



# **Material Safety Data Sheet**

NFPA	HMIS	Personal Protective Equipment
100	Fire Hazard 1	
	Reactivity	See Section 15.

Section 1. Chemical Product and Company Identification			Page Number: 1
Common Name/ Trade Name	Dowex 50X2-Hydrogen Ion Exchange Resin	Catalog Number(s).	DWX40, DWX45, DWX50
	Kesiii	CAS#	12612-37-2
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC.	RTECS	Not applicable.
	14422 S. SAN PEDRO STREET GARDENA, CA 90248	TSCA	TSCA 8(b) inventory: Water; Sulfonated copolymer of styrene, ethylstyrene, and
			divinyIbenzene in the hydrogen form (CAS no. 69011-20-7)
Commercial Name(s)	Not available.	CI#	Not available.
Synonym	Dowex 50W-Hydrogen strongly Acidic Cation Ion Exchange Resin Dowex 50WX2 Cation Exchange Resin, Hydrogen form	IN CASE OF	EMERGENCY N/241 N200 121
<b>Chemical Name</b>	Not applicable.	CHEMTREC	C (24hr) 800-424-9300
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/m³)	STEL (mg/m³)	CEIL (mg/m³)	% by Weight
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7				74-82
2) Water	7732-18-5				18-26

Toxicological Data	Sulfonated copolymer of styrene and divinylbenzene in the sodium form.
on Ingredients	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.

**Potential Chronic Health Effects** 

**CARCINOGENIC EFFECTS**: Not available. **MUTAGENIC EFFECTS**: Not available. TERATOGENIC EFFECTS: Not available. **DEVELOPMENTAL TOXICITY**: Not available.

Dowex 50X2-Hyd	roaen Ion	Exchange	Resin
----------------	-----------	----------	-------

Page	Number:	2
------	---------	---

Section 4. First Aid Measures		
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 oxygen. 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 an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.	
<b>Serious Ingestion</b>	Not available.	

Section 5. Fire and E	xplosion Data
Flammability of the Product	May be combustible at high temperature.
<b>Auto-Ignition Temperature</b>	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
<b>Products of Combustion</b>	Not available.
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 reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis.
Explosion Hazards in Presence of Various Substances	Non-explosive in presence of open flames and sparks, of shocks.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	As with most organic solids, fire is possible at elevated temperatures. This product will not burn until water has evaporated.  Hazardous decomposition products may include and are not limited to aromatic compounds, hydrocarbons, organic sulfonates, and sulfur oxides.
Special Remarks on Explosion Hazards	Not available.

#### Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Dowex 50X2-Hydrogen Id	on Exchange Resin
------------------------	-------------------

Section 7. Handling and Storage	
Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Page Number: 3

Section 8. Exposure Controls/Personal Protection		
<b>Engineering Controls</b>	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.	
<b>Personal Protection</b>	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.	
<b>Exposure Limits</b>	Not available.	

Section 9. Physical and Chemical Properties				
Physical state and appearance	Solid. (Beads solid.)	Odor	Odorless.	
Molecular Weight	Not applicable.	Taste	Not available.	
pH (1% soln/water)	Not available	Color	White to yellowish.	
<b>Boiling Point</b>	Not available.			
<b>Melting Point</b>	Not available.			
Critical Temperature	Not available.			
Specific Gravity	1.1 - 1.25 (Water = 1)			
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.			
<b>Dispersion Properties</b>	Not available.			
Solubility	Insoluble in cold water.			

Section 10. Stability and Reactivity Data				
Stability	The product is stable.			
Instability Temperature	Not available.			
<b>Conditions of Instability</b>	Excess heat, incompatible materials			
Incompatibility with various substances	Reactive with oxidizing agents.			
Corrosivity	Not available.			
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.			

# Continued on Next Page

#### Dowex 50X2-Hydrogen Ion Exchange Resin

Special Remarks on Corrosivity Not available.

**Polymerization** 

Will not occur.

Section 11.	loxicological	Into	rmation
<b>Routes of Entry</b>	Inhala	ation.	Ingestion.

Toxicity to Animals Acute oral toxicity (LD50): >5000 mg/kg [Rat].

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. May cause slight skin irritation.

Eyes: May cause slight irritation. Solid or dust may cause irritation or corneal injury due to mechanical

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

Page Number: 4

during normal industrial handling.

## Section 12. Ecological 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. Disposal Considerations

Waste Disposal Waste must be disposed of in

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14. Transport Information

**DOT Classification** Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport

Not applicable.

**DOT** (Pictograms)



Section 15. Other Re						
	gulatory Informat	tion and	Pictograms			
Federal and State Regulations	TSCA 8(b) inventory form (CAS no. 69011		ulfonated copolymer of styr	ene, ethylstyrer	ne, and divinylb	enzene in the hydrogen
Camfornia 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	CAS no. 69011-20-7 is on the Canadian Domestic Substances List (DSL), and on the National Inventory Lists for China, Korea (KECI), Philippines (PICCS), and Australia (AICS)					
Other Classifications	WHMIS (Canada)		ntrolled under WHMIS (Car	•	iaahla	
	DSCL (EEC)		duct is not classified ng to the EU regulations.	Not appl	icable.	
HMIS (U.S.A.)	Health Hazard  Fire Hazard  Reactivity  Personal Protection	1 1 0 C	National Fire Protect Association (U.S.A.)		100	Flammability  Reactivity  Specific hazard
WHMIS (Canada) (Pictograms)						
DSCL (Europe) (Pictograms)						
TDG (Canada) (Pictograms)						
ADR (Europe) (Pictograms)						
<b>Protective Equipment</b>	Glov	es.				
	Lab	coat.				
		applicable. ty glasses				

Continued on Next Page

Section 16. C	Other Information	
MSDS Code	D3665	
References	Not available.	
Other Special Considerations	Not available.	
Validated by Sonia Owen on 7/3/2012.		Verified by Sonia Owen. Printed 7/3/2012.
CALL (310) 516-80	00	

Page Number: 6

#### Notice to Reader

Dowex 50X2-Hydrogen Ion Exchange Resin

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.