

Palintest

Water Analysis Technologies

SAFETY DATA SHEET GREEN 2 SOLUTION

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name GREEN 2 SOLUTION

Product number PT228, PT804, LR-9890, SKW400, SKW400NPK, SKW500, PT270SPEC, PT296, PT791, PT802, PT753

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 Met. Corr. 1 - H290

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

Hazard pictograms



Signal word

Danger

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| | |
|---|---|
| Hazard statements | <p>H290 May be corrosive to metals.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H317 May cause an allergic skin reaction.</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> |
| Precautionary statements | <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P234 Keep only in original packaging.</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> |
| Contains | NICKEL (II) SULFATE HEXAHYDRATE |
| Supplementary precautionary statements | <p>P201 Obtain special instructions before use.</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>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</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>P390 Absorb spillage to prevent material damage.</p> <p>P391 Collect spillage.</p> <p>P405 Store locked up.</p> <p>P406 Store in a corrosion-resistant container with a resistant inner liner.</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

| | |
|------------------------------|--|
| HYDROCHLORIC ACID 37% | 3-5% |
| CAS number: 7647-01-0 | EC number: 231-595-7 |
| | REACH registration number: 01-2119484862-27-XXXX |
| Classification | |
| Met. Corr. 1 - H290 | |
| Skin Corr. 1B - H314 | |
| Eye Dam. 1 - H318 | |
| STOT SE 3 - H335 | |

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| | | | |
|---|------------------------|--|-----------------|
| NICKEL (II) SULFATE HEXAHYDRATE | | | <3.1% |
| 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. | | | |
| 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 | | | |

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

Composition comments When handled correctly, undamaged units represent no danger.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|----------------------------|--|
| General information | When handled correctly, undamaged units represent no danger. |
| Inhalation | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. |
| Ingestion | Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel. |
| 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. 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 | May cause respiratory irritation. |
| Ingestion | May cause irritation. |
| Skin contact | Prolonged contact may cause burns. |
| Eye contact | May cause severe eye irritation. |

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

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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.

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. When handled correctly, undamaged units represent no danger.

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 37%

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) SULFATE HEXAHYDRATE

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Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m³

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.

Ingredient comments Due to the hazardous nature of ingredients, exposure should be minimal.

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. |
|---------------------------|--|

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10.6. Hazardous decomposition products

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) 12,609.76

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 383.28

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

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General As supplied, this product is consigned under the Excepted Quantities provisions. When handled correctly, undamaged units represent no danger.

14.1. UN number

| | |
|------------------|------|
| UN No. (ADR/RID) | 1789 |
| UN No. (IMDG) | 1789 |
| UN No. (ICAO) | 1789 |
| UN No. (ADN) | 1789 |

14.2. UN proper shipping name

| | |
|--------------------------------|-------------------|
| Proper shipping name (ADR/RID) | HYDROCHLORIC ACID |
| Proper shipping name (IMDG) | HYDROCHLORIC ACID |
| Proper shipping name (ICAO) | HYDROCHLORIC ACID |
| Proper shipping name (ADN) | HYDROCHLORIC ACID |

14.3. Transport hazard class(es)

| | |
|-----------------------------|----|
| ADR/RID class | 8 |
| ADR/RID classification code | C1 |
| ADR/RID label | 8 |
| IMDG class | 8 |
| ICAO class/division | 8 |
| ADN class | 8 |

Transport labels



14.4. Packing group

| | |
|-----------------------|-----|
| ADR/RID packing group | III |
| IMDG packing group | III |
| ICAO packing group | III |
| ADN packing group | III |

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

| | |
|-----------------------------|----------|
| IMDG Code segregation group | 1. Acids |
| EmS | F-A, S-B |

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|---|-----|
| ADR transport category | 3 |
| Emergency Action Code | 2R |
| Hazard Identification Number (ADR/RID) | 80 |
| Tunnel restriction code | (E) |

14.7. Transport in bulk according to Annex II of MARPOL 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

| | |
|----------------------------------|--|
| Revision comments | NOTE: Lines within the margin indicate significant changes from the previous revision. |
| Issued by | L. Morgan |
| Revision date | 01/10/2020 |
| Revision | 13 |
| Supersedes date | 31/08/2018 |
| SDS status | Approved. |
| Hazard statements in full | <p>H290 May be corrosive to metals. 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.</p> |

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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.