

# Palintest

Water Analysis Technologies

## SAFETY DATA SHEET GREEN 2 SOLUTION

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name** GREEN 2 SOLUTION

**Product number** PT 228, PT 270 SPEC, PT 296, PT 791, PT 802, PT 804, PT 753, LR-9890, SKW 400, SKW 400NPK, SKW 500

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Testing water

#### 1.3. Details of the supplier of the safety data sheet

**Supplier** PALINTEST LIMITED  
PALINTEST HOUSE  
TEAM VALLEY  
GATESHEAD  
TYNE & WEAR NE11 0NS  
ENGLAND  
TEL 0191 491 0808  
FAX 0191 482 5372  
palintest@palintest.com

#### 1.4. Emergency telephone number

**Emergency telephone** +44 (0)207 858 1228 (24hr)

**National emergency telephone number** NHS Direct: 0845 4647 (England and Wales) NHS 24: 08454 24 24 24 (Scotland)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC/1272/2008)

**Physical hazards** Not Classified

**Health hazards** Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1A - H350 Repr. 1A - H360D  
STOT RE 2 - H373

**Environmental hazards** Aquatic Chronic 2 - H411

#### 2.2. Label elements

##### Pictogram



**Signal word** Danger

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<b>Hazard statements</b>	<p>H317 May cause an allergic skin reaction.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H341 Suspected of causing genetic defects.</p> <p>H350 May cause cancer.</p> <p>H360D May damage the unborn child.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
<b>Precautionary statements</b>	<p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P501 Dispose of contents/ container in accordance with local regulations.</p>
<b>Contains</b>	NICKEL (II) SULPHATE HEXAHYDRATE
<b>Supplementary precautionary statements</b>	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P284 [In case of inadequate ventilation] wear respiratory protection.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p> <p>P405 Store locked up.</p>

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>HYDROCHLORIC ACID ...%</b>		<b>&lt;5%</b>
CAS number: 7647-01-0	EC number: 231-595-7	REACH registration number: 01-2119484862-27-XXXX
<b>Classification</b>		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
STOT SE 3 - H335		

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<b>NICKEL (II) SULPHATE HEXAHYDRATE</b>			<b>&lt;3.1%</b>
CAS number: 10101-97-0	EC number: 232-104-9	REACH registration number: 01-2119439361-44-XXXX	
M factor (Acute) = 1	M factor (Chronic) = 1		
This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES.			
<b>Classification</b> Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1A - H350i Repr. 1A - H360D STOT RE 1 - H372 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**Composition comments**      The data shown are in accordance with the latest EC Directives.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	When handled correctly, undamaged units represent no danger.
<b>Inhalation</b>	Unlikely route of exposure as the product does not contain volatile substances.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Get medical attention immediately.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

#### 4.2. Most important symptoms and effects, both acute and delayed

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	This is unlikely to occur but symptoms similar to those of ingestion may develop.
<b>Ingestion</b>	May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.
<b>Skin contact</b>	May cause serious chemical burns to the skin.
<b>Eye contact</b>	May cause blurred vision and serious eye damage.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor**      Treat symptomatically.

### SECTION 5: Firefighting measures

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### 5.1. Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

**Hazardous combustion products** Heating may generate the following products: Toxic and corrosive gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet.

### 6.2. Environmental precautions

**Environmental precautions** Not considered to be a significant hazard due to the small quantities used. However, large or frequent spills may have hazardous effects on the environment.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb in vermiculite, dry sand or earth and place into containers. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Good personal hygiene procedures should be implemented.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store in tightly-closed, original container in a dry and cool place.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### **HYDROCHLORIC ACID ...%**

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2 mg/m<sup>3</sup> gas and aerosol mists

Short-term exposure limit (15-minute): WEL 5 ppm 8 mg/m<sup>3</sup> gas and aerosol mists

#### **NICKEL (II) SULPHATE HEXAHYDRATE**

Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL

Carc, Sen, Sk

as Ni

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WEL = Workplace Exposure Limit  
 Carc = Capable of causing cancer and/or heritable genetic damage.  
 Sen = Capable of causing occupational asthma.  
 Sk = Can be absorbed through skin.

**Ingredient comments** Due to the hazardous nature of ingredients, exposure should be minimal. WEL = Workplace Exposure Limits

### 8.2. Exposure controls

#### Protective equipment



**Eye/face protection** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

**Hand protection** It is recommended that chemical-resistant, impervious gloves are worn. It is recommended that gloves are made of the following material: Nitrile rubber.

**Hygiene measures** No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Wash promptly if skin becomes contaminated.

**Respiratory protection** Due to the physical nature of this product, exposure by this route is unlikely. No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

**Appearance** Liquid.  
**Colour** Green.

### 9.2. Other information

**Other information** No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

**Stability** Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No data available.

### 10.4. Conditions to avoid

**Conditions to avoid** There are no known conditions that are likely to result in a hazardous situation.

### 10.5. Incompatible materials

**Materials to avoid** No specific material or group of materials is likely to react with the product to produce a hazardous situation.

### 10.6. Hazardous decomposition products

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**Hazardous decomposition products** When heated, vapours/gases hazardous to health may be formed.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects** This product is toxic.

**Other health effects** Mutagen Category 3. Carcinogen Category 1. Toxic to Reproduction Category 1.

#### Acute toxicity - oral

**ATE oral (mg/kg)** 12,609.75609756

#### Acute toxicity - inhalation

**ATE inhalation (vapours mg/l)** 383.27526132

**Ingestion** May cause discomfort if swallowed.

**Skin contact** May cause sensitisation by skin contact.

**Acute and chronic health hazards** Known or suspected carcinogen for humans. Contains a substance/a group of substances which may cause cancer.

### SECTION 12: Ecological Information

**Ecotoxicity** The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

#### 12.1. Toxicity

**Toxicity** Very toxic to aquatic organisms.

#### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

#### 12.4. Mobility in soil

**Mobility** The product is water-soluble and may spread in water systems.

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

#### 12.6. Other adverse effects

**Other adverse effects** None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### SECTION 14: Transport information

**Air transport notes** This product is not subject to transport regulations as it complies with the conditions of Special Provision A197 of IATA.

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### 14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NICKEL (II) SULPHATE HEXAHYDRATE)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NICKEL (II) SULPHATE HEXAHYDRATE)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NICKEL (II) SULPHATE HEXAHYDRATE)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NICKEL (II) SULPHATE HEXAHYDRATE)

### 14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID label	9
IMDG class	9
ICAO class/division	9

#### Transport labels



### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

EmS	F-A, S-F
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU legislation** Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

**Guidance** Safety Data Sheets for Substances and Preparations.

#### 15.2. Chemical safety assessment

No data available.

#### Inventories

##### US - TSCA

All the ingredients are listed or exempt.

##### US - TSCA 12(b) Export Notification

None of the ingredients are listed.

### SECTION 16: Other information

**Issued by** L. Morgan

**Revision date** 21/07/2016

**Revision** 8

**Supersedes date** 02/03/2016

**SDS status** Approved.

**Hazard statements in full**

H302 Harmful if swallowed.  
 H314 Causes severe skin burns and eye damage.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H332 Harmful if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.  
 H341 Suspected of causing genetic defects.  
 H350 May cause cancer.  
 H350i May cause cancer by inhalation.  
 H360D May damage the unborn child.  
 H372 Causes damage to organs (Lungs) through prolonged or repeated exposure.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.