

# SAFETY DATA SHEET

#### 1. Identification

Product identifier STANNOUS CHLORIDE, REAGENT I, SOLUTION

Other means of identification

Product code 2150

**Recommended use** professional, scientific and technical activities: other professional, scientific and technical activities

**Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

**Company name** GFS Chemicals, Inc. **Address** P.O. Box 245

Powell OH 43065 US

**Telephone** Phone 740-881-5501

Toll Free 800-858-9682 Fax 740-881-5989

Website www.gfschemicals.com
E-mail service@gfschemicals.com

Emergency phone Emergency Assistance

number

# 2. Hazard(s) identification

Physical hazards Not classified.

**Health hazards** Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A Specific target organ toxicity, repeated Category 2

exposure

**OSHA hazard(s)** Not classified.

**Label elements** 



Signal word Warning

**Hazard statement** Causes skin irritation. Causes serious eye irritation. May cause damage to organs through

prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting

Chemtrec 800-424-9300

effects.

**Precautionary statement** 

**Prevention** Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves. Wear

eye/face protection.

**Response** Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical

advice/attention.

**Storage** Not available.

**Disposal** Dispose of contents/container to an approved waste disposal plant.

Hazard(s) not otherwise

classified (HNOC)

Not classified.

**Environmental hazards** Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

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## **Supplemental information**

## **Precautionary statement**

**Prevention** Avoid release to the environment.

Response Collect spillage.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

97.4% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 97.4% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

# 3. Composition/information on ingredients

#### **Mixtures**

**Hazardous components** 

Chemical name	CAS number	<u>%</u>
GLYCERIN	56-81-5	90 - 100
STANNOUS CHLORIDE, DIHYDRATE	10025-69-1	1 - < 3

<sup>\*</sup>Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

**Inhalation** Move to fresh air.

Skin contact Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs:

Get medical advice/attention.

**Eye contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Have victim rinse mouth thoroughly with water. Call a POISON CENTER or doctor/physician if you

feel unwell.

Most important

symptoms/effects, acute and

delayed

Irritation of eyes and mucous membranes. Irritant effects. Prolonged exposure may cause chronic

effects.

**Indication of immediate** medical attention and special

treatment needed **General information**  Symptoms may be delayed. Provide general supportive measures and treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Wash

contaminated clothing before reuse.

# 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Dry powder. Dry chemical powder. Carbon dioxide (CO2). Alcohol resistant foam.

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

None known.

Special protective equipment

and precautions for firefighters

Fire-fighting equipment/instructions Firefighters should wear full protective clothing including self contained breathing apparatus.

Water runoff can cause environmental damage.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ensure adequate ventilation. Wear appropriate personal protective equipment.

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## Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Remove sources of ignition. Should not be released into the environment. This product is miscible in water. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. After removal flush contaminated area thoroughly with water. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.

## **Environmental precautions**

Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

## 7. Handling and storage

# Precautions for safe handling

Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Keep in a well-ventilated place. Keep container tightly closed. Keep out of the reach of children. Store in a cool dry place. Store in a cool, dry place out of direct sunlight.

# 8. Exposure controls/personal protection

## **Occupational exposure limits**

U.S. - OSHA

	Value	Form
TWA	2 mg/m3	as tin
	15 mg/m3	glycerin
Туре	Value	Form
TWA	2 mg/m3	as tin
r Contaminants (29 CFR 191	10.1000)	
Туре	Value	Form
PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.
PEL	2 mg/m3	
Туре	Value	Form
TWA	2 mg/m3	as tin
	10 mg/m3	glycerin
Туре	Value	Form
TWA	2 mg/m3	as tin
	Value	Form
		Mist.
TWA	2 mg/m3	riiot.
	Type TWA  r Contaminants (29 CFR 19: Type PEL PEL  Type TWA  Type TWA  Type TWA  Type TWA	Type Value  TWA 2 mg/m3  r Contaminants (29 CFR 1910.1000) Type Value  PEL 5 mg/m3 15 mg/m3 15 mg/m3 2 mg/m3  Type Value  TWA 2 mg/m3

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Components **Value TWA** 2 mg/m3 STANNOUS CHLORIDE,

DIHYDRATE (CAS 10025-69-1)

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering** 

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** Do not get this material in contact with eyes. Wear chemical goggles.

Skin protection

**Hand protection** Wear protective gloves.

Other Do not get this material in contact with skin. Wear appropriate chemical resistant clothing. Wear

appropriate chemical resistant gloves. Wear protective gloves.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators. Respirator with filter for organic vapor

Thermal hazards Not available.

**General hygiene** considerations

Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid contact with eyes. Wash hands before breaks and immediately after handling the product. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

**Appearance** Clear. **Physical state** Liquid. Form Liquid.

> Color Colorless to light yellow.

Odor Odorless. **Odor threshold** Not available. pН Not available.

Melting point/freezing point 68 °F (20 °C) estimated Initial boiling point and

boiling range

554 °F (290 °C) estimated

Flash point 350.60 °F (177.00 °C) estimated

**Evaporation rate** Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

**Explosive limit - lower** 

(%)

Not available.

**Explosive limit - upper** 

(%)

Not available.

0.00021 hPa estimated Vapor pressure

Not available. Vapor density **Relative density** Not available.

Solubility(ies) Completely miscible **Partition coefficient** 

(n-octanol/water)

Not available.

**Auto-ignition temperature** 739 °F (392.78 °C) estimated

**Decomposition temperature** Not available. **Viscosity** Not available.

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Other information

**Density** 1.26 g/cm3 estimated Flammability class Combustible IIIB estimated

Flash point class Combustible IIIB Specific gravity 1.26 estimated

# 10. Stability and reactivity

Reactivity Not available.

**Chemical stability** Material is stable under normal conditions. Possibility of hazardous Hazardous polymerization does not occur.

reactions

**Conditions to avoid** None known. Avoid temperatures exceeding the flash point.

**Incompatible materials** Strong oxidizing agents. Strong acids, alkalies and oxidizing agents.

**Hazardous decomposition** 

products

At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

# 11. Toxicological information

## Information on likely routes of exposure

**Ingestion** Based on available data, the classification criteria are not met.

**Inhalation** Due to lack of data the classification is not possible.

Skin contact Not available.

**Eye contact** Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Irritant effects.

## Information on toxicological effects

**Acute toxicity** 

Product	Species	Test Results
STANNOUS CHLORIDE, RI	EAGENT I, SOLUTION (CAS Mixture)	
Acute		
Oral		
LD50	Mouse	46153.8477 mg/kg, estimated
	Rabbit	384.6154 g/kg, estimated
	Rat	26923.0762 mg/kg, estimated
		12.94 g/kg
Other		
LD100	Dog	6115.3848 mg/kg, estimated
	Mouse	2538.4614 mg/kg, estimated
LD50	Dog	846.1539 mg/kg, estimated
	Mouse	684.6154 mg/kg, estimated
	Rat	2000 mg/kg, estimated
Components	Species	Test Results
GLYCERIN (CAS 56-81-5)		
Acute		
Oral		
LD50	Rat	12.6 g/kg
STANNOUS CHLORIDE, D	IHYDRATE (CAS 10025-69-1)	
Acute		
Oral		
LD50	Mouse	1200 mg/kg
	Rabbit	10000 mg/kg
		10 g/kg
	Rat	700 mg/kg, (anhydrous)
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Components	Species	Test Results	est Results	
Other				
LD100	Dog	159 mg/kg		
	Mouse	66 mg/kg		
LD50	Dog	22 mg/kg		
	Mouse	17.8 mg/kg		
	Rat	52 mg/kg		

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation. Serious eye damage/eye Causes serious eye irritation. irritation

Respiratory sensitization Due to lack of data the classification is not possible. Skin sensitization Due to lack of data the classification is not possible. Germ cell mutagenicity Due to lack of data the classification is not possible.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Reproductive toxicity** Due to lack of data the classification is not possible. Specific target organ toxicity Due to lack of data the classification is not possible. - single exposure

Specific target organ toxicity

- repeated exposure

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Due to lack of data the classification is not possible.

**Chronic effects** Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause

disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects. May cause damage to organs through prolonged or repeated exposure.

**Further information** Symptoms may be delayed.

# 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Contains a substance which causes risk of hazardous effects to the environment.

Product		Species	Test Results
STANNOUS CHLORID	E, REAGENT I, SOL	UTION (CAS Mixture)	
Crustacea	EC50	Daphnia	3030.3845 mg/l, 48 hours, estimated
	LC50	Daphnia	10267 mg/l, 24 Hours
Fish	LC50	Fish	55441 mg/l, 96 Hours
			10267 mg/l, 48 Hours
			5133 mg/l, 24 Hours
Components		Species	Test Results
GLYCERIN (CAS 56-8:	1-5)		
Aquatic			
Crustacea	LC50	Water flea (Daphnia magna)	> 10000 mg/l, 24 hours
Fish	LC50	Carp (Leuciscus idus melanotus)	> 10000 mg/l, 48 hours
		Goldfish (Carassius auratus)	> 5000 mg/l, 24 hours
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	51000 - 57000 mg/l, 96 hours
			51000 - 57000 mg/l, 96 hours
STANNOUS CHLORID  Aquatic	E, DIHYDRATE (CAS	5 10025-69-1)	
Crustacea	EC50	Water flea (Daphnia magna)	55 mg/l, 48 hours

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Persistence and degradability None known. **Bioaccumulative potential** Not available.

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**GLYCERIN** -1.76

Mobility in soil Not available. Other adverse effects Not available.

# 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

> and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations Not available. Hazardous waste code Not regulated.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions). Not applicable.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Offer rinsed packaging material to local recycling facilities.

# 14. Transport information

Not regulated as a hazardous material by DOT.

**IATA** 

Not regulated as a dangerous good.

**IMDG** 

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

**General information** DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

15. Regulatory information

**US federal regulations** CERCLA/SARA Hazardous Substances - Not applicable.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not on regulatory list.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes

> Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

**SARA 302 Extremely** 

hazardous substance

No

**SARA 311/312** 

**Hazardous chemical** 

No

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act** 

(SDWA)

Not regulated.

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# Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed

## Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

## **DEA Exempt Chemical Mixtures Code Number**

Not regulated.

Food and Drug
Administration (FDA)

Total food additive
Direct food additive
GRAS food additive

**US state regulations**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material

is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

On inventory (yes/no)\*

#### **US. Massachusetts RTK - Substance List**

GLYCERIN (CAS 56-81-5)

STANNOUS CHLORIDE, DIHYDRATE (CAS 10025-69-1)

## **US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

## **US. Pennsylvania RTK - Hazardous Substances**

**GLYCERIN (CAS 56-81-5)** 

## **US. Rhode Island RTK**

GLYCERIN (CAS 56-81-5)

STANNOUS CHLORIDE, DIHYDRATE (CAS 10025-69-1)

**Inventory name** 

### **US. California Proposition 65**

## US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

#### **International Inventories**

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

<sup>\*</sup>A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

# 16. Other information, including date of preparation or last revision

**Issue date** August-13-2013

Version # 01

**Further information** Not available.

**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently

available. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified

in the text.

**Revision Information** Hazards Identification: US Hazard Categories

Composition / Information on Ingredients: Ingredients Exposure Controls / Personal Protection: OELs Physical & Chemical Properties: Multiple Properties

Regulatory Information: United States

GHS: Classification

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