



**SAFETY DATA SHEET
(SDS)**

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Delflex (Peritoneal Dialysis Solution)
Product Number:	None
Formula:	Electrolyte solution: CaCl ₂ , MgCl ₂ , NaCl, NaC ₃ H ₅ O ₃ , C ₆ H ₁₂ O ₆
Product Use:	Medical Care
Restrictions on Use:	None known

SUPPLIER INFORMATION: Fresenius Medical Care

Address: Renal
Product Technologies
920 Winter Street
Waltham, MA 02451

Phone Number: 1-800-662-1237
Fax Number: N/A
Email Address: N/A

Emergency Contact Information:
CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

CLASSIFICATION AND LABELING (GHS / HMIS / NFPA):

GHS Status		
Pictogram	Classification	Signal Word and Hazard Statements
None	NOT CLASSIFIED	None

HMIS Ratings	
HEALTH	0
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	B

NFPA Ratings	
HEALTH	0
FLAMMABILITY	0
REACTIVITY	0
SPECIFIC HAZARD	---

POTENTIAL HEALTH EFFECTS

ACUTE EFFECTS:

Eye: Although not classified as hazardous, overexposure associated with non-standard use may cause eye tearing and irritation.

Skin: Although not classified as hazardous, overexposure associated with non-standard use may cause irritation.

Inhalation: Although not classified as hazardous, overexposure associated with non-standard use may cause pulmonary irritation.

Ingestion: Although not classified as hazardous, overexposure associated with non-standard use may result in hypotension, hypertension or tachycardia.

CHRONIC EFFECTS:

None expected.



3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Weight % Range ^a
Calcium Chloride	10035-04-08	0.018
D-Glucopyranose Monohydrate	77029-61-9	1.5
Magnesium Chloride	7791-18-6	0.006
Sodium Chloride	7647-14-5	0.018
Sodium Lactate	72-17-3	0.448

a. Product composed of 98% water.

4. FIRST AID MEASURES

PROCEDURES

- Eye Contact: Flush eyes with copious amounts of water for at least 15 minutes. Get medical attention if irritation, pain, swelling, tearing or other symptoms persist.
- Skin Contact: Wash with soap and water. Get medical attention if irritation, pain, swelling or other symptoms persist.
- Inhalation: Contact a physician.
- Ingestion: Contact a physician.
- Note to Physicians: Use general supportive care.

5. FIRE FIGHTING MEASURES

- Unusual Fire and Explosion Hazards: None.
- Extinguishing Media: Alcohol foam, water fog, carbon dioxide or dry chemical as appropriate for surrounding fire.
- Special Firefighting Procedures: Use procedures, protective clothing, breathing apparatus, and equipment appropriate for surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: None.
- Environmental precautions: None.
- Methods and materials for containment: Mop up spill.
- Cleanup procedures: Not a hazardous waste. Thoroughly collect spill with absorbent material and dispose of in trash.

7. HANDLING AND STORAGE

- Handling: Transport in original container in accordance with good industrial hygiene and safety practice. Keep in the original container or an approved alternative made from a compatible material, keep tightly closed when not in use.



FRESENIUS MEDICAL CARE

Storage: Store protected from direct sunlight and away from other chemicals in a dry, cool, well-ventilated area, away from incompatible materials. Keep away from 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.

Other Precautions: None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	OSHA Permissible Exposure Limits (PELs)	American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs)	NIOSH Recommended Exposure Limits (RELs)
Calcium Chloride	Not established	Not established	Not established
Dextrose	Not established	Not established	Not established
Magnesium Chloride	Not established	Not established	Not established
Sodium Chloride	Not established	Not established	Not established
Sodium Lactate	Not established	Not established	Not established

Engineering Controls: Normal building ventilation.

Eye/Face Protection: Safety glasses recommended.

Skin Protection: Not normally required.

Respiratory Protection: Not normally required.

General Hygiene Considerations: Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Property	Value
<i>Appearance:</i>	Clear liquid	<i>Initial Boiling Point (°F):</i>	160 °C
<i>Odor:</i>	Odorless	<i>Boiling Range (°F):</i>	Not established
<i>Odor Threshold:</i>	Not established	<i>Melting point:</i>	Not established
<i>Molecular Weight:</i>	Not established	<i>Specific gravity (g/cc):</i>	1.6 – 2.1
<i>Physical State:</i>	Liquid	<i>Viscosity (cps):</i>	Not established
<i>pH:</i>	8 – 9	<i>Flash Point:</i>	Not combustible
<i>Vapor Pressure (mm Hg):</i>	Not established	<i>Decomposition Temperature:</i>	Not established
<i>Solubility in Water (20 °C):</i>	Completely	<i>Flammability:</i>	Not flammable
<i>Volatiles, Percent by volume:</i>	Not established	<i>Upper/Lower Flammability Limits:</i>	Not established
<i>Vapor Density (air = 1):</i>	Not established	<i>Auto-ignition Temperature:</i>	Not established
<i>Evaporation Rate:</i>	Not established	<i>Octanol/water partition coefficient:</i>	Not established

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Reactivity: Not reactive under normal conditions.

Conditions to Avoid: Strong oxidizing solutions.

Materials to Avoid: Strong oxidants.

Hazardous Decomposition Products: Carbon dioxide gas.

Hazardous Polymerization: Will not occur.

Hazardous reaction conditions: None known.



11. TOXICOLOGICAL INFORMATION

Potential Exposure Routes: Skin, eye, inhalation, ingestion

ACUTE ANIMAL TOXICITY DATA:

Chemical Substance	Oral LD50 (mg/kg)	Dermal LD50 (mg/kg)	Inhalation LC50 (4-hour)
Calcium Chloride	1000 to 4179 in rat	>2630 in rat	Not established
Dextrose	Not evaluated	Not evaluated	Not evaluated
Magnesium Chloride	2800 in rat	Not established	Not established
Sodium Chloride	3000 in rat	>10,000 in rabbit	Not established
Sodium Lactate	Not established	Not established	Not established

Skin Corrosion/Irritation: Although not classified as hazardous, exposure may cause mild irritation to the eyes under non-normal use conditions.

Serious Eye Damage/Irritation: Although not classified as hazardous, exposure may cause mild irritation to the eyes under non-normal use conditions.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive, Teratogenicity, or Developmental Effects: Not classified

STOT- Single Exposure: Not classified

STOT- Repeated Exposure: Not classified

Aspiration Hazard: Not classified

Neurological Effects: Not classified

Interactions with Other Chemicals Which Enhance Toxicity: None known

12. ECOLOGICAL INFORMATION

Not mandatory

12. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State and/or local rules / regulations

14. TRANSPORT INFORMATION

U.S. DOT Classification: NOT Regulated

15. REGULATORY INFORMATION

Not mandatory



16. OTHER INFORMATION

Company Contacts	Fred Christadore or Larry Park
Telephone:	1-800-662-1237, Extension 101-2580
CHEMTREC:	1-800-424-9300 (Transportation Incidents)

The data included herein are presented according to Fresenius Medical Care North America practices current at the time of preparation hereof, are made available solely for the consideration, investigation and verification of the original recipients hereof and do not constitute a representation or warranty for which Fresenius Medical Care North America assumes responsibility. It is the responsibility of a recipient of this data to remain currently informed on chemical hazard information, to design and update its own safety program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right to know and environmental protection.

REVISIONS: This SDS was prepared on July 2, 2015 to conform to 29 CFR Parts 1910.1200(g), 1915, and 1926, known as HazCom 2012.

PREPARED BY: Fresenius Medical Care

NOTICE: This product does not legally require an SDS. The data included herein are presented according to Fresenius Medical Care North America practices current at the time of preparation hereof, are made available solely for the consideration, investigation and verification of the original recipients hereof and do not constitute a representation or warranty for which Fresenius Medical Care North America assumes responsibility. It is the responsibility of a recipient of this data to remain informed on chemical hazard information, to design and update its own safety program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right to know and environmental protection.

Preparation Date: July 2, 2015 Supersedes: November 30, 2006 MSDS
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