

# SAFETY DATA SHEET

## 1. Chemical Product and Company Identification

Description: Differential Sensors  
Product Code: 2764, 2766, 2765 and 2767  
Product Type: Aqueous buffered reference solution and gelled salt bridge.  
Application: Differential Sensors

## Manufacturer/Supplier Information

Manufactured for and SDS prepared by:  
Georg Fischer Signet LLC  
3401 Aero Jet Ave.  
El Monte, California 91731

Date Prepared: 05/04/2015  
For additional health, safety or regulatory information, call (626) 571-2770

**For Chemical Emergency  
Spill Leak Fire Exposure or Accident  
Call CHEMTREC Day or Night**

**DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)**

## 2. Hazards Identification

**Signal word:** WARNING  
**Pictograms:** GHS07  
**Target organs:** Red blood cells



### GHS Classification:

Skin irritation (Category 2)  
Eye irritation (Category 2A)

### GHS Label Information: Hazard statement:

H315: Causes skin irritation  
H319: Causes serious eye irritation

### Precautionary statement.

**If sensor breaks and operator is exposed to internal salt and/or gel solutions take the following measures:**

P264: Wash hands thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical attention.  
P302+P352: IF ON SKIN: Wash with plenty of water and soap.  
P332+P313: If skin irritation occurs: Get medical attention.  
P362+P364: Take off contaminated clothing and wash it before reuse.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

### 3. Composition/Information on Ingredients

**Chemical characterization:** Mixtures

**Description:** Two mixtures (gelled salt bridge approximately 15% and reference solution, approximately 85%) containing the substances listed below with non-hazardous additions.

<b>Chemical</b>	<b>CAS No</b>	<b>% w/v</b>
Water	7732-18-5	>78
Potassium Nitrate	7757-79-1	<12
Sodium Chloride	7647-14-5	<5
Potassium Phosphate	7778-77-0	<1
Sodium Hydroxide	1310-73-2	<1
Polyacrylamide-co-methylene-bis-acrylamide	25034-58-6	<1.5

### 4. First Aid Measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

### 5. Fire Fighting Measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

### 6. Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

## 7. Handling and Storage

**Precautions for Safe Handling:** Read label on container before using.

- Do not wear contact lenses when working with chemicals.
- Keep out of reach of children.
- Avoid contact with eyes, skin and clothing.
- Do not inhale vapors, spray or mist.
- Use with adequate ventilation.
- Avoid ingestion.
- Wash thoroughly after handling.
- Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store according to product specification.

## 8. Exposure Controls / Personal Protection

Exposure Limits:

ACGIH (TLV):	Not established
OSHA (PEL):	Not established
NIOSH (REL):	Not established

### Exposure controls

#### Personal protective equipment

**General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.

**Protection of hands:** Protective gloves.

**Material of gloves:** Synthetic gloves

**Eye protection:** Safety glasses

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Reference solution: clear, colorless liquid Salt bridge gel: clear, colorless, solid
<b>Odor:</b>	No odor.
<b>Odor threshold:</b>	Data not available.
<b>pH:</b>	Data not available.
<b>Melting / Freezing point:</b>	Approximately 0°C (32°F) (water)
<b>Boiling point:</b>	Approximately 100°C (212°F) (water)
<b>Flash point:</b>	Data not available
<b>Evaporation Rate (water = 1):</b>	<1
<b>Flammability:</b>	Data not available
<b>Explosion limits:</b>	Data not available.
<b>Vapor pressure (mm Hg):</b>	14 (water)
<b>Vapor density (Air = 1):</b>	0.7 (water)
<b>Relative Density (Specific Gravity):</b>	1.0 (water)
<b>Solubility:</b>	Complete in water.
<b>Molecular formula:</b>	Mixture
<b>Molecular weight:</b>	Mixture

## 10. Stability and Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures which cause evaporation.

**Incompatible materials:** Heavy metals, phosphites, organic compounds, carbonaceous materials, strong acids.

**Hazardous decomposition products:** Nitrogen oxides and toxic metal fumes.

## 11. Toxicological Information

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

### Potential health effects:

**Inhalation:** Inhalation causes cough, sore throat.

**Ingestion:** Ingestion causes abdominal pain, blue lips, fingernails and skin, dizziness, labored breathing, confusion, convulsions, diarrhea, headache, nausea, unconsciousness.

**Skin:** Contact with skin causes redness.

**Eyes:** Contact with eyes causes redness and pain.

**Signs and symptoms of exposure:** Ingestion could cause effects on the blood. This may result in formation of methaemoglobin. The effects may be delayed. Medical observation is indicated. Exercise appropriate procedures to minimize potential hazards.

## 12. Ecological Information

**Toxicity to fish:** *Poecilia reticulata* (fish, fresh water), LC50 = 1378 mg/L/96 hours (Potassium nitrate)

**Toxicity to daphnia and other aquatic invertebrates:** *Daphnia magna* (Crustacea), TLM = 39 mg/L/96 hours (Potassium nitrate)

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### 13. Disposal Consideration

#### Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of in accordance with international, federal, state and local regulations.

### 14. Transport Information (US DOT / CANADA TDG)

**UN/NA number:** Not applicable  
**Shipping name:** Not Regulated  
**Hazard class:** Not applicable  
**Packing group:** Not applicable  
**Reportable Quantity:** No  
**Marine pollutant:** No  
**Exceptions:** Not applicable  
**2012 ERG Guide #** Not applicable

### 15. Regulatory Information

**WHMIS Classification:** Class C, oxidizing material  
**NDSL:** Not listed  
**CERLCA (RQ):** Not listed  
**RCRA code:** D001



#### SARA TITLE III: 313 and 401CFR372:

Product does not contain any toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1996, and Subpart C – Supplier notification requirement of 40CFR372.

#### TSCA Section 8(b) Inventory

Georg Fischer Signet relies on the SDS and certifications of compliance from our suppliers for chemical substances not manufactured by Georg Fischer Signet.

### 16. Other Information

#### Disclaimer

It is the responsibility of the Distributor, Dealer, or Agent to provide a current copy of the SDS to the Consumers of Georg Fischer Signet LLC products. The information contained herein is presented in good faith and has been compiled from sources believed to be reliable. It represents the best information currently available to us. No warranty expressed or implied, or merchantability, fitness or otherwise is made and we assume no liability resulting from its use. This information is offered for your consideration and users should make their own investigation and verification to determine the suitability of the information for their particular purposes. In no event shall Georg Fischer Signet LLC, the parent company or its subsidiaries be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if Georg Fischer Signet LLC has been advised of the possibility of such damages. This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.

**Revision**

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Responsibility for SDS:

S.K. Wells

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