SAFETY DATA SHEET

---------- Section 1: IDENTIFICATION ----------

PRODUCT NAME: RESIN RESEARCH ADDITIVE F
MANUFACTURER: RESIN RESEARCH
131 TOMAHAWK DR.#11 INDIAN HARBOUR BEACH, FL. 32937
4231 S. FREMONT AV. TUCSON AZ. 85714
HAZARDOUS MATERIAL DESCRIPTION: EPOXY RESIN ACCELERATOR
USE: COMPOSITES, ADHESIVES AND COATINGS
EMERGENCY NOS. Domestic 800-255-3924 International 813-248-0585 Chemtel MIS0005050

----------Section 2: HAZARDS IDENTIFICATION ----------

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Corrosive to metals
Skin Corrosion/irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1
Specific target organ toxicity (single exposure) Category 3
Target Organs - Respiratory system.

Label elements: Danger

Hazard statements:
May be corrosive to metals
Causes severe skin burns and eye damage
May cause respiratory irritation

Hazard pictograms :

Precautionary Statements

PREVENTION:
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

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Use only outdoors or in a well-ventilated area
Keep only in original container
RESPONSE:
Immediately call a POISON CENTER or doctor/physician
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
SPILLS: Absorb spillage to prevent material damage
STORAGE
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Store in corrosive resistant polypropylene container with a resistant inliner
Store in a dry place
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
None identified

----SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS----

COMPONENTS:

WATER	CAS# - 7732-18-5	WEIGHT % - 90
HYDROCHLORIC ACID	CAS# - 7647-01-0	WEIGHT % - 10

----------SECTION 4: FIRST AID MEASURES----------

DESCRIPTION OF NECESSARY FIRST AID MEASURES

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Immediate medical attention is required.
Skin Contact: Wash off immediately with plenty of water for at least 15 minutes.
Immediate medical attention is required.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Ingestion: Do not induce vomiting. Call a physician or Poison Control Center immediately.
Most important symptoms/effects: Causes burns by all exposure routes. Product is a corrosive material. Use of gastric

lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Notes to Physician: Treat symptomatically

---------- SECTION 5: FIRE FIGHTING MEASURES ----------

Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Corrosive Material. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.
Hazardous Combustion Products
Carbon monoxide (CO) Carbon dioxide (CO2) Hydrogen chloride gas
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/ NIOSH (approved or equivalent) and full protective gear.

NFPA
HEALTH 3 FLAMMABILITY 0 INSTABILITY 0 PHYSICAL HAZARDS NA

---------- SECTION 6 ACCIDENTAL RELEASE MEASURES ----------

Personal Precautions - Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.
Environmental Precautions - Avoid release to the environment. See Section 12 for additional ecological information.
Methods for Containment and Clean Up - Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

---------- SECTION 7. HANDLING AND STORAGE ----------

Handling: Use only under a chemical fume hood. Wear personal protective equipment. Do not get ineyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.
Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

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---- SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION ----

COMPONENT: Hydrochloric acid

ACGIH TLV:
Ceiling:2 ppm
OSHA PEL:
Ceiling: 5 ppm
Ceiling: 7 mg/m3
(Vacated) Ceiling: 5 ppm
(Vacated) Ceiling: 7 mg/m3
NIOSH IDLH:
ISLH: 50 ppm
Ceiling: 5 ppm
Ceiling: 7 mg/m3
Quebec:
CEILING 5 ppm
CEILING 7.5 mg/m3
Mexico OEL (TWA)
CEILING: 5 PPM
CEILING 7 mg/m3
Ontario TWAEV
CEV: 2 PPM

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health
Engineering Measures - Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment
Eye/face Protection - Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and body protection - Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection - Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European StandardEN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures - Handle in accordance with good industrial hygiene and safety practice.

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---------- SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES ----------

PHYSICAL STATE: LIQUID

COLOR: CLEAR

ODOR: PUNGENT

PH: <1

MELTING POINT: -74C

BOILING POINT: 81 - 110C

FLASHPOINT: CLOSED CUP: NA

EVAPORATION RATE: 1.00

LOWER AND UPPER EXPLOSIVE (FLAMMABLE) LIMITS: NA NA

VAPOR PRESSURE: 5.7 MMHG @ 0C

VAPOR DENSITY: 1.26

RELATIVE DENSITY: 1.0 - 1.2

SOLUBILITY: MISCIBLE IN WATER

PARTITION COEFFICIENT: NA

DECOMPOSITION TEMPERATURE: NA

VISCOSITY: NA

---------- SECTION 10. STABILITY AND REACTIVITY ----------

Reactive Hazard: None known, based on information available
Stability: Stable under normal conditions.
Conditions to Avoid: Incompatible products. Excess heat.
Incompatible Materials: Strong oxidizing agents, Reducing agents, Bases, Metals
Hazardous Decomposition Products: Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas
Hazardous Polymerization: Hazardous polymerization does not occur.
Hazardous Reactions: None under normal processing.

----------SECTION 11. TOXICOLOGICAL INFORMATION ----------

Acute Toxicity
Product Information
Oral LD50 - Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Dermal LD50 - Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Vapor LC50 - Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Toxicologically Synergistic - No information available

Products
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation - Causes burns by all exposure routes
Sensitization - No information available
Carcinogenicity - The table below indicates whether each agency has listed any ingredient as a carcinogen.
Mutagenic Effects - No information available
Reproductive Effects - No information available.
Developmental Effects - No information available.
Teratogenicity - No information available.
STOT - single exposure - Respiratory system
STOT - repeated exposure - None known
Aspiration hazard - No information available
Symptoms / effects,both acute and delayed - Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Endocrine Disruptor Information - No information available
Other Adverse Effects - The toxicological properties have not been fully investigated.

---------- SECTION 12. ECOLOGICAL INFORMATION ----------

Ecotoxicity
This product contains the following substance(s) which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Hydrochloric acid	-	282 mg/L LC50 96 h	-	-

Persistence and Degradability - Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation - No information available.

Mobility - No information available.

---------- SECTION 13. DISPOSAL CONSIDERATIONS ----------

Waste Disposal Methods - Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

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---------- SECTION 14. TRANSPORT INFORMATION ----------

DOT
UN-No UN1789
Proper Shipping Name HYDROCHLORIC ACID
Hazard Class 8
Packing Group II
TDG
UN-No UN1789
Proper Shipping Name HYDROCHLORIC ACID
Hazard Class 8
Packing Group II
IATA
UN-No UN1789
Proper Shipping Name HYDROCHLORIC ACID
Hazard Class 8
Packing Group II
IMDG/IMO
UN-No UN1789
Proper Shipping Name - HYDROCHLORIC ACID
Hazard Class - 8
Packing Group - II

---------- SECTION 15. REGULATORY INFORMATION ----------

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	-	231-791-2	-		X	-	X	X	X
Hydrochloric acid	X	X	-	231-595-7	-		X	X	X	X	X

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base
Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

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U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Hydrochloric acid	7647-01-0	10	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard - Yes
Chronic Health Hazard - No
Fire Hazard - No
Sudden Release of Pressure Hazard - No
Reactive Hazard - No

Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Hydrochloric acid	X	5000 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Hydrochloric acid	X		-

OSHA Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Hydrochloric acid	-	TQ: 5000 lb

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Hydrochloric acid	5000 lb	5000 lb

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Hydrochloric acid	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): - N
DOT Marine Pollutant - N
DOT Severe Marine Pollutant - N

U.S. Department of Homeland Security

This product contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Hydrochloric acid	0 lb STQ (anhydrous); 11250 lb STQ (37% concentration or greater)

Other International Regulations

Mexico - Grade - No information available

Canada - This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

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WHMIS Hazard Class E Corrosive material

----------SECTION 16: OTHER INFORMATION ----------

Creation Date 01- May -2006
Revision Date 20-May -2016
Print Date 01-June- 2016
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

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