

SAFETY DATA SHEET

VB 1002

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME:	EP 745 PART A	PRODUCT CODE:	745-A
PRODUCT CLASS:	Epoxy	CAS NUMBER:	None
COMPANY NAME:	INNOVATIVE RESIN SYSTEMS, INC. 257 WILSON AVENUE NEWARK, NJ 07105 973-465-6887	FOR EMERGENCY ASSISTANCE	CONTACT CHEMTREC AT 1-800-424-9300

SECTION II - HAZARDS IDENTIFICATION

Information in accordance with 29 CFR 1910.1200

GHS Classification:

Skin Irritation Category 2
Eye Irritation Category 2A
Skin Sensitization Category 1

GHS Label elements:
Pictograms



Signal Word: Warning

Hazard Statements:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Precautionary Statements:

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303	IF ON SKIN:
P352	Wash with plenty of soap and water.
P333	If skin irritation or rash occurs:
P313	Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P304	IF INHALED:
	Remove victim to fresh air and keep at rest in a position comfortable for
P340	breathing.
P305	IF IN EYES:
P351	Rinse cautiously with water for several minutes.
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container according to Federal state/Provincial and local government regulations.

OTHER HEALTH HAZARDS:

Lung sensitization (e.g. Allergy, asthma) may be evidenced by wheezing with shortness of breath and cough.

SECTION III - COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS NO.</u>	<u>Weight</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
NJTSRN-EP745-A	--	--	--	--

SECTION IV - FIRST AID MEASURES

SKIN CONTACT :

Immediately remove contaminated clothing or shoes, wipe excess from skin and flush with plenty of water for at least 15 minutes. Use soap if available or follow by washing with soap and water. Do not reuse clothing until thoroughly cleaned.

EYE CONTACT :

Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open and seek medical attention.

INHALATION :

Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing and seek medical help immediately.

INGESTION :

Do not give any liquids (do not induce vomiting) if victim is unconscious or very drowsy. Get medical help immediately.

SECTION V - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Use Dry Chemical, Carbon Dioxide, Foam or Water Fog

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS :

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by fire fighters. Do not enter a confined space without full bunker gear, including a positive pressure NIOSH approved self-contained breathing apparatus. During fire, irritating and toxic gases may be generated by thermal decomposition or combustion.

SECTION VI - ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Remove all sources of ignition and ventilate the area. Dike and contain spilled material and control further spillage if feasible. Cover spill with clay, sand, saw dust, vermiculite, Fuller's earth or other suitable absorbent. Collect material in non-leaking containers and seal tightly for disposal. Refer to section 13 for disposal information.

SECTION VII - HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing. Employee education and training in the safe use and handling of this material are required under the OSHA Hazard communication standard. Use with adequate ventilation.

STORAGE:

Store indoors in a cool dry place away from heat, sparks and flame. Keep containers tightly closed when not in use.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION:

Safety glasses, splash goggles or face shield. Contact lenses should not be worn.

SKIN PROTECTION:

Avoid contact with skin and clothing. Use chemical resistant protective gloves.

RESPIRATORY PROTECTION:

Avoid breathing vapors which may be produced under some conditions such as heating or applications. Avoid breathing aerosols and mists. Use NIOSH / MSHA approved respiratory protection equipment when airborne exposure is excessive. Observe OSHA regulations for respirator use (29 CFR 1910.134).

VENTILATION :

Hazard control from vapor or spray mist is ideally performed by the use of engineering controls. General or local ventilation or isolation may prove adequate to keep airborne exposures below exposure limits.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM:	Liquid
COLOR:	Black
BOILING POINT:	Not available
WEIGHT PER GALLON:	9.4 pounds
VAPOR DENSITY:	Heavier than air
EVAPORATION RATE :	Not available
(N-Butyl Acetate)	
FLASH POINT :	>300°F (PMCC)
FLAMMABILITY LIMITS:	UEL % Not established
	LEL % Not established
AUTO IGNITION TEMP. :	Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guarantee analysis of any specific lot or as specifications for the product.

SECTION X - STABILITY AND REACTIVITY

STABILITY:

Product is stable under normal conditions of storage and handling.

MATERIALS TO AVOID :

Lewis or mineral acids, Organic bases such as primary and secondary aliphatic amines, oxidizing agents, curing agents - Considerable heat may be generated.

HAZARDOUS POLYMERIZATION :

Will not occur under normal storage conditions. However, polymerization may occur over 500 Deg. F.

DECOMPOSITION PRODUCTS :

By heat and fire: Carbon dioxide, carbon monoxide, Aldehydes, acids and other organic substances may be formed.

SECTION XI - TOXICOLOGICAL INFORMATION

CHRONIC STUDIES:

Recent 2 year Bioassays in mice exposed by the dermal route to the Diglycidyl ether of Bisphenol A have yielded very limited evidence of weak carcinogenicity. The renal tumor evidence "was of no biological significance" and that the resin "is not a systemic carcinogen when applied to the dorsal skin of CF1 mice". Based on this, The international Agency for Research on cancer (IARC) concluded that DGEBA was not classifiable as a carcinogen (IARC group 3) based on following: Human and Animal evidence - Inadequate.

DGEBA have proved to be inactive when tested by in vivo mutagenicity assays. They have shown activity in vitro microbial mutagenicity screening tests and have produced chromosomal aberrations in cultured rat liver cells. The significance of this information to man is unknown.

SECTION XII - ECOLOGICAL INFORMATION

Data not available.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch.

SECTION XIV - TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION GROUND

PROPER SHIPPING NAME :	Plastic Liquid, Nos.	(** Not regulated by DOT)
HAZARD CLASS or DIVISION:	None	(** Non Hazardous by DOT Regulation)
UN / NA Number :	---	
PACKING GROUP :	PG III	
DOT PRODUCT RQ, Lb.	None	
HAZARD LABEL(S) :	None	
HAZARD PLACARD(S) :	None	

INTERNATIONAL AIR TRANSPORTATION (ICAO/IATA)

PROPER SHIPPING NAME :	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (Epoxy resin)
HAZARD CLASS OR DIVISION :	9
IDENTIFICATION NUMBER :	UN 3082
PACKING GROUP :	PG III

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:

All ingredients in this products are listed in the T.S.C.A. inventory.

CERCLA REPORTABLE QUANTITY:

None

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE :

None

SECTION 311/312 HAZARD CATEGORIES:

Immediate (Acute) health hazard

SECTION 313 TOXIC CHEMICALS :

None

RCRA :

If discarded in its purchased form, this product would not be a hazardous waste by listing. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24).

CALIFORNIA PROPOSITION 65 : This product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm – epichlorohydrin.

SECTION XVI - OTHER INFORMATION

HMIS RATINGS:	Health 2	Flammability 1	Reactivity 0
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REASON FOR ISSUE : Initial issuance of new product.

SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: EP 745 Part B
PRODUCT CLASS: Amine
COMPANY NAME: INNOVATIVE RESIN SYSTEMS, INC.
257 WILSON AVENUE
NEWARK, NJ 07105
973-465-6887

PRODUCT CODE: 745-B
CAS NUMBER: None

**FOR EMERGENCY ASSISTANCE
CONTACT CHEMTREC
AT 1-800-424-9300**

SECTION II - HAZARDS IDENTIFICATION

In accordance with 29 CFR 1910.1200

GHS Classification:

Skin corrosion Category 1B
Skin sensitization , Category 1
Serious eye damage/eye irritation Category 1

GHS Label Elements Pictograms



Signal Word : Danger

Hazard Statements:

H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash...thoroughly after handling
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 IF SWALLOWED:
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P331 Do NOT induce vomiting.

P303 IF ON SKIN:
P361 Remove/Take off immediately all contaminated clothing.
P353 Rinse skin with water/shower.

P304 IF INHALED:
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 IF IN EYES:

- P351 Rinse cautiously with water for several minutes.
- P338 Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P333 If skin irritation or rash occurs:
- P313 Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P501 Dispose of contents/container according to Federal state/Provincial and local government regulations.

SECTION III - COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS NO.</u>	<u>Weight</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
NJTSRN-EP745-B	--	--	--	--

SECTION IV - FIRST AID MEASURES

- SKIN CONTACT :** Immediately remove contaminated clothing or shoes, wipe excess from skin and flush with plenty of water for at least 15 minutes. Use soap if available or follow by washing with soap and water. Do not reuse clothing until thoroughly cleaned.
- EYE CONTACT :** Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open and seek medical attention.
- INHALATION :** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing and seek medical help immediately. Turn victims head to the side.
- INGESTION :** In the event of ingestion, administer 1 glass of water. Do not induce vomiting and get medical help immediately.

SECTION V - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: In case of large fire use: Water Spray, Alcohol Foam. In case of small fires, use Carbon dioxide, Dry Chemical, dry sand or limestone.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS : Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by fire fighters. Do not enter a confined space without full bunker gear, including a positive pressure NIOSH approved self-contained breathing apparatus. During fire, irritating and toxic gases may be generated by thermal decomposition or combustion.

SECTION VI - ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Remove all sources of ignition and ventilate the area. Dike and contain spilled material and control further spillage if feasible. Cover spill with clay, sand, saw dust, vermiculite, Fuller's earth or other suitable absorbent. Collect material in non-leaking containers and seal tightly for disposal. Refer to section 13 for disposal information.

SECTION VII - HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing. Employee education and training in the safe use and handling of this material are required under the OSHA Hazard communication standard. Use with adequate ventilation.

STORAGE: Store indoors in a cool dry place away from heat, sparks and flame. Keep containers tightly closed when not in use. Keep away from acids and oxidizers. Do not store in an iron or other reactive metal containers.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION: Safety glasses, splash goggles or face shield . Contact lenses should not be worn.

SKIN PROTECTION: Avoid contact with skin and clothing. Use chemical resistant protective gloves such as neoprene rubber gloves, nitrile rubbers gloves, cuffed butyl rubber gloves and other impermeable gloves.

RESPIRATORY PROTECTION: Avoid breathing vapors which may be produced under some conditions such as heating or applications. Avoid breathing aerosols and mists. Use NIOSH / MSHA approved respiratory protection equipment when airborne exposure is excessive. Observe OSHA regulations for respirator use (29 CFR 1910.134).

VENTILATION : Hazard control from vapor or spray mist is ideally performed by the use of engineering controls. General or local ventilation or isolation may prove adequate to keep airborne exposures below exposure limits.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Liquid
COLOR: light Amber
BOILING POINT: 149°C
VAPOR DENSITY: >1 (air = 1)
SPECIFIC GRAVITY: 1.08
VAPOR PRESSURE: Not available
SOLUBILITY: Missible
(in water)
EVAPORATION RATE : Not available
(n Butyl Acetate = 1)
FLASH POINT : >300°F (PMCC)
FLAMMABILITY LIMITS: UEL % Not established
LEL % Not established
AUTO IGNITION TEMP. : Not Known

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guarantee analysis of any specific lot or as specifications for the product.

SECTION X - STABILITY AND REACTIVITY

STABILITY: Product is stable under normal conditions of storage and handling.

MATERIALS TO AVOID : Lewis or mineral acids, Organic bases such as primary and secondary aliphatic amines, Ketones, Aldehydes, oxidizing agents. A reaction accompanied by large heat release occur when the product is mixed with acids.

HAZARDOUS POLYMERIZATION : Will not occur.

DECOMPOSITION PRODUCTS : By heat and fire: Carbon dioxide, carbon monoxide. Ammonia when heated. Nitrogen oxide in the fire. Nitrogen oxide can react with water vapors to form corrosive nitric acid

SECTION XI - TOXICOLOGICAL INFORMATION

Acute Oral Toxicity (LD50, Rat) : >4290 mg/kg (estimates)
Acute dermal Toxicity (LC50, Rat): >2500 mg/kg (estimates)
Chronic Data: No delayed, subchronic or chronic test data are known

SECTION XII - ECOLOGICAL INFORMATION

Data not available.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch.

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME : Amines, Liquid Corrosive, N.O.S.

HAZARD CLASS or DIVISION: 8 Corrosive

UN / NA Number : UN 2735

PACKING GROUP : PG III

DOT PRODUCT RQ, Lb. None

HAZARD LABEL(S) : 8 Corrosive

HAZARD PLACARD(S) : Corrosive

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All ingredients in this products are listed in the T.S.C.A. inventory.

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE : None

SECTION 311/312 HAZARD CATEGORIES: None

SECTION 313 TOXIC CHEMICALS : None

RCRA :

It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24).

SECTION XVI - OTHER INFORMATION

HMS RATINGS: Health 3 Flammability 1 Reactivity 0

REASON FOR ISSUE : Initial issuance of new product.