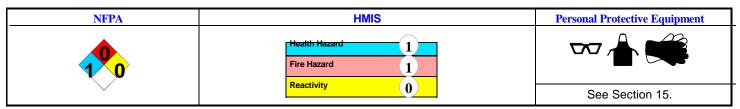




Material Safety Data Sheet



Section 1. Chemical Product and Company Identification			Page Number: 1
Common Name/ Trade Name	Dowex 1X2 Ion Exchange Resin	Catalog Number(s).	DWX05, DWX10, DWX15
		CAS#	9085-42-1
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC.	RTECS	Not applicable.
	14422 S. SAN PEDRO STREET GARDENA, CA 90248	TSCA	TSCA 8(b) inventory: Water; Styrene, divinylbenzene and ethylstyrene copolymer, chloromethyl trimethylamine functionalized in the chloride form
Commercial Name(s)	Not available.	CI#	Not available.
Synonym	Dowex 1X2-chloride Strongly Basic Anion Exchange Resin; I 1X2 Anion Resin, chloride form	IN CASE OF	EMERGENCY
Chemical Name	Not applicable.	CHEMIKEC	<u>(24hr) 800-424-9300</u>
Chemical Family	Not available.	CALL (310) 5	16-8000
Chemical Formula	Not applicable.		
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		

			Exposure Limits		
Name	CAS #	TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
 Water Styrene, divinylbenzene and ethylstyrene copolymer, chloromethyl trimethylamine functionalized in the chloride form 	7732-18-5 69011-19-4				35-80 20-65

Toxicological Data on Ingredients

Styrene, divinylbenzene and ethylstyrene copolymer, chloromethyl trimethylamine functionalized in the chloride form LD50: Not available.

LC50: Not available.

Section 3. Hazards Identification

Potential Acute Health Effects Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Non-corrosive for skin. Non-permeator by skin. Non-hazardous in case of inhalation. Non-corrosive to the eyes. Non-corrosive for lungs.

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Potential Chronic Health Effects	Non-corrosive for skin. Non-irritant for skin. Non-sensitizer for skin. Non-permeator by skin. Non-irritating the eyes. Non-hazardous in case of ingestion. Non-hazardous in case of inhalation. Non-irritant for lung Non-sensitizer for lungs. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.		
Section 4. First Aid M	<i>Neasures</i>		
Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.		
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.		
Serious Skin Contact	Not available.		
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxyge Get medical attention.		
Serious Inhalation	Not available.		
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to a unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loose tight clothing such as a collar, tie, belt or waistband.		
Serious Ingestion	Not available.		
Section 5. Fire and Ex	xplosion Data		
Flammability of the Product	May be combustible at high temperature.		
Auto-Ignition Temperature	Not available.		
Flash Points	Not available.		
Flammable Limits	Not available.		
	Not available.		
Products of Combustion			
Products of Combustion Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of heat. Non-flammable in presence of open flames and sparks, of shocks, of oxidizing materials, of reducin materials, of combustible materials, of organic materials, of metals, of acids, of alkalis.		
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of heat. Non-flammable in presence of open flames and sparks, of shocks, of oxidizing materials, of reducin		
Fire Hazards in Presence of Various Substances Explosion Hazards in Presence	Slightly flammable to flammable in presence of heat. Non-flammable in presence of open flames and sparks, of shocks, of oxidizing materials, of reducin materials, of combustible materials, of organic materials, of metals, of acids, of alkalis.		
Fire Hazards in Presence of Various Substances Explosion Hazards in Presence of Various Substances Fire Fighting Media	Slightly flammable to flammable in presence of heat. Non-flammable in presence of open flames and sparks, of shocks, of oxidizing materials, of reducin materials, of combustible materials, of organic materials, of metals, of acids, of alkalis. Non-explosive in presence of open flames and sparks, of shocks. SMALL FIRE: Use DRY chemical powder.		
Fire Hazards in Presence of Various Substances Explosion Hazards in Presence of Various Substances Fire Fighting Media and Instructions Special Remarks on	Slightly flammable to flammable in presence of heat. Non-flammable in presence of open flames and sparks, of shocks, of oxidizing materials, of reducin materials, of combustible materials, of organic materials, of metals, of acids, of alkalis. Non-explosive in presence of open flames and sparks, of shocks. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. Not available.		

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Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.		
Personal Protection	Safety glasses. Synthetic apron. Gloves (impervious). No respiratory protection should be needed. Good general ventilation should be sufficient for most conditions.		
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.		
Exposure Limits	Not available.		

Section 9. Physical and Chemical Properties

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Physical state and appearance	Solid. (Beads solid.)	Odor	Odorless to Amine like.	
Molecular Weight	Not applicable.	Taste	Not available.	
pH (1% soln/water)	Neutral.	Color	White to yellowish (amber)	
Boiling Point	Not available.			
Melting Point	Not available.			
Critical Temperature	Not available.			
Specific Gravity	The only known value is 1 (Water = 1) (Water).			
Vapor Pressure	Not applicable.			
Vapor Density	Not available.			
Volatility	Not available.			
Odor Threshold	Not available.			
Water/Oil Dist. Coeff.	Not available.			
Ionicity (in Water)	Not available.			
Dispersion Properties	Not available.			
Solubility	Insoluble in cold water, hot water.			

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents.
Corrosivity	Not available.

Dowex 1X2 Ion Excl	hange Resin Page Number: 4				
Special Remarks on Reactivity	Avoid contact with oxidizing materials. Oxidizing agents such as Nitric acid attack organic exchange resins under certain conditions. Before using strong oxidizing agents, consult sources knowledgeable in handling such materials. The severity of the reaction with oxidizing agents can vary from slight degradation to an explosive reaction.				
Special Remarks on Corrosivity	Not available.				
Polymerization	Will not occur.				
Section 11. Toxicological Information					
Routes of Entry	Inhalation. Ingestion.				
Toxicity to Animals	LD50: Not available. LC50: Not available.				
Chronic Effects on Humans	Not available.				
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant), of ingestion. Non-permeator by skin. Non-hazardous in case of inhalation.				
Special Remarks on Toxicity to Animals	Not available.				
Special Remarks on Chronic Effects on Humans	Not available.				
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: It is essentially nonirritating to skin. Not likely to cause significant skin irritation. May cause slight skin irritation. Eyes: May cause slight transient (temporary) irritation. Solid or dust may cause irritation or corneal injury due to mechanical action. Inhalation: Dust may cause respiratory tract irritation due to mechanical action. No adverse effects are anticipated from inhalation. Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts during normal industrial handling.				
Section 12. Ecologic	cal Information				
Ecotoxicity	Not available.				
BOD5 and COD	Not available.				
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.				
Toxicity of the Products of Biodegradation	Not available.				
Special Remarks on the Products of Biodegradation	Not available.				
Section 13. Disposa	Considerations				
Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.				
Section 14. Transpo	Section 14. Transport Information				
DOT Classification	Not a DOT controlled material (United States).				
Identification	Not applicable.				
Special Provisions for Transport	Not applicable.				
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DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms				
Federal and State Regulations	TSCA 8(b) inventory: Water; Styrene, divinylbenzene and ethylstyrene copolymer, chloromethyl trimethylamine functionalized in the chloride form			
California Proposition 65 Warnings	California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found. California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.			
Other Regulations	For CAS no. 69011-19-4: EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances. Canada: Listed on Canadian Domestic Substance List (DSL). China: Listed on National Inventory. Japan: Not listed on National Inventory (ENCS). Korea: Not listed on National Inventory (KECI). Philippines: Listed on National Inventory (PICCS). Australia: Listed on AICS. CAS no. 9085-42-1 is not listed on EINECS, Canada DSL or NDSL, China, Japan (ENCS), Phillippines (PICCS) or Australia (AICS) inventories			
Other Classifications	WHMIS (Canada) Not controlled under WHMIS (Canada). DSCL (EEC) This product is not classified according to the EU regulations. Not applicable.			
HMIS (U.S.A.)	Health Hazard 1 National Fire Protection Flammability Fire Hazard 1 Association (U.S.A.) Health Image: Constraint of the sectivity Personal Protection C Flammability Specific hazard			
WHMIS (Canada) (Pictograms)				
DSCL (Europe) (Pictograms)				
TDG (Canada) (Pictograms)	\bigotimes			
ADR (Europe) (Pictograms)				
Protective Equipment	Gloves (impervious).			

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Dowex 1X2 le	on Exchange Resin	1		Page Number: 6
		Synthetic apron.		
		Not applicable.		
		Safety glasses.		
Section 16. O	ther Information			
MSDS Code	D3630			
References	Not available.			
Other Special Considerations	Not available.			
Validated by Sonia Owen on 6/6/2012.			Verified by Sonia Owen.	
			Printed 7/2/2012.	
CALL (310) 516-800	0			
Notice to Reader				
	a unknown hazards and should	he used with equation This M	aterial Safety Data Sheet (MSDS) applies only to the n	atorial as packaged. If this product is

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.