MSDS Number: 16364 \* \* \* \* \* Effective Date: 02/16/06 \* \* \* \* \* Supercedes: 05/08/03



From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300 National Response in Canada CANUTEC: 613-996-6666

Outside U.S. And Canada Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance

# DOWEX® 50WX8, 100-200 Mesh, H Cation Exchange Resin

#### 1. Product Identification

Synonyms: Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated; Styrene sulfonic acid

CAS No.: 69011-20-7

Molecular Weight: Not applicable.

Chemical Formula: (C10H12.C10H10.C8H8)x

Product Codes: 1905

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardou
Cation Exchange Polymer	69011-20-7	57 - 62%	Yes
Water	7732-18-5	38 - 43%	No

#### 3. Hazards Identification

### **Emergency Overview**

## CAUTION! MAY CAUSE IRRITATION TO SKIN AND EYES.

## J.T. Baker SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

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Health Rating: 0 - None Flammability Rating: 1 - Slight Reactivity Rating: 0 - None Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT Storage Color Code: Orange (General Storage)

#### **Potential Health Effects**

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## Inhalation:

Not expected to be a health hazard.

### Ingestion:

Large oral doses may cause irritation to the gastrointestinal tract. Extremely large oral dosages may produce gastrointestinal disturbances. The effects would be those of bulking, mainly discomfort and possible nausea or osmotic imbalance due to the exchange of ions. A possibly hazardous condition might occur if the ingested resin was previously loaded with a toxic anion which could be released in the stomach.

#### Skin Contact:

May cause mild irritation and redness. Product has a tendency to cling to skin due to static charge. Care must be exercised to remove all product from skin.

Eye Contact:

May cause mild irritation, possible reddening.

**Chronic Exposure:** 

No adverse health effects expected.

Aggravation of Pre-existing Conditions:

No adverse health effects expected.

## 4. First Aid Measures

#### Inhalation:

Not expected to require first aid measures. Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

**Skin Contact:** 

In case of contact, immediately wash skin with plenty of soap and water for at least 15 minutes. Get medical attention if irritation develops.

**Eve Contact:** 

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

## 5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

**Explosion:** 

Not considered to be an explosion hazard. Nitric acid and other strong oxidizing agents can cause explosive-type reactions when mixed with ion exchange resins. Proper design of equipment to prevent build up of pressure is necessary if use of an oxidizing agent such as nitric acid is contemplated.

Fire Extinguishing Media:

Dry chemical, foam, water or carbon dioxide.

**Special Information:** 

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### 6. Accidental Release Measures

Caution! Floor and other surfaces may be slippery. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Protect from freezing. Avoid prolonged storage above 50C. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

## 8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

Not expected to require any special ventilation.

Personal Respirators (NIOSH Approved):

Not expected to require personal respirator usage.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

**Eye Protection:** 

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

### 9. Physical and Chemical Properties

Appearance:

Light yellow to amber beads.

Odor:

Odorless.

Solubility:

Insoluble in water.

Specific Gravity:

0.80

pH:

No information found.

% Volatiles by volume @ 21C (70F):

ca. 40 For water.

**Boiling Point:** 

No information found.

**Melting Point:** 

No information found.

Vapor Density (Air=1):

0.62 For water.

Vapor Pressure (mm Hg):

17 @ 20C (68F) For water.

Evaporation Rate (BuAc=1):

No information found.

## 10. Stability and Reactivity

#### Stability:

Stable under ordinary conditions of use and storage. Do not pack column with dry ion exchange resins. Dry beads expand when wet; this expansion can cause a glass column to shatter.

#### **Hazardous Decomposition Products:**

Amines, ammonia, divinylbenzene, and oxides of carbon, nitrogen and sulfur.

**Hazardous Polymerization:** 

Will not occur.

Incompatibilities:

Nitric acid and similar strongly oxidizing liquids.

Conditions to Avoid:

Heat and incompatibles.

## 11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

\Cancer Lists\			
Ingredient		Carcinogen Anticipated	IARC Category
Cation Exchange Polymer (69011-20-7)	No	No	None
(89011-20-7) Water (7732-18-5)	No	No	None

## 12. Ecological Information

**Environmental Fate:** 

No information found.

**Environmental Toxicity:** 

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

Ingredient					Australia
Cation Exchange Polymer (69011-20-7) Water (7732-18-5)		Yes	No	No	
\Chemical Inventory Status - Part	2\				
Ingredient		Korea	DSL	anada NDSL	Phil.
Cation Exchange Polymer (69011-20-7) Water (7732-18-5)		Yes	Yes	No No	Yes
\Federal, State & International Red	-SARA RQ	302- TPQ	Li:	SAR st Che	A 313 mical Cate
Cation Exchange Polymer (69011-20-7) Water (7732-18-5)	No	No	No		No
	CERCL.	A	-RCRA-261.3	т 3 8	SCA- (d)
Cation Exchange Polymer (69011-20-7) Water (7732-18-5)	No		No		0
nemical Weapons Convention: No TSCA 12 MRA 311/312: Acute: No Chronic: No Pactivity: No (Mixture / Solid)					

**Australian Hazchem Code:** None allocated. **Poison Schedule:** None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

### 16. Other Information

NFPA Ratings: Health: 0 Flammability: 1 Reactivity: 0

Label Hazard Warning:

CAUTION! MAY CAUSE IRRITATION TO SKIN AND EYES.

**Label Precautions:** 

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Keep container closed.

Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Product Use:** 

Laboratory Reagent. **Revision Information:** 

No Changes.

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