PREMIUM RESIN TECH.

RDH-9106 RDH-9106

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: **RDH-9106 HARDENER**

Manufacturer: **Premium Resin Tech.**

3605-32nd Street, Port Huron, Michigan 48060 (586) 530-3633

Chemical /Formula / Family: Cyclohexylamine

Section 2 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Potential Health Effects

Signal Word : **"DANGER"**

GHS LABEL :

HMIS		
H	3	**PPE**†
F	1	†Sec. 8
R	0	

Primary Entry Route: SKIN CONTACT, EYE CONTACT, INGESTION, INHALATION

Inhalation: PRODUCT MAY CAUSE IRRITATION TO THE NOSE, THROAT AND RESPIRATORY TRACT.

Eye: MAY BE MODERATELY IRRITATING TO THE EYES.

Skin: MAY BE MODERATELY IRRITATING TO THE SKIN; MAY CAUSE SKIN SENSITIZATION. PROLONGED OR REPEATING LIQUID CONTACT CAN RESULT IN DEFEATING AND DRYING OF THE SKIN WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS.

Ingestion: PRODUCT IS MODERATELY TOXIC AND MAY BE HARMFUL IF SWALLOWED.

Carcinogenicity: IARC, NTP, AND OSHA DO NOT LIST RDH-9106 AS A CARCINOGEN.

Medical conditions aggravated by long-term exposure: PREEXISTING EYE, SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. PREEXISTING SKIN OR LUNG ALLERGIES MAY INCREASE THE CHANCE OF DEVELOPING INCREASED ALLERGY SYMPTOMS FROM EXPOSURE TO THIS PRODUCT. REPEATED AND/OR PROLONGED EXPOSURE TO LOW CONCENTRATIONS OF VAPOR MAY CAUSE SORE THROAT, EYE IRRITATION, NAUSEA, AND MAY CAUSE CHRONIC IRRITATION OF THE RESPIRTATORY TRACT AND BRONCHOPHEUMONIA.

Section 3 - Composition / Information on Ingredients

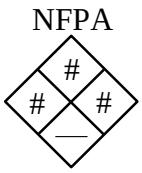
Ingredient Name	CAS Number	% wt *or* % vol
ISOPHORONE DIAMINE	2855-13-2	60-80
AMINE	0112-24-3	20-40

Section 4 - First Aid Measures

Inhalation: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT, GIVE ARTIFICIAL RESPIRATION. IF NOT BREATHING. GET MEDICAL ATTENTION.
Eye Contact: FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.
Skin Contact: REMOVE CONTAMINATED CLOTHING/SHOES AND WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. DO NOT REUSE CLOTHING UNTIL CLEANED. CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES, CANNOT BE DECONTAMINATED AND SHOULD BE DESTROYED TO PREVENT REUSE.
Ingestion: DO NOT GIVE LIQUIDS IF VICTIM IS UNCONSCIOUS OR VERY DROWSY. OTHERWISE, GIVE NO MORE THAN 2 GLASSES OF WATER AND INDUCE VOMITING BY GIVING 30CC {2 TABLESPOONS} SYRUP OF IPECAC. IF IPECAC IS UNAVAILABLE, GIVE 2 GLASSES OF WATER AND INDUCE VOMITING BY TOUCHING FINGER TO BACK OF VICTIM'S THROAT. KEEP VICTIM'S HEAD BELOW HIPS WHILE VOMITING. GET MEDICAL ATTENTION.
After first aid, get appropriate in-plant, paramedic, or community medical support.
Note to Physicians: IF VICTIM IS A CHILD, GIVE NO MORE THAN 1 GLASS OF WATER AND 15CC {1 TABLESPOON} SYRUP OF IPCAC. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE SHOULD BE CONSIDERED FOLLOWING INCUBATION WITH A CUFFED ENDOTRACHEAL TUBE.
Special Precautions / Procedures: STORE IN COOL, DRY PLACE WITH ADEQUATE ENTILATION. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES. HEATING THIS RESIN ABOVE 300^{O}F IN THE PRESENCE OF AIR MAY CAUSE SLOW OXIDANT DECOMPOSITION ABOVE 500^{O}F, POLYMERIZATION MAY OCCUR. SOME CURING AGENTS, POLYAMINES CAN PRODUCE EXOTHERMIC REACTIONS, WHICH IN LARGE MASSES CAN CAUSE RUNAWAY POLYMERIZATION AND CHARRING TO THE REACTIONS. FUMES AND VAPORS FROM THESE THERMAL AND CHEMICAL DECOMPOSITION VARY WIDELY IN COMPOSITION AND TOXICITY. DO NOT BREATH FUMES.

Section 5 - Fire-Fighting Measures

Flash Point: 277°F
Flash Point Method: (PENS – MARTIN CLOSED CUP)
LEL: 1.2% **UEL:** N/AV
Flammability Classification: MATERIAL WILL NOT BURN UNLESS PREHEATED.
Extinguishing Media: USE SAND, EARTH, "ALCOHOL" FOAM, DRY CHEMICAL OR C02.



Unusual Fire or Explosion Hazards: MAY GENERATE TOXIC, IRRITATING OR FLAMMABLE COMBUSTION PRODUCTS. MAY GENERATE CARBON MONOXIDE GAS AND TOXIC NITROGEN OXIDE GASES.
Hazardous Combustion Products: NO UNUSUAL HAZARDS.
Fire-Fighting Instructions: DO NOT RELEASE RUNOFF FROM FIRE CONTROL METHODS TO SEWERS OR WATERWAYS.
Fire-Fighting Equipment: WEAR FULL BUNKER GEAR INCLUDING HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS. BECAUSE FIRE MAY PRODUCE TOXIC THERMAL DECOMPOSITION PRODUCTS, WEAR A SELF-CONTAINED BREATHING APPARATUS (SCBA) WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR POSITIVE-PRESSURE MODE.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: MAY BURN ALTHOUGH NOT READILY IGNITABLE.
Small Spills: TAKE UP WITH AN ABSORBENT MATERIAL AND DISPOSE OF PROPERLY.
Large Spills: DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE / SALVAGE MATERIAL; DISPOSE OF PROPERLY.
Containment: FOR LARGE SPILLS, DIKE FAR AHEAD OF LIQUID SPILL FOR LATER DISPOSAL. DO NOT RELEASE INTO SEWERS OR WATERWAYS.
Cleanup: FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE.
Regulatory Requirements: FOLLOW APPLICABLE OSHA REGULATIONS (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: MINIMIZE ALL CONTACT WITH MATERIAL. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS OR USING TOILET FACILITIES.
Storage Requirements: STORE IN COOL, DRY PLACE WITH ADEQUATE VENTILATION.
Regulatory Requirements: NONE

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:
Ventilation: PROVIDE GENERAL OR LOCAL EXHAUST VENTILATION SYSTEMS TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW OSHA PELS (SEC. 2). LOCAL EXHAUST VENTILATION IS PREFERRED BECAUSE IT PREVENTS CONTAMINANT DISPERSION INTO THE WORK AREA BY CONTROLLING IT AT ITS SOURCE.
Administrative Controls:
Respiratory Protection: SEEK PROFESSIONAL ADVICE PRIOR TO RESPIRATOR SELECTION AND USE. FOLLOW OSHA RESPIRATOR REGULATIONS (29 CFR 1910.134) AND, IF NECESSARY, WEAR A MSHA/NIOSH-APPROVED RESPIRATOR. SELECT RESPIRATOR BASED ON ITS SUITABILITY TO PROVIDE ADEQUATE WORKER PROTECTION FOR GIVEN WORKING CONDITIONS, LEVEL OF AIRBORNE CONTAMINATION, AND PRESENCE OF SUFFICIENT OXYGEN. FOR EMERGENCY OR NONROUTINE OPERATIONS (CLEANING SPILLS, REACTOR VESSELS, OR STORAGE TANKS), WEAR AN SCBA. *WARNING! AIR-PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATMOSPHERES.* IF RESPIRATORS ARE USED, OSHA REQUIRES A WRITTEN RESPIRATORY PROTECTION PROGRAM THAT INCLUDES AT LEAST: MEDICAL CERTIFICATION, TRAINING, FIT-TESTING, PERIODIC ENVIRONMENTAL MONITORING, MAINTENANCE, INSPECTION, CLEANING, AND CONVENIENT, SANITARY STORAGE AREAS.
Protective Clothing/Equipment: WEAR CHEMICALLY PROTECTIVE GLOVES, BOOTS, APRONS, AND GAUNTLETS TO PREVENT PROLONGED OR REPEATED SKIN CONTACT. WEAR PROTECTIVE EYEGLASSES OR CHEMICAL SAFETY GOGGLES, PER OSHA EYE- AND FACE-PROTECTION REGULATIONS (29 CFR 1910.133). CONTACT LENSES ARE NOT EYE PROTECTIVE DEVICES. APPROPRIATE EYE PROTECTION MUST BE WORN INSTEAD OF, OR IN CONJUNCTION WITH CONTACT LENSES.
Safety Stations: MAKE EMERGENCY EYEWASH STATIONS, SAFETY/QUICK-DRENCH SHOWERS, AND WASHING FACILITIES AVAILABLE IN WORK AREA.
Contaminated Equipment: SEPARATE CONTAMINATED WORK CLOTHES FROM STREET CLOTHES. LAUNDER BEFORE REUSE. REMOVE THIS MATERIAL FROM YOUR SHOES AND CLEAN PERSONAL PROTECTIVE EQUIPMENT.
Comments: NEVER EAT, DRINK, OR SMOKE IN WORK AREAS. PRACTICE GOOD PERSONAL HYGIENE AFTER USING THIS MATERIAL, ESPECIALLY BEFORE EATING, DRINKING, SMOKING, USING THE TOILET, OR APPLYING COSMETICS.

Section 9 - Physical and Chemical Properties

Physical State: LIQUID
Vapor Pressure: NOT AVAILABLE
Vapor Density (Air=1): NOT AVAILABLE
Water Solubility: APPRECIABLE

Appearance and Odor: Colorless, Faint Amine like odor
Density: 7.8 WPG
Specific Gravity (H_2O=1, at 24 °C): .94
Freezing/Melting Point: N/A

Boiling Point: 477ºF
Evaporation Rate: Not Volitile

Section 10 - Stability and Reactivity

Stability: RDH-9106 IS STABLE AT ROOM TEMPERATURE IN CLOSED CONTAINERS UNDER NORMAL STORAGE AND HANDLING CONDITIONS.
Polymerization: HAZARDOUS POLYMERIZATION CANNOT OCCUR.
Chemical Incompatibilities: OXIDIZING AGENTS (I.E. PERCHLORATES, NITRATES, ETC.), EPOXY RESINS
Conditions to Avoid: AVOID HEAT, FLAME AND CONTACT WITH STRONG OXIDIZING AGENT.
Hazardous Decomposition Products: THERMAL OXIDATIVE DECOMPOSITION OF RDH-9106 CAN PRODUCE CARBON MONOXIDE, CARBON DIOXIDE AND NITROGEN OXIDES.

Section 11- Toxicological Information

Toxicity Data:*

- LD50 Rat: 1030 mg/kg Method: analogous OECD method

Section 13 - Disposal Considerations

Disposal: CONTACT YOUR SUPPLIER OR A LICENSED CONTRACTOR FOR DETAILED RECOMMENDATIONS. FOLLOW APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
Disposal Regulatory Requirements:
Container Cleaning and Disposal:

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name:
Isophoronediamine
Shipping Symbols:
Hazard Class: 8
ID No.: UN 2289
Packing Group: III
Label:
Special Provisions (172.102):

Packaging Authorizations
a) Exceptions: 173
b) Non-bulk Packaging: 173
c) Bulk Packaging: 173

Quantity Limitations
a) Passenger, Aircraft, or Railcar:
b) Cargo Aircraft Only:

Vessel Stowage Requirements
a) Vessel Stowage:
b) Other:

Section 16 - Other Information

Prepared By: PREMIUM RESIN TECH
Revision Notes: 2-2019
Additional Hazard Rating Systems:

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