

Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY INFORMATION		
PRODUCT TYPE:	Strong Acid Cation Exchange Resin Sodium Form	
PRODUCT NAME:	C106, C107, C108, C110, C151 in sodium forms, and the variations of the above	
COMPANY ID:	General Technologies, SPC General Technologies, SPC 2016 E. Spruce Circle Olathe, KS 66062 USA	
Contact Information:	<i>Direct Line</i>	913-708-8131
	<i>Office</i>	913-766-5566
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	<i>Email</i>	info@gtspc.com
DATE PREPARED:	11/5/2015	Revised: n/a

SECTION 2: HAZARD(S) IDENTIFICATION		
HMIS RATINGS		GUIDE
HEALTH	0	4 – EXTREME/SEVERE 3 – HIGH/SERIOUS 2 – MODERATE 1 - SLIGHT 0 – MINIMUM W – WATER REACTIVE OX - OXIDIZER FLAMMABILITY
FLAMMABILITY	OX	
PHYSICAL HAZARD	0	
PERSONAL PROTECTION	0	
HAZARD STATEMENT		
Hazard warning not required		
PRECAUTIONARY STATEMENT(S)		
PREVENTION	Wear eye protection.	
RESPONSE	Irrigate immediately with water for at least 5minutes. Mechanical irritation only.	
STORAGE	Store in a cool dry place.	
Other Hazards		
All ingredients are non-hazardous.		

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

PERCENT BY WEIGHT	COMMON NAME (Ingredient / Component)	CAS NO. IMPURITIES
35-65%	Sulfonated Copolymer of styrene and divinylbenzene in the sodium form	CAS# 69011-22-9
Balance	water	CAS# 7732-18-5

SECTION 4: FIRST-AID MEASURES**NECESSARY FIRST AID INSTRUCTIONS**

INHALATION	No adverse effects anticipated by this route of exposure.
SKIN CONTACT	No adverse effects anticipated by this route of exposure.
EYE CONTACT	Irrigate immediately with water for at least 5minutes. Mechanical irritation only.
INGESTION	No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

DESCRIPTION OF MOST IMPORTANT SYMPTOMS

No known significant effects or critical hazards

RECOMMENDATIONS FOR IMMEDIATE MEDICAL CARE

No special measures required.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Water, Talc, Dry Chemical
UNSUITABLE EXTINGUISHING MEDIA	None
SPECIFIC HAZARDS	No specific for or explosion hazard.
PERSONAL PROTECTIVE EQUIPMENT	MSHA/NIOSH approved self-contained breathing gear. Firemen have to wear self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

PERSONAL PRECAUTIONS	Sweep up material and transfer to containers. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Hazard of slipping on a spilled product.
ENVIRONMENTAL PRECAUTIONS	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). This product is insoluble in water.

CONTAINMENT AND CLEAN-UP	Move containers from spilled area. Vacuum or sweep up material and place in designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal. Prevent entry into sewers and water courses.
OTHER INFORMATION	none.

SECTION 7: HANDLING AND STORAGE	
PRECAUTIONS FOR SAFE HANDLING	Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
CONDITIONS FOR SAFE STORAGE	Store between the following temperatures: -20 to below 40 °C (-4 to below 104 °F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers or liners may retain some product residues. It is recommended to store ion exchange resins at temperatures above the freezing point of water.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION	
ENGINEERING CONTROLS	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
RESPIRATORY PROTECTION	Not required for normal uses if irritation occurs from breathing-get fresh air!
SKIN PROTECTION	Wear suitable protective gloves. Suitable protective footwear.
EYE/FACE PROTECTION	If contact with this product is possible, wear safety glasses with side shields.

EXPOSURE LIMITS/GUIDELINES	No exposure limit value known.		
	RESULT	OSHA 8 HR mg/m3	ACGIH TLV 8 HR mg/m3
PARTICULATES NOT OTHERWISE REGULATED (PNOR)	n/a		
PARTICULATES NOT OTHERWISE CLASSIFIED (PNOC)	n/a		

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
COLOR	Amber Spherical Beads	MOLECULAR WEIGHT	Not available.
ODOR	Odorless; may have amine odor.	ODOR THERSHOLD	Not available
pH VALUE	0-14	VAPOR PRESSURE	Not available
MELTING POINT	Not available	VAPOR DENSITY	Not available
FREEZING POINT	Not available	RELATIVE DENSITY	Not available
INITIAL BOILING POINT	Not available	SOLUBILITY	insoluble in water
FLASHPOINT	Not available	PARTITION COEFFICEINT	Not available
EVAPORATION RATE	Not available	AUTO IGNITION TEMP.	Not available
FLAMMABILITY	Not available	DECOMP. TEMP.	Not available
UEL	Not available	VISCOSITY	Not available
LEL	Not available	THERMAL	temp over 30 °C (85 °F) will accelerate the oxidation.

SECTION 10: STABILITY AND REACTIVITY	
REACTIVITY	Exposure to >0.1 ppm of free chlorine, "hypochlorite" ions, or other strong oxidizing agents over long periods of time will eventually break down the crosslinking.
CHEMICAL STABILITY	The product is stable
POSSIBILITY OF HAZARDOUS REACTIONS	Under normal conditions of storage and use, hazardous reactions will not occur.
HAZAROUS POLYMERIZATION	Material does not polymerize
INCOMPATIBLE MATERIALS	Temperature over 30 °C (85 °F) will accelerate the oxidation. This will tend to increase the moisture retention of the resin, decreasing it's mechanical strength, as well as generating small amounts of extractable breakdown products.
HAZAROUS DECOMPOSITION PRODUCTS	Under normal conditions of storage and use, hazardous decomposition products should not be produced
HAZARDOUS COMBUSTION PRODUCTS	It is thermally stable to higher than 150 °C (300 °F) in the alkali or alkaline earth salt forms. The free acid form tends to hydrolyze in water temperatures appreciably higher than 120 °C (250 °F) thereby losing capacity, as the functional groups are gradually replaced by hydroxyl groups.
HAZARDOUS BY PRODUCTS	CO, CO2, NH3, amines, styrene, divinylbenzene.

SECTION 11: TOXICOLOGICAL INFORMATION		
INHALATION	ACUTE	No specific data
	CHRONIC	
SKIN	ACUTE	No specific data
	CHRONIC	
EYE	ACUTE	No specific data
	CHRONIC	
INGESTION	ACUTE	No specific data
	CHRONIC	
LD50		Single dose oral LD50 has not been determined. Single dose oral toxicity is believed to be low.
LC50		Not applicable.
ACUTE TOXICITY ESTIMATES		Not applicable.
CARCINOGENICITY/MUTAGENICITY		No known significant effects or critical hazards.
REPRODUCTIVE EFFECTS		No known significant effects or critical hazards.
NEUROTOXICITY		No known significant effects or critical hazards.
TARGET ORGANS		No known significant effects or critical hazards.
OTHER EFFECTS		No known significant effects or critical hazards.

SECTION 12: ECOLOGICAL INFORMATION
<p>The product is insoluble in water. Therefore, ecological tests have not been conducted.</p> <p>Do not allow to escape into waters, wastewater or soil.</p> <p>Water pollution class: 1 – slightly hazardous to water.</p>

SECTION 13: DISPOSAL CONSIDERATIONS	
SPILL/LEAK PROCEDURES	Isolate spill area to prevent falls as material can be a slipping hazard. Avoid contact with eyes and skin. Material is heavier than water and has limited water solubility. It will collect on the lowest surface.
CLEANUP	Sweep up.
REGULATORY REQUIREMENTS	If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. 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)
DISPOSAL	Bury resin in licensed landfill or burn in approved incinerator according to local, state, and federal regulations. For resin contaminated with hazardous material, dispose of mixture as hazardous material according to local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION		
LAND – DOT	UN/NA IDENTIFICATION NUMBER:	Not regulated.
	Not regulated.	
	UN PROPER SHIPPING NAME:	
	TRANSPORT HAZARD CLASS:	
	PACKING GROUP:	
	MARINE POLLUTANT:	
	HAZARD CLASS:	
WATER – IMO/IMDG	UN/NA IDENTIFICATION NUMBER:	Not regulated.
	UN-PROPER SHIPPING NAME:	
	TRANSPORT HAZARD CLASS:	
	PACKING GROUP:	
	MARINE POLLUTANT:	
AIR – ICAO/IATA For product quantities less than 0.5 Kg	UN/NA IDENTIFICATION NUMBER:	Not regulated.
	UN-PROPER SHIPPING NAME:	
	TRANSPORT HAZARD CLASS:	
	PACKING GROUP:	
	MARINE POLLUTANT:	
OTHER INFORMATION	Not dangerous cargo. Avoid temperatures below –20℃。Avoid heat above +40℃. Keep separated from food items. The substance is not subject to IMO IMDG CODE, could be shipped by sea without danger.	

SECTION 15: REGULATORY INFORMATION	
OSHA	None
CAA	None
CERCLA	None
SARA	None
SARA HAZARD CATEGORIES 311/312	Not applicable
TSCA	None

SECTION 16: OTHER INFORMATION
<p>The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.</p> <p>The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance.</p>