SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: PU 1914 PART A
PRODUCT CODE: 1914-A
PRODUCT CLASS: Polymeric Diisocyanate (MDI)
CAS NUMBER: None
COMPANY NAME: **INNOVATIVE RESIN SYSTEMS, INC.**
257 WILSON AVE
NEWARK, NJ 07105
1914-465-6887

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

SECTION II - HAZARDS IDENTIFICATION

Information In accordance with 29 CFR 1910.1200

GHS Classification:

Acute Toxicity Inhalation Category 4
Skin Irritation Category 2
Eye Irritation Category 2A
Respiratory Sensitization Category 1
Skin Sensitization Category 1

GHS Label elements
Pictograms

Signal Word : Danger

Hazard Statements:
H315: Causes Skin Irritation
H317: May cause Allergic skin reaction
H320: Causes eye irritation
H332: Harmful if inhaled
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements:
P261: Do not breath vapors, mist or spray
P264: Wash thoroughly hands after handling
P270: Do not eat drink or smoke when using this product.
P271: Use only outdoors or in well-ventilated area.
P280: Wear eye and face protection. Wear protective gloves
P285: In case of inadequate ventilation wear respiratory protection.
P302+P352: If on Skin: wash with plenty of soap and water
P304+P340: If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P388: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,if present and easy to do so. Continue rinsing.
P333+P313: If skin irritation or rush occurs: Get medical attention
P337+P313: If eye irritation persists: Get medical attention
P342+P311: If experiencing respiratory symptoms: Call a poison center or physician
P362: Take off contaminated clothing and wash before reuse.
P403: Store in a well-ventilated place
P232: Protect from moisture
P233: Keep container tightly closed
P501: Dispose of contents and /or container according to Federal State/Provincial and local governmental regulations.

SECTION III - COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	Weight	ACGIH TWA	OSHA PEL
4,4' -Diphenylmethane Diisocyanate	101-68-8	< 60 %	0.005 ppm TWA	0.20 mg/m^3 TWA
Diphenylmethane Diisocyanate	26447-40-5	< 10 %	Not Established	Not Established

SECTION IV - FIRST AID MEASURES

SKIN CONTACT : Remove contaminated clothing or shoes, wipe excess from skin. Wash with soap and plenty of water (warm water is preferable if readily available).

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. Asthmatic- type symptoms may develop and may be immediate or delayed up to several hours.

INGESTION : Do not give any liquids (do not induce vomiting). Get medical help immediately.

SECTION V - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Use Dry Chemical, Carbon Dioxide, Foam or Water Fog. For large fires, alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function but much less effectively. Water is not recommended but may be applied in very large quantities as a fine spray when other extinguishing media are not available.

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. Product reacts with water. Reaction may produce heat and / or gases.

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 pillage 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. Attempt to neutralize by adding a mixture of : water (80%) with non-ionic surfactant Tergitol TMN-10 (20%), OR water (90%), concentrated ammonia (3-8%) and detergent (2%). Add about 10 parts of neutralizer per part of Isocyanate while mixing, Allow to stand uncovered for 48 hours to let CO2 escape. If ammonia is used, use good ventilation to prevent vapor exposure. Large quantities may be pumped into closed , but not sealed containers. 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 dry place away from heat between 65 to 85 °F. Keep containers tightly closed when not in use. Keep product from exposing to atmospheric moisture and maintain a nitrogen atmosphere in the containers at all times. Do not store product contaminated with water to prevent potential hazardous reaction. Refer to Section X of the MSDS for Reactivity and Stability data.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION: Safety glasses, Chemical / splash goggles.

SKIN PROTECTION: Avoid contact with skin and clothing. Use permeation resistant gloves such as Butyl rubber, nitrile rubber or polyvinyl alcohol. However, please note that PVA degrades with water.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations, use an approved positive pressure supplied - air respirator. 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.

VENTILATION : Hazard control from vapor or spray mist is ideally performed by the use of engineering controls. MDI levels must be monitored.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Liquid
COLOR: Beige
BOILING POINT: 406 °F @ 5 mm Hg for MDI
ODOR: Slightly musty odor
WEIGHT PER GALLON: 11.0 pounds
VAPOR PRESSURE: < 10-5 mm Hg @ 77°F
VAPOR DENSITY: 8.5 (MDI) (Air =1)
EVAPORATION RATE : Not available
(N-Butyl Acetate)
FLASH POINT : >400°F (PMCC)
FLAMMABILITY LIMITS: UEL % Not established
LEL % 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**.** Product is very Unstable when contaminated with water.

CONDITIONS TO AVOID:

Avoid temperatures above 90°F. Avoid temperatures below 64°F. Avoid moisture. Product can decompose at Elevated temperature..

MATERIALS TO AVOID:

Avoid contact with metals such as aluminum, brass, copper, galvanized metals, zinc. Reaction with water can generate carbon dioxide. Generation of gas can cause pressure build up in closed systems. Avoid contact with acids, alcohol, amines, ammonia, bases, metal compounds, moist air, strong oxidizers, and water. Avoid unintended contact with polyols.

HAZARDOUS POLYMERIZATION : Polymerization can occur which could be catalyzed by strong bases and water.

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

SECTION XI - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD50 : > 15,800 mg/Kg (Rat)
Dermal LD50: > 5010 but < 7,940 mg/Kg (Rabbit)

Inhalation LC50: The 4 hour LC50 for polymeric MDI in rats ranges from 370 to 490 mg/m3. The LC50 For monomeric MDI was estimated to be between 172 and 187 mg/m3.

MUTAGENICITY:

Positive (Salmonella micro some test with metabolic activation; cell transformation assay). As well as negative (mouse lymphoma specific locus mutation test with or without metabolic activation) results have been observed "in vitro". However, MDI was negative in an "in vivo" (mouse micronucleus) assay.

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

DOMESTIC SURFACE (USA / DOT)

PROPER SHIPPING NAME :	Not Regulated
HAZARD CLASS or DIVISION:	Not Applicable
UN / NA Number :	Not Applicable
PACKING GROUP :	PG III
DOT PRODUCT RQ, Lb.	25000 lbs
HAZARD LABEL(S) :	Not Applicable
HAZARD PLACARD(S) :	Not Applicable

SECTION XV - REGULATORY INFORMATION

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

CERCLA REPORTABLE QUANTITY:

5000 lbs for 4,4' -Diphenylmethane Diisocyanate , CAS # 101-68-8

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE : None

SECTION 311 and 312 HAZARD CATEGORIES:

Under applicable definitions, the product is considered to meet following categories: An immediate health hazard, A delayed health hazard and a reactive hazard.

SECTION 313 TOXIC CHEMICALS :

4,4' -Diphenylmethane Diisocyanate	CAS #: 101-68-8	< 99 % by weight
Diphenylmethane Diisocyanate	CAS #: 26447-40-5	< 10 % by weight

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.

CALIFORNIA PROPOSITION 65: To the best of our knowledge this product does not contain any list of chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

SECTION XVI - OTHER INFORMATION

HMIS RATINGS:	Health	Flammability	Reactivity
	3	1	1

REASON FOR ISSUE : Initial issuance of new document