

# SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC - Switzerland  
English

## 1. Identification of the substance/preparation and company/undertaking

**Product name** Rehydration Solution; part of 'DeStreak™ Starter Kit'

**Catalogue Number** 11-0008-35



**Hazard symbol or symbols**



Harmful

**Product type** Liquid.

### Company/undertaking identification

**Supplier** GE Healthcare UK Ltd  
Amersham Place  
Little Chalfont  
Buckinghamshire HP7 9NA  
England  
+44 0870 606 1921

**Emergency telephone number**  
Swedish Poisons Information Centre :  
+46 (0)8 331 231

**Person who prepared the MSDS:** msdslifesciences@ge.com

**Switzerland** GE Healthcare Bio-Sciences GmbH  
Industriestr. 30  
CH-8112 Otelfingen

0848 8028 12

## 2. Hazards identification

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** Carc. Cat. 3; R40  
Repr. Cat. 3; R63  
R52/53

**Human health hazards** Limited evidence of a carcinogenic effect. Possible risk of harm to the unborn child.

**Environmental hazards** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See section 11 for more detailed information on health effects and symptoms.

## 3. Composition/information on ingredients

**Substance/preparation** Preparation

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EC number</u>	<u>Classification</u>
Thiourea	62-56-6	10 - 15	200-543-5	Carc. Cat. 3; R40 Repr. Cat. 3; R63 Xn; R22 N; R51/53 T; R25
2,2'-dithiobisethanol	1892-29-1	<1.5	217-576-6	

See section 16 for the full text of the R-phrases declared above

Occupational exposure limits, if available, are listed in section 8.



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11000835-1



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## 4. First-aid measures

### First-aid measures

<b>Inhalation</b>	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Ingestion</b>	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Skin contact</b>	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Obtain medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
<b>Protection of first-aiders</b>	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable</b>	Use an extinguishing agent suitable for the surrounding fire.
<b>Not suitable</b>	None known.
<b>Special exposure hazards</b>	<p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.</p>
<b>Special protective equipment for fire-fighters</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

<b>Personal precautions</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
<b>Environmental precautions</b>	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.
<b>Large spill</b>	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
<b>Small spill</b>	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 7. Handling and storage

<b>Handling</b>	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Storage</b>	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.



**Packaging materials**

<b>Recommended</b>	Use original container.
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**8. Exposure controls/personal protection**

<b>Exposure limit values</b>	Not available.
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**Exposure controls**

<b>Occupational exposure controls</b>	<input checked="" type="checkbox"/> If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
<b>Respiratory protection</b>	<input checked="" type="checkbox"/> Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<b>Eye protection</b>	<input checked="" type="checkbox"/> Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
<b>Skin protection</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**9. Physical and chemical properties****General information****Appearance**

<b>Physical state</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Odourless.

**Important health, safety and environmental information**

<b>Explosive properties</b>	Not considered to be a product presenting a risk of explosion.
<b>Solubility</b>	<input checked="" type="checkbox"/> Not available.

**10. Stability and reactivity**

<b>Stability</b>	<input checked="" type="checkbox"/> The product is stable.
<b>Conditions to avoid</b>	<input checked="" type="checkbox"/> Avoid exposure during pregnancy.
<b>Materials to avoid</b>	<input checked="" type="checkbox"/> No specific data.

**11. Toxicological information****Potential acute health effects**

<b>Inhalation</b>	<input checked="" type="checkbox"/> Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Ingestion</b>	No known significant effects or critical hazards.
<b>Skin contact</b>	No known significant effects or critical hazards.
<b>Eye contact</b>	No known significant effects or critical hazards.

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> Thiourea	LD50 Intraperitoneal	Rat	436 mg/kg	-
	LD50 Oral	Rat	125 mg/kg	-
	TDLo Oral	Rat	4 mg/kg	-
2,2'-dithiobisethanol	LD50 Oral	Rat	173 mg/kg	-
<b>Conclusion/Summary</b>	Not available.			

**Potential chronic health effects**

<b>Chronic effects</b>	<input checked="" type="checkbox"/> No known significant effects or critical hazards.
<b>Carcinogenicity</b>	<input checked="" type="checkbox"/> May cause cancer, based on animal data. Limited evidence of a carcinogenic effect. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	<input checked="" type="checkbox"/> May cause birth defects, based on animal data.
<b>Developmental effects</b>	<input checked="" type="checkbox"/> No known significant effects or critical hazards.
<b>Fertility effects</b>	<input checked="" type="checkbox"/> No known significant effects or critical hazards.



**Over-exposure signs/symptoms**

Inhalation	No specific data.
Ingestion	No specific data.
Skin	No specific data.
Eyes	No specific data.
Target organs	Contains material which may cause damage to the following organs: blood, liver, skin, bone marrow, eye, lens or cornea, thyroid.

**12. Ecological information**

**Environmental effects** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Aquatic ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
thiourea	-	Acute LC50 9000 to 18000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours

**Conclusion/Summary** Not available.

**Conclusion/Summary** Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
thiourea	-	-	Not readily

**Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
thiourea	-0.92	<2	low

**Other adverse effects** No known significant effects or critical hazards.

**13. Disposal considerations**

**Methods of disposal** The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**Hazardous waste** The classification of the product may meet the criteria for a hazardous waste.

**14. Transport information****International transport regulations**

Not classified.

**15. Regulatory information****EU regulations**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols**



Harmful

**Risk phrases**

R40- Limited evidence of a carcinogenic effect.  
R63- Possible risk of harm to the unborn child.  
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
S36/37- Wear suitable protective clothing and gloves.

**Safety phrases**

**Contains**

thiourea

200-543-5

**Product use**

Industrial applications.

**Europe inventory**

Not determined.

**Other EU regulations****National regulations**

**VOC content**

Liberated.



16. Other information

Full text of R-phrases referred to in sections 2 and 3 - Switzerland

Full text of classifications referred to in sections 2 and 3 - Switzerland

R40- Limited evidence of a carcinogenic effect.  
R63- Possible risk of harm to the unborn child.  
R25- Toxic if swallowed.  
R22- Harmful if swallowed.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Carc. Cat. 3 - Carcinogen Category 3  
Repr. Cat. 3 - Toxic to reproduction Category 3  
T - Toxic  
Xn - Harmful  
N - Dangerous for the environment

Indicates information that has changed from previously issued version.

History

Date of printing	21 August 2009	Date of previous issue	18 July 2006
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Notice to reader

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