

MATERIAL SAFETY DATA SHEET

Product Name: EasyNovo
Product Class: Part A – Epoxy Resin

Date Prepared: 4/15/99
Date Revised: 3/01/01

Section 1 – COMPANY IDENTIFICATION

Manufacturer: Royal Chemical Corporation
2705 Concord Road
Belle Chasse, LA 70037 USA
Telephone: (504) 392-8811
Fax: (504) 392-2173

Emergency Contact: Chem-Tel, Inc. @ 1-800-255-3924

Section 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	OSHA PEL	ACGIH TLV	CAS#
Phenol (Bisphenol A)	2 PPM(S)	2 PPM(S)	108-95-2 (<1%)
Epichlorohydrin	2 PPM(S)	2 PPM(S)	106-89-8 (<1%)

Remaining components are Proprietary

None of the remaining components are listed by O.S.H.A in 29 CRF Subpart Z

HMIS CODE

Health	2
Flammability	1
Reactivity	1

Section 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	NA
Specific Gravity (H₂O=1)	1.15 – 1.3
Vapor Pressure (mm Hg)	NA
Solubility in Water	Insoluble
Reactivity in Water	Not Reactive
Appearance & Odor	Grey with no odor
Melting Point	NA

Section 4 – FIRE & EXPLOSION DATA

Flash Point	None
Flammable Limits	NA
Auto-Ignition Temperature	NA
Extinguishing Media	Water, Foam, C _o 2, Dry Chemical
Special Fire Fighting Procedures	Wear self-contained breathing apparatus.
Unusual Fire and Explosion Hazard	None Known

Product Name: EasyNovo

Section 5 – REACTIVITY DATA

Stability	Stable
Conditions to Avoid	Heat, flame and contact with strong oxidizing agents.
Incompatibility (Materials to Avoid)	Strong acids, strong oxidizers and reactive organometallic compounds.
Hazardous Decomposition Products	Oxides of carbon
Hazardous Polymerization	Will not occur
Conditions to Avoid	NA

Section 6 – HEALTH HAZARD DATA

Route(s) of Entry	Skin and eyes
Eye Contact	Moderately irritating to the eyes.
Skin Contact	Potential for severe irritation. May cause burns, blistering and scar formation. May cause sensitization.
Inhalation	Irritating to the upper respiratory tract.
Ingestion	Abdominal cramps, nausea, vomiting
Carcinogenicity	NA
Signs and Symptoms of Exposure	Burning sensation, cough, labored breathing, headache, shortness of breath
Medical Conditions Aggravated by Exposure	Prior skin conditions
Emergency and First Aid Procedures	EYE CONTACT: IMMEDIATELY flush with plenty of water. Continue For 10 minutes. Call a physician. SKIN CONTACT: Wash affected area with soap and water. INHALATION: Remove to fresh air, sit person ½ upright, perform artificial respiration if indicated, seek medical attention immediately, repeated or prolonged exposure may cause asthma. NOTE: Anyone showing symptoms of asthma should never be exposed to this substance again. INGESTION: DO NOT INDUCE VOMITING. Give copious amounts of water. IMMEDIATELY call a physician or Poison Control.

Section 7 – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Of Spill	Extinguish all ignition sources. Ventilate. Cover with absorbent material. Collect spilled material and place in container and seal.
Waste Disposal Method	Incinerate in permitted waste facility. Since regulations vary, consult applicable regulations or authorities before disposal.
Precautions In Handling & Storing	Store in a cool, dry place. Keep incompatibles away from storage area.

Section 8 – CONTROL MEASURES

Respiratory Protection	Use organic vapor respirator when mixing or applying this product
Ventilation	Local exhaust ventilation is recommended
Protective Gloves	Rubber gloves, protective clothing
Eye Protection	Safety glasses or goggles or full-face respirator is recommended
Other Protective Clothing	Use of poly-coated vulcanized suit is recommended, gloves (rubber gauntlet type) chemical boots and suits taped at the ankles and wrists.
Work/Hygienic Practices	As with all chemicals, no smoking, eating, drinking, or the application of cosmetics in the work area. A thorough decontamination prior to leaving the work area is necessary to prevent cross contamination of others.

The information on this data sheet represents our current data and best opinion as to the proper use and handling of this product under normal conditions. Any use of this product which is not in conformance with this data sheet or which involves using the product in combination with any other product or process is the responsibility of the user.

MATERIAL SAFETY DATA SHEET

Product Name: Part B/Curing Agent
Product Class: Epoxy Curing Agent (Catalyst)

Date Prepared: 4/15/99
Date Revised: 3/01/01

Section 1 – COMPANY IDENTIFICATION

Manufacturer: Royal Chemical Corporation
2705 Concord Road
Belle Chasse, LA 70037 USA
Telephone: (504) 392-8811
Fax: (504) 392-2173

Emergency Contact: Chem-Tel, Inc. @ 1-800-255-3924

Section 2 – COMPOSITION/INFORMATION ON INGREDIENTS

None of the materials used in the manufacture of this product are listed by O.S.H.A. in 29 CRF Subpart Z

HMIS CODES

Health 3
Flammability 1
Reactivity 0

Section 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	NA
Specific Gravity (H₂O=1)	1.0
Vapor Pressure (mm Hg)	NA
Vapor Density (Air=1)	NA
Solubility in Water	Insoluble
Reactivity in Water	Not Reactive
Appearance & Odor	Clear Amber, Ammonical Odor
Melting Point	NA

Section 4 – FIRE & EXPLOSION DATA

Flash Point (Method Used)	200°F (93°C) (Closed Cup)
Flammable Limits	NA
Auto-Ignition Temperature	NA
Extinguishing Media	Water, Foam, C _o 2, Dry Chemical
Special Fire Fighting Procedures	Wear self-contained breathing apparatus.
Unusual Fire and Explosion Hazard	None Known

Section 5 – REACTIVITY DATA

Stability	Stable
Conditions to Avoid	Heat, flame and contact with strong oxidizing agents.
Incompatibility (Materials to Avoid)	Strong acids, strong oxidizers and reactive organometallic compounds.
Hazardous Decomposition Products	Oxides of carbon and nitrogen
Hazardous Polymerization	Will not occur
Conditions to Avoid	NA

Product Name: Part B/Curing Agent

Section 6 – HEALTH HAZARD DATA

Route(s) of Entry	Inhalation, Absorption, Skin, Eyes
Eye Contact	Moderately irritating to the eyes.
Skin Contact	Potential for severe irritation. May cause burns, blistering and scar formation. May cause sensitization.
Inhalation	Irritating to the upper respiratory tract and mucous membranes
Ingestion	NA
Carcinogenicity	NA
Signs and Symptoms of Exposure	Burning sensation, cough, labored breathing, headache, nausea shortness of breath, these may be delayed for several hours after exposure.
Medical Conditions Aggravated by Exposure	Prior skin conditions, asthma, prior sensitization reactions
Emergency and First Aid Procedures:	
	EYE CONTACT: IMMEDIATELY flush with plenty of water. Continue For 10 minutes. Call a physician.
	SKIN CONTACT: Wash affected area with soap and water.
	INHALATION: Remove to fresh air.
	INGESTION: DO NOT INDUCE VOMITING. Give copious amounts of water. IMMEDIATELY call a physician or Poison Control.

Section 7 – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Of Spill	Extinguish all ignition sources. Ventilate. Cover with absorbent material. Collect spilled material and place in container and seal.
Waste Disposal Method	Incinerate in permitted waste facility. Since regulations vary, consult applicable regulations or authorities before disposal.
Precautions In Handling & Storing	Store in a cool, dry place. Keep incompatibles away from storage area.

Section 8 – CONTROL MEASURES

Respiratory Protection	Use organic vapor respirator in well ventilated areas, SCBA or Airline type respirator in poorly ventilated spaces.
Ventilation	Local exhaust ventilation is recommended
Protective Gloves	Rubber gauntlet type to prevent skin irritation
Eye Protection	Safety goggles or full-face respirator
Other Protective Clothing	Use a vulcanized suit (not sewn) for application and mixing products, suit should be taped at the ankles and wrists.
Work/Hygienic Practices	No smoking, drinking, or application of cosmetics in work area. Fully decontaminate prior to leaving area to prevent cross contamination.

The information on this data sheet represents our current data and best opinion as to the proper use and handling of this product under normal conditions. Any use of this product which is not in conformance with this data sheet or which involves using the product in combination with any other product or process is the responsibility of the user.