIRST AID PROCEDURES:
 Flush eyes with large amounts of water for at least 15 minutes.
 Consult a physician if irritation develops or persists.
 Wash skin thoroughly with large amounts of soap and water.
 Consult a physician if irritation develops or persists.
 Remove contaminated clothing and wash before re-use.
 If affected by vapors, remove patient to fresh air and get medical attention. Give oxygen or artificial respiration if necessary.
 If swallowed, drink 2 glasses of water & induce vomiting.
 Get medical attention immediately!

CARCINOGENIC ACCORDING TO NTP, IARC, OR OSHA?
 This product does not contain ingredients listed by NTP, IARC, or OSHA.

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 Section VII - Reactivity Data
 =====

STABILITY: Stable
 STABILITY CONDITIONS TO AVOID:
 None
 INCOMPATIBILITY (MATERIALS TO AVOID CONTACT WITH):
 Strong oxidizing agents
 HAZARDOUS DECOMPOSITION PRODUCTS:
 CO, CO2
 HAZARDOUS POLYMERIZATION: Will not occur
 POLYMERIZATION CONDITIONS TO AVOID:
 None

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 Section VIII - Spill or Leak Procedures
 =====

STEPS FOR MATERIAL SPILLAGE:
 Properly protected personnel should contain the spill & soak it up with absorbent material. Shovel the absorbed material into containers for disposal.
 WASTE DISPOSAL METHODS:
 Dispose of according to federal, state, and local regulations.
 Empty containers retain product residue and are subject to all of the handling instructions on this sheet.

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 Section IX - Special Protection Information
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RESPIRATORY PROTECTION:
 None normally needed.
 VENTILATION:
 Good room ventilation.
 PROTECTIVE GLOVES:
 Chemical resistant gloves.

