



SAFETY DATA SHEET

1. Chemical Product and Company Identification

Description: Differential Salt Bridge
Product Code: 3864-0001
Product Type: Gelled Salt Solution
Application: 2764, 2766, 2765 and 2767 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: 11/29/18

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, REFER TO THE INFORMATION CONTAINED HEREIN AND CALL YOUR LOCAL GF OFFICE

2. Hazards Identification

GHS Classification:
GHS Label Elements:
Pictogram: GHS03



Hazard Statements: H272: May intensify fire; oxidizer.

Pictogram: GHS07



Hazard Statements: H302: Harmful if swallowed. H317: May cause an allergic skin reaction.

Pictogram: GHS08



Hazard Statements: H340 May cause genetic defects. H350 May cause cancer. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:



Hazard Statements: O; Oxidizing, R8: Contact with combustible material may cause fire.



Hazard Statements: T; Toxic, R45-46: May cause cancer. May cause heritable genetic damage.



Hazard Statements: Xn; Harmful, R22: Harmful if swallowed.



Hazard Statements: Xi; Irritant, R43: May cause sensitization by skin contact.

Information Concerning Particular Hazards for Human and Environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification System: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

**Label Elements:
Labelling According to
EU Guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

**Code Letter and Hazard
Designation of Product:**

T; Toxic, O; Oxidizing

Hazard-determining components of labeling: Acrylamide

Risk phrases:

45 May cause cancer.
46 May cause heritable genetic damage.
8 Contact with combustible material may cause fire.
22 Also harmful if swallowed.
43 May cause sensitization by skin contact.

Safety phrases:

53 Avoid exposure - obtain special instructions before use.
24/25 Avoid contact with skin and eyes.
37/39 Wear suitable gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately.
60 This material and its container must be disposed of as hazardous waste.

NFPA Ratings (Scale 0 - 4)



Health = 2
Fire = 3
Reactivity = 0
The substance possesses oxidizing properties.

HEALTH	2
FIRE	3
REACTIVITY	0

HMIS Ratings (Scale 0 - 4)

Health = *2
Fire = 3
Reactivity = 0

Other Hazards:

Results of PBT and vPvB Assessment:

PBT: Not applicable
vPvB: Not applicable

3. Composition/Information on Ingredients

Chemical Characterization:

Mixture

Description:

Mixture of the substances listed below with non-hazardous additions.

Acrylamide

CAS Number: 79-06-1
% w/v: 7-10%

Potassium Nitrate

CAS Number: 7757-79-1
% w/v: <22

Sodium Chloride

CAS Number: 7778-77-0
% w/v: <5

Nitric Acid

CAS Number: 1310-73-2
% w/v: <1

Dipotassium Peroxodisulfate

CAS Number: 7727-21-1
% w/v: <1%

N,N'-methylene diacrylamide

CAS Number: 110-26-9
% w/v: <1%

Water

CAS Number: 7732-18-5
% w/v: >60

SVHC:

Acrylamide

CAS Number: 79-06-1

Additional Information: For the wording of the listed risk phrases refer to section 16.

4. First Aid Measures

General Information:	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Inhalation:	Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.
Skin Contact:	Immediately wash with water and soap and rinse thoroughly.
Eye Contact:	Rinse opened eye for several minutes under running water.
Ingestion:	Immediately call a doctor.
Most Important Symptoms and Effects, (both acute and delayed):	No further relevant information available.
Indication of Any Immediate Medical Attention and Special Treatment Needed:	No further relevant information available.

5. Fire Fighting Measures

Suitable Extinguishing Agents:	CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Unsuitable Extinguishing Media:	No information available
Special Hazards Arising from the Substance or Mixture:	During heating or in case of fire poisonous gases are produced.
Protective Equipment and Precautions for Firefighters:	No special measures required.

6. Accidental Release Measures

Personal Precautions:	Mount respiratory protective device.
Environmental Precautions:	Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.
Methods and Material for Containment and Clean Up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
Reference to Other Sections:	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7. Handling and Storage

Handling:	Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.
Information about Protection against Explosions and Fires:	Keep respiratory protective device available.
Requirements to be met by Storerooms and Receptacles:	No special requirements
Information about Storage in One Common Storage Facility:	Not required

Further Information about Storage Conditions:

None

Specific End Use(s):

No further relevant information available.

8. Exposure Controls/Personnel Protection

Additional Information about Design of Technical Systems:

No further data; see item 7.

Control Parameters:

Components with limit values that require monitoring at the workplace: 79-06-1 acrylamide

PEL Long-term value: 0.3 mg/m³
Skin

REL Long-term value: 0.03 mg/m³
Skin; See Pocket Guide App. A

TLV Long-term value: 0.03* mg/m³
Skin;*inhalable fraction and vapor

Additional information:

The lists that were valid during the creation were used as basis.

Personal Protective Equipment

Hygiene Measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

Respiratory Protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Eye/Face Protection:

Tightly sealed goggles

Skin and Body Protection:

Protective gloves. To avoid skin problems reduce the wearing of gloves to the required minimum. Only use chemical-protective gloves with CE-labeling of category III. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of Gloves:

Nitrile rubber, NBR

Natural rubber, NR

Chloroprene rubber, CR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration Time of Glove Material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

9. Physical and Chemical Properties

Appearance:

Form:	Solid gel
Color:	Colorless
Odor:	Odorless
Odor Threshold:	Not determined
pH-value at 20 °C:	6.5 – 7.0
Melting Point/Melting Range:	Undetermined
Boiling Point/Boiling Range:	Undetermined
Flash Point:	Not applicable
Flammability (solid, gaseous):	Not applicable
Decomposition Temperature:	Not determined
Auto Igniting:	Product is not self-igniting
Danger of Explosion:	Product does not present an explosion hazard
Explosion Limits	
Lower:	Not determined
Upper:	Not determined
Vapor Pressure at 20 °C:	23 hPa
Density:	Not determined
Relative Density:	Not determined
Vapor Density:	Not determined
Evaporation Rate:	Not determined
Solubility in / Miscibility	
With Water:	Fully miscible
Partition Coefficient (n-octanol/water):	Not determined
Viscosity:	
Dynamic:	Not determined
Kinematic:	Not determined

Other Information: No further relevant information available.

10. Stability and Reactivity

Thermal Decomposition:	No decomposition if used according to specifications.
Possibility of Hazardous Reactions:	No dangerous reactions known
Conditions to Avoid:	No further relevant information available.
Incompatible Materials:	No further relevant information available.
Hazardous Decomposition Products:	No dangerous decomposition products known.

11. Toxicological Information

Acute Toxicity:

LD/LC50 values that are relevant for classification:

7757-79-1 Potassium Nitrate

Oral LD50 3750 mg/kg (rat)

79-06-1 Acrylamide

Oral LD50 124 mg/kg (rat)

Dermal LD50 400 mg/kg (rat)

7647-14-5 Sodium Chloride

Oral LD50 3000 mg/kg (rat)

Primary Irritant Effect:

On Skin: No irritating effect.

On Eyes: No irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional Toxicological Information: The product shows the following dangers according to internally approved calculation methods for preparations: Harmful, Irritant, Carcinogenic. The product can cause inheritable damage.

Carcinogenic categories

IARC (International Agency for Research on Cancer): 79-06-1 acrylamide

NTP (National Toxicology Program): 79-06-1 acrylamide

12. Ecological Information

Aquatic Toxicity: No information available

Persistence and Degradability: No information available

Bioaccumulation Potential: No information available

Mobility in Soil: No information available

General Notes: Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB Assessment:

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available

13. Disposal Considerations

Waste Treatment Methods: 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. Transportation Information

UN-Number:

DOT, ADR, ADN, IMDG, IATA: Void

UN Proper Shipping Name:

DOT, ADR, ADN, IMDG, IATA: Void

Transport Hazard Classes:

DOT, ADR, ADN, IMDG, IATA
Class: Void

Packing Group:

DOT, ADR, IMDG, IATA: Void

Environmental Hazards:

Marine Pollutant: No

Special Precautions for User: Not applicable

Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code: Not applicable

Transport/Additional Information: Not dangerous according to the above specifications.

15. Regulatory Information

S.A.R.A. Section 355 (Extremely Hazardous Substances): 79-06-1 acrylamide
7697-37-2 nitric acid

S.A.R.A. Section 313 (Specific Toxic Chemical Listings): 79-06-1 acrylamide
7697-37-2 nitric acid

TSCA (Toxic Substances Control Act): All ingredients are listed.

California Proposition 65:

Chemicals known to cause cancer:

79-06-1 acrylamide

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

79-06-1 acrylamide

Chemicals known to cause developmental toxicity:

79-06-1 acrylamide

Carcinogenicity Categories:

EPA (Environmental Protection Agency): 79-06-1 acrylamide B2

TLV (Threshold Limit Value established by ACGIH): 79-06-1 acrylamide A3

MAK (German Maximum Workplace Concentration): 79-06-1 acrylamide 2

NIOSH-Ca (National Institute for Occupational Safety and Health): 79-06-1 acrylamide

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients is listed.

Product Related Hazard Information:

The product has been classified and marked in accordance with directives on hazardous materials.

Hazard Symbols:

T Toxic

O Oxidizing

Hazard-determining Components of Labeling:

Acrylamide

Risk Phrases:

45 May cause cancer.

46 May cause heritable genetic damage.

8 Contact with combustible material may cause fire.

22 Also harmful if swallowed.

43 May cause sensitization by skin contact.

Safety Phrases:

53 Avoid exposure - obtain special instructions before use.

24/25 Avoid contact with skin and eyes.

37/39 Wear suitable gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

60 This material and its container must be disposed of as hazardous waste.

**National Regulations:
Information about Limitation of Use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

**Technical Instructions (Air):
Class Share in %**

Water	72.9
II	7.7

Water Hazard Class: Water Hazard Class 3 (Self-assessment): Extremely hazardous for water.
Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out.

16. 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

Date of latest revision:	11/29/2018
Responsibility for SDS:	S.K. Wells

Copyright 2018 Georg Fischer Signet LLC
License granted to make unlimited paper copies for internal use only.