



1/12

# SAFETY DATA SHEET

Preparation Date: 6/21/2017 Revision Date: 6/21/2017 Revision Number: G1

1. IDENTIFICATION

**Product identifier** 

DWX65 Product code:

**Product Name:** DOWEX(R), 50WX8-200, ION EXCHANGE RESIN

Other means of identification

Dowex-50W-hydrogen Strongly Acidic Cation Ion Exchange Resin Synonyms:

Dowex 50Wx8 Cation Exchange Resin, Hydrogen form

Dowex is a registered trademark of Dow Chemical Corporation

CAS #: 11119-67-8 RTECS# Not available CI#: Not available

Recommended use of the chemical and restrictions on use

No information available. Recommended use: Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena, CA 90248

(310) 516-8000.

**Order Online At:** https://www.spectrumchemical.com

Chemtrec 1-800-424-9300 Emergency telephone number Martin LaBenz (West Coast) **Contact Person: Contact Person:** Ibad Tirmiz (East Coast)

#### 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Serious eye damage/eye irritation Category 1

Label elements

Danger

Hazard statements

Causes serious eye damage

Product code: DWX65

Product name: DOWEX(R).



#### Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

May be harmful if swallowed

**Precautionary Statements - Prevention** 

Wear eye/face protection

#### **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Water	7732-18-5	50-58
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	42-50

# 4. FIRST AID MEASURES

First aid measures

**General Advice:** National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention if irritation develops. Consult a physician if necessary.

**Eye Contact:** Flush eyes with water for 15 minutes. Call a physician or Poison Control Centre

immediately.

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give Inhalation:

oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Severe eye irritation. May cause eye burns. Risk of serious damage to eyes. Possible eye **Symptoms** 

damage. May cause corneal injury. May result in permanent impairment of vision. even

blindness.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Product code: DWX65 Product name: DOWEX(R)

#### **Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing Media** 

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or

foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Dioxide, Carbon Monoxide. Sulfur Oxides. Organic

sulfonates. Benzene compounds. Hydrocarbons.

**Specific hazards:** May be combustible at high temperatures.

**Special Protective Actions for Firefighters** 

Specific Methods: No information available.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch

damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all

sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering

drains. Prevent from entering into soil, ditches, sewers, waterways, and/or ground

water.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent

spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated

surface thoroughly.

# 7. HANDLING AND STORAGE

# Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

#### Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and

Product code: DWX65 Product name: DOWEX(R), 3/12

sources of ignition. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

#### Conditions for safe storage, including any incompatibilities

# **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

# **Incompatible Materials:**

Oxidizing agents
Nitric acid

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### National occupational exposure limits

#### **United States**

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Water	7732-18-5	None	None	None	None
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	None	None	None	None

#### Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	None	None	None	None

#### **Australia and Mexico**

Components	CAS-No.	Australia	Mexico
Water	7732-18-5	None	None
Sulfonated copolymer of styrene, ethylstyrene and	69011-20-7	None	None
divinylbenzene in the hydrogen form			

# **Appropriate engineering controls**

Engineering measures to reduce exposure:

Ensure adequate ventilation. 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.

# Individual protection measures, such as personal protective equipment

# **Personal Protective Equipment**

**Eye protection:** Goggles

Product code: DWX65 Product name: DOWEX(R), 4/12

Skin and body protection: Chemical resistant apron

Gloves

Long sleeved clothing

Respiratory protection: Respiratory protection is not necessary for normal handling. Good room

> ventilation or use of local exhaust (fume hood) is sufficient. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to

use an approved/certified respirator or equivalent.

Avoid contact with skin, eyes and clothing. Wash hands before breaks and Hygiene measures:

immediately after handling the product. When using, do not eat, drink or smoke.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance:

Solid Beads. Sand-like granules. White to yellowish. Light yellow. Beige.

Odor: **Taste** Formula:

Odorless. No information available. No information available

Molecular/Formula weight: Flashpoint (°C/°F): Flammability: No information available No information available. No information available

Flash Point Tested according to: Autoignition Temperature (°C/°F): **Lower Explosion Limit (%):** Not available No information available No information available

Melting point/range(°C/°F): **Upper Explosion Limit (%):** Decomposition temperature(°C/°F):

No information available No information available No information available

Boiling point/range(°C/°F): Density (g/cm3): **Bulk density:** 

No information available No information available 0.978 @ 25°C/77°F

Specific gravity: Vapor pressure @ 20°C (kPa): 1.20-1.26 No information available No information available

**Evaporation rate:** Vapor density: VOC content (g/L): No information available No information available No information available

Odor threshold (ppm): **Partition coefficient Viscosity:** 

No information available No information available (n-octanol/water): No information available

Miscibility: Solubility:

No information available Insoluble in water

# 10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

**Chemical stability** 

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Excess Heat. Incompatible materials.

Product code: DWX65 Product name: DOWEX(R). 5/12

Oxidizing agents Incompatible Materials:

Nitric acid

Hazardous decomposition

products:

When heated to decomposition it emits toxic fumes. Carbon monoxide. Sulfur

oxides. Hydrocarbons. aromatic compounds. organic sulfonates.

Other Information

No information available Corrosivity:

Special Remarks on Corrosivity: No information available

# 11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

#### **Principal Routes of Exposure:**

Ingestion. Inhalation.

#### **Acute Toxicity**

# **Component Information**

Water CAS-No. 7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat

LD50/oral/mouse = No information available

**LD50/dermal/rabbit** = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information = No information available

Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form CAS-No.

69011-20-7 LD50/oral/rat = No information available

LD50/oral/mouse = No information available

**LD50/dermal/rabbit** = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information = No information available

# **Product Information**

LD50/oral/rat =

VALUE- Acute Tox Oral = 2500 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 2602 mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

**VALUE -Acute Tox Dermal =** No information available

Product code: DWX65 Product name: DOWEX(R). 6/12

LC50/inhalation/rat

**VALUE-Vapor** = No information available **VALUE-Gas** = No information available **VALUE-Dust/Mist** = No information available

LC50/Inhalation/mouse

**VALUE-Vapor** = No information available **VALUE - Gas =** No information available VALUE - Dust/Mist = No information available

**Symptoms** 

**Skin Contact:** May cause skin irritation.

**Eye Contact:** Severe eye irritation. Risk of serious damage to eyes. May cause burns. May

cause corneal injury.

Inhalation This material is in the form of beads and is unlikely to cause respiratory tract

irritation.

Health injuries are not known or expected under normal use. Ingestion

**Aspiration hazard** No information available.

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

No information available. **Chronic Toxicity** 

Sensitization: No information available.

**Mutagenic Effects:** No information available

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

**Reproductive Effects:** No information available **Developmental Effects:** No information available **Teratogenic Effects:** No information available

**Specific Target Organ Toxicity** 

STOT - single exposure No information available.

Product code: DWX65 Product name: DOWEX(R).

STOT - repeated exposure

No information available. No information available. **Target Organs:** 

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

**Ecotoxicity effects:** No data available.

Persistence and degradability: No information available

No information available. Bioaccumulative potential:

Mobility: No information available.

# 13. DISPOSAL CONSIDERATIONS

# **Disposal Methods**

# Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

### Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series	RCRA - K Series	RCRA - P Series	RCRA - U Series
		Wastes	Wastes	Wastes	Wastes
Water	7732-18-5	None	None	None	None
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	None	None	None	None

# 14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

**Proper Shipping Name:** No information available No information available **Hazard Class: Subsidiary Class** No information available No information available Packing group: **Emergency Response Guide** No information available

Number

**Marine Pollutant** No data available No information available DOT RQ (lbs): **Special Provisions** No Information available Symbol(s): No information available **Description:** No information available

TDG (Canada)

UN-No: Not Regulated

**Proper Shipping Name:** No information available No information available **Hazard Class:** No information available **Subsidiary Risk: Packing Group:** No information available **Marine Pollutant** No Information available

Product code: DWX65 Product name: DOWEX(R),

**Description:** No information available

**ADR** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Packing Group:
Subsidiary Risk:
No information available
No information available
No information available

**IMO / IMDG** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No information available

RID

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:

No information available
No information available
No information available

**ICAO** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:

No information available
No information available
No information available

**IATA** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
ERG Code:
No information available

# 15. REGULATORY INFORMATION

#### International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Water	7732-18-5	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	Present XU	Present KE-10326	Present	Present (6)-3208	Present	Present	Not present

# **U.S. Regulations**

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Product code: DWX65 Product name: DOWEX(R), 9/12

#### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen		Reproductive	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Sulfonated copolymer of styrene, ethylstyrene and	69011-20-7	Not Listed	Not Listed	Not Listed	Not Listed
divinylbenzene in the hydrogen form					

#### **CERCLA/SARA**

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Water	7732-18-5	None	None	None	None	None
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	None	None	None	None	None

#### U.S. TSCA

Components		· · · · · · · · · · · · · · · · · · ·	TSCA 8(d) -Health and Safety Reporting
Water	7732-18-5	Not Applicable	Not Applicable
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	Not Applicable	Not Applicable

# Canada

#### WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Component

WHMIS 2015 Hazard Classification

Water 7732-18-5 ( 50-58 )

Not a dangerous product according to HPR classification criteria

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

#### WHMIS 1988 Hazard Class

The classification of this product has not been validated yet

Components

**WHMIS 1988** 

Water Unco

Uncontrolled product according to WHMIS classification

criteria

### **Canada Controlled Products Regulation:**

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

Inventory

Product code: DWX65 Product name: DOWEX(R), 10 / 12

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Sulfonated copolymer of styrene,	69011-20-7	Present	Not Listed
ethylstyrene and divinylbenzene in			
the hydrogen form			

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	Not listed

#### **EU Classification**

# EU GHS - SV - CLP 172/2008

Components	CAS-No.	EU GHS - SV - CLP (172/2008)
Water	7732-18-5	
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	69011-20-7	

# EU - CLP (1272/2008)

### R-phrase(s)

Not determined

# S -phrase(s)

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Water	7732-18-5		No information	
Sulfonated copolymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form			No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

# Indication of danger:

not determined

# **16. OTHER INFORMATION**

**Preparation Date:** 6/21/2017 **Revision Date:** 6/21/2017 Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) 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 SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular

Product code: DWX65 Product name: DOWEX(R), 11 / 12 purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. 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 SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet** 

Product code: DWX65