

**MATERIAL SAFETY DATA SHEET
KEY VINYL ESTER BINDER/COATING RESIN PART A**

PRODUCT NAME: KEY VINYL ESTER BINDER/COATING PART A
PRODUCT CODE:

HMIS CODES: H F R P

SECTION 1: MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: KEY RESIN COMPANY
ADDRESS: 4050 Clough Woods Drive
Batavia, OH 45103
EMERGENCY NUMBER: 1-800-424-9300 **DATE PRINTED:** 12/16/10
INFORMATION NUMBER: 1-513-943-4225 **NAME OF PREPARER:** R. CAIN

SECTION 2: HAZARDOUS INGREDIENTS/SARA III INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	WT %	CARCINOGEN
Vinyl Ester Resin	068002-44-8	NE	NE	90-100	YES (IARC)
Styrene*					
Acrylate Copolymer	26376-86-3	NE	NE	0-10	NO
Cobalt Maphthenate **	61789-51-3		0.1 mg/m3	0-10	NO

Substances listed are present in concentration of 1% or greater, or 0.1% if cited as a potential Carcinogen in the OSHA hazards communication standard. Where proprietary ingredient is listed, the identity is available as provided in 29 CFR 1910.1200.

NE - Not Established

*Present at level of 44 wt% (regulated)

**Present at level of 30 PPM in product (Regulated OSHA 7-1)

SECTION 3: PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE	: 313° F (styrene)
VAPOR DENSITY	: 3.6 (styrene)
VAPOR PRESSURE	: 7 mm Hg @ 75° F (styrene)
VOC	: 3.81 lbs/gallon
SOLUBILITY IN WATER	: NIL
APPEARANCE AND ODOR	: Moderately viscous liquid with pungent odor
SPECIFIC GRAVITY (H₂O=1)	: 1.0278
EVAPORATION RATE	: Heavier than air

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 74-84° F

METHOD USED: PMCC

FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 0.07%

LOWER: 0.0%
UPPER: 8.9%

EXTINGUISHING MEDIA: Water fog, foam, dry chemical, CO₂

OSHA FLAMMABILITY CLASSIFICATION: Combustible liquid. Class I B

SPECIAL FIRE FIGHTING PROCEDURES: Wear goggles and self contained positive pressure breathing equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS: With exposure to heat of fire a strong exothermic reaction may cause decomposition and release of toxic fumes. Keep vapors away from sources of ignition. Cool containers with water spray.

SECTION 5: REACTIVITY DATA

STABILITY: Stable under normal conditions. Do not store in direct sunlight or above 100° F.

CONDITIONS TO AVOID: Avoid contact with oxidizing compounds, iron or aluminum chlorides or peroxides.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with iron or aluminum chlorides or peroxides.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with iron or aluminum chloride. **HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Carbon Monoxide, Carbon Dioxide.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: May occur during polymerization.

SECTION 6: HEALTH HAZARD DATA

HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

INHALATION: Styrene portion is volatile. Vapors can be harmful in high concentrations. Can cause irritation to upper respiratory tract. Can cause narcosis.

SKIN: Prolonged exposure to skin may cause irritation. Not likely to be absorbed at harmful levels.

EYE: Vapors may irritate and cause tears in the eyes. Liquid can cause some corneal injury.

INGESTION: Oral toxicity is low. However, if liquid enters lungs it may be absorbed and cause damage to other organs.

HEALTH HAZARDS (ACUTE AND CHRONIC): No data available.

CARCINOGENICITY:

NTP CARCINOGEN: No

IARC MONOGRAPHS: Yes

OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with potable water immediately for 15 minutes. If irritation develops, get medical attention.

SKIN: Remove with soap and water.

INGESTION: Do not induce vomiting. Get immediate medical attention.

INHALATION: Remove to fresh air. If unconscious, apply mouth to mouth resuscitation. Get medical attention immediately.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Flammable material. Isolate from all sources of ignition. Protect personnel involved in clean-up from vapors of styrene. Soak up spill with absorbent material such as clay and sand.

WASTE DISPOSAL METHOD: Place in containers for disposal. Residual resin may be removed by steam cleaning or with the use of non-flammable solvent such as 1-1-1 Trichloroethane. Burn in an approved incinerator or bury in an approved landfill.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep containers tightly closed when not in use. If mixtures of A and B are allowed to remain in the mixing vessel past pot life deadline, heat and a strong reaction will result.

OTHER PRECAUTIONS: Hazardous waste per SARA III.

SECTION 8: CONTROL MEASURES

RESPIRATORY PROTECTION: If TLV exceeded, use a NIOSH approved respirator.

VENTILATION: Provide ventilation to keep styrene TLV below the exposure guideline value.

PROTECTIVE GLOVES: Wear protective gloves.

EYE PROTECTION: Wear protective goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear protective body covering clothing when handling.

WORK/HYGIENIC PRACTICES: Practice good industrial hygiene. Wash hands thoroughly after use, before eating or smoking.

SECTION 9: REGULATORY INFORMATION

SARA TITLE III SECTION 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

CAS #	Chemical Name	Percent by Weight
000100-42-5	Styrene	<45%

SARA TITLE III SECTION 311/312: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 123 of the Superfund Amendment and Reauthorization Act of 1986 and is considered under applicable definitions to meet the following categories:

- An immediate health hazard
- A delayed health hazard
- A fire hazard
- A reactive hazard

D. O. T. PROPER SHIPPING NAME: Resin solution, flammable

PROPER SHIPPING NAME: Resin solution, flammable

HAZARD CLASS: Class 3, Flammable Liquid

UN/NA ID NUMBER: UN 1866

PACKING GROUP: III

SECTION 10: DISCLAIMER

Data and recommendations presented herein are based upon our and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.