Palintest®

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

Internal identification X-989

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

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

Classification (67/548/EEC or 1999/45/EC) Xn; R48/20/21/22. Carc. Cat. 1 R45. Muta. Cat. 3 R68. Repr. Cat. 1 R61. N; R51/53. R42/43

Environmental The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See Section 12 for additional information on ecological hazards.

Physicochemical When handled correctly, undamaged units represent no danger.

2.2. Label elements

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Pictogram

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

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

HYDROCHLORIC ACID ...% **<5.5%**

CAS number: 7647-01-0 EC number: 231-595-7 REACH registration number: 01-2119484862-27-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335	C; R34. Xi; R37

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NICKEL (II) SULPHATE HEXAHYDRATE		<5.5%
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	

Classification
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

Classification (67/548/EEC or 1999/45/EC)
T; R48/23/24/25. Xn; R20/22. Xi; R38. Carc. Cat. 1 R49. Muta. Cat. 3 R68. Repr. Cat. 1 R61. N; R50/53. R42/43

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

General information When handled correctly, undamaged units represent no danger.

Inhalation Unlikely route of exposure as the product does not contain volatile substances.

Ingestion Rinse mouth thoroughly with water. Get medical attention immediately.

Skin contact Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact 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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation This is unlikely to occur but symptoms similar to those of ingestion may develop.

Ingestion May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

Skin contact May cause serious chemical burns to the skin.

Eye contact 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

5.1. Extinguishing media

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

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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/m³ gas and aerosol mists
Short-term exposure limit (15-minute): WEL 5 ppm 8 mg/m³ gas and aerosol mists

NICKEL (II) SULPHATE HEXAHYDRATE

Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m³
Short-term exposure limit (15-minute): WEL
Carc, Sen, Sk
as Ni

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.

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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 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

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

SECTION 11: Toxicological information

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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

Road transport notes The product is considered hazardous goods in "excepted quantities" as packaged as per ADR European agreement, concerning the international carriage of dangerous goods by road 2013 section 3.5.1.4

Air transport notes This product is considered as Dangerous Goods Permitted in Excepted Quantities as packaged as per Section 2.6.2.2 of the IATA Dangerous Goods Regulations 54th Edition.

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

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

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Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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.

SECTION 16: Other information

Issued by L. Morgan

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Revision 4

Supersedes date 02/12/2013

SDS status Approved.

Risk phrases in full

R20/22 Harmful by inhalation and if swallowed.
R34 Causes burns.
R37 Irritating to respiratory system.
R38 Irritating to skin.
R42/43 May cause sensitisation by inhalation and skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R49 May cause cancer by inhalation.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61 May cause harm to the unborn child.
R68 Possible risk of irreversible effects.

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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.