

SAFETY DATA SHEET

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

1.1 Product identifier

- **UFI No:** **NP50-906R-7002-2V62**
- Product Name: Spa Stain and Scale Inhibitor
- Product Part Number: 066
- Contains phosphonic acid

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

- Use of the substance/mixture: Pool / spa treatment
- Use advised against: Processes involving extreme heat

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Plastica Ltd
- Address of Supplier: Perimeter House
Napier Road
St Leonards-on-Sea
East Sussex
United Kingdom
TN38 9NY
- Telephone: +44 (0) 1424 857857
- Email: info@plasticapools.net

1.4 Emergency telephone number

- Emergency Telephone: 0800 043 0891 (technical)
0800 043 0892 (emergency)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Met. Corr. 1, H290; Skin Irrit. 2, H315; Eye Dam. 1, H318
- Additional information: For full text of Hazard and EU Hazard statements: see section 16

2.2 Label elements



- Signal Word: Danger
- Hazard statements
 - H290 - May be corrosive to metals.
 - H315 - Causes skin irritation.
 - H318 - Causes serious eye damage.
- Precautionary statements
 - P260 - Do not breathe mists/vapours/spray
 - P280 - Wear eye/face protection
 - P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
 - P302+P352+P332+P313 - IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
 - P406 - Store in a corrosion-resistant container with a resistant inner liner.
 - P501 - Dispose of contents/container to an authorised waste collection point

SECTION 2: Hazards identification (....)

- Supplemental Hazard information (EU)
None

2.3 Other hazards

- Not a PBT according to REACH Annex XIII
 - Not a vPvB according to REACH Annex XIII
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SECTION 3: Composition/information on ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Nitritotrimethylenetris (phosphonic acid)	48 - 52 %	6419-19-8	229-146-5	Met. Corr. 1, H290 Skin Irrit. 2, H315 Eye Irrit. 2, H319	-	01-2119487988-08-XXXX	No
Phosphonic acid	< 5%	13598-36-2	237-066-7	Acute Tox. 4, H302 Skin Corr. 1A, H314	-	01-2119488030-46-XXXX	No

SECTION 4: First aid measures

Rescuers should put on approved personal protective equipment (PPE) before administering first aid

Rescuers should take suitable precautions to avoid becoming casualties themselves

4.1 Description of first aid measures

- Contact with skin
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water
If skin irritation occurs: Get medical advice/attention.
Contaminated clothing should be laundered before reuse
- Contact with eyes
If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
Irrigate eyes thoroughly whilst lifting eyelids
Remove contact lenses, if present and easy to do. Continue rinsing.
Get immediate medical advice/attention.
- Ingestion
Rinse mouth with water (do not swallow)
Never give anything by mouth to an unconscious person
If vomiting occurs turn patient on side
Get medical advice/attention.
- Inhalation
Remove person to fresh air and keep comfortable for breathing.
If breathing is difficult, oxygen should be given by a trained person
If exposed or concerned: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes
Causes redness and swelling
-

SECTION 4: First aid measures (....)

May cause severe damage with formation of corneal ulcers and permanent impairment of vision.

- Contact with skin
Causes redness and irritation
- Ingestion
May cause irritation of the throat
May cause nausea/vomiting
- Inhalation
May cause respiratory tract irritation.
May cause coughing

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically
-

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media: Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include nitrogen and carbon oxides
- Decomposition products may include phosphorus oxides
- Decomposition products may include phosphine

5.3 Advice for firefighters

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
 - Keep container(s) exposed to fire cool, by spraying with water
 - Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.
-

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Rescuers should take suitable precautions to avoid becoming casualties themselves
- No action shall be taken involving any personal risk or without suitable training
- Personal precautions for non-emergency personnel: Do not touch or walk through spilt material; Avoid contact with skin and eyes
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear protective clothing as per section 8; Wash thoroughly after dealing with spillage

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Evacuate the area and keep personnel upwind
 - Absorb spillage in earth or sand
 - Place in appropriate container
 - Remove contaminated material to safe location for subsequent disposal
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SECTION 6: Accidental release measures (....)

- Seal containers and label them
- To be disposed of as hazardous waste

6.4 Reference to other sections

- See section(s): 7, 8 & 13
-

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Ensure adequate ventilation
- Avoid formation of spray/mist/aerosols
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Do not get in eyes, on skin, or on clothing.
- Wear safety glasses
- Wear protective gloves
- Do not eat, drink or smoke when using this product.
- Eyewash bottles should be available
- Wash thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Contaminated clothing should be laundered before reuse

7.2 Conditions for safe storage, including any incompatibilities

- Keep in a cool, dry, well ventilated place
- Avoid extremes of temperature
- Protect from frost
- Keep container tightly closed.
- Storage containers should not be made from aluminium
- Storage containers should not be made from galvanised metals
- Keep in an area equipped with impermeable flooring.
- Keep away from food, drink and animal feedingstuffs
- Keep away from heat and sources of ignition
- Keep away from oxidising substances
- Keep away from metals

7.3 Specific end use(s)

- Pool / spa treatment
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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
 - Nitrotrimethylenetris(phosphonic acid)
 - DNEL (inhalational) 9.7 mg/m³ Industry, Long Term, Systemic Effects
 - DNEL (inhalational) 9.7 mg/m³ Industry, Acute/Short Term, Systemic Effects
 - DNEL (dermal) 2.75 mg/kg (bw/day) Industry, Long Term, Systemic Effects
 - DNEL (dermal) 2.75 mg/kg (bw/day) Industry, Acute/Short Term, Systemic Effects
-

SECTION 8: Exposure controls/personal protection (....)

DNEL (inhalational) 2.39 mg/m³ Consumer, Long Term, Systemic Effects
 DNEL (inhalational) 2.39 mg/m³ Consumer, Acute/Short Term, Systemic Effects
 DNEL (dermal) 1.38 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
 DNEL (dermal) 1.38 mg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects
 DNEL (oral) 1.38 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
 DNEL (oral) 1.38 mg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects
 PNEC aqua (freshwater) 460 µg/L
 PNEC aqua (marine water) 46 µg/L
 PNEC (STP) 20 mg/L
 PNEC sediment (freshwater) 150 - 690 mg/kg
 PNEC sediment (marine water) 15 - 69 mg/kg
 PNEC terrestrial (soil) 244 - 277 mg/kg
 PNEC secondary poisoning (food) 170 - 333 mg/kg

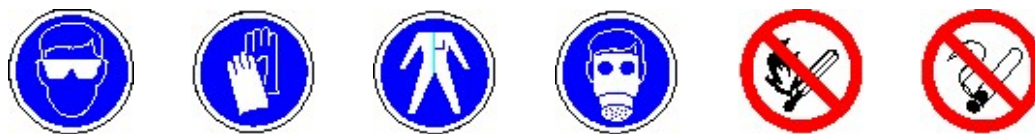
- Phosphonic acid

DNEL (inhalational) 2.94 mg/m³ Industry, Long Term, Systemic Effects
 DNEL (dermal) 830 µg/kg (bw/day) Industry, Long Term, Systemic Effects
 DNEL (inhalational) 720 µg/m³ Consumer, Long Term, Systemic Effects
 DNEL (dermal) 420 µg/kg (bw/day) Consumer, Long Term, Systemic Effects
 DNEL (oral) 420 µg/kg (bw/day) Consumer, Long Term, Systemic Effects
 PNEC aqua (freshwater) 153 µg/L
 PNEC aqua (intermittent releases, freshwater) 1.53 mg/L
 PNEC aqua (marine water) 15.3 µg/L

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls
Engineering controls should be provided to prevent the need for ventilation
- Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment
Where a reusable half mask respirator is required, use EN 140, with gas/vapour filter EN 14387 type ABEK, or EN 405; EN 1827
Where a full face mask respirator is required, use EN 136, with gas/vapour filter EN 14387 type ABEK
- Eye/face protection
Wear goggles giving complete eye protection approved to standard EN 166.
If necessary, wear face-shield approved to standard EN 166 1B39N
- Skin protection
Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
Wear suitable protective clothing
- Hygiene measures
Do not eat, drink or smoke when using this product.
Use good personal hygiene practices
Contaminated work clothing should not be allowed out of the workplace.
Ensure eyewash stations and safety showers are close to hand.
- Environmental exposure controls
Do not allow to enter public sewers and watercourses
Do not allow to penetrate the ground/soil.

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SECTION 8: Exposure controls/personal protection (....)


SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Clear liquid
- Odour: No information available
- Odour threshold: No information available
- pH: ~ 2
- Melting point/freezing point: -12 °C
- Initial boiling point and boiling range: > 105 °C
- Flashpoint: Not applicable
- Evaporation Rate: No information available
- Flammability (solid,gas): Not applicable
- Upper/lower flammability or explosive limits: No information available
- Vapour Pressure: 23 hPa
- Vapour Density: No information available
- Relative Density: 1.35
- Solubility(ies): Miscible in water
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: No information available
- Decomposition temperature: No information available
- Viscosity: Kinematic 11 cSt @ 20 °C
- Explosive Properties: No information available
- Oxidising properties: Not oxidising

9.2 Other information

- None

SECTION 10: Stability and reactivity

10.1 Reactivity

- No hazardous reactions known if used for its intended purpose

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Avoid extremes of temperature

10.5 Incompatible materials

- Incompatible with strong acids
- Incompatible with alkalis (strong bases)
- Incompatible with strong oxidizing substances

10.6 Hazardous decomposition products

- Decomposition products may include nitrogen and carbon oxides

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SECTION 10: Stability and reactivity (....)

- Decomposition products may include phosphorus oxides
- Decomposition products may include phosphine

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute Toxicity
Based on available data, the classification criteria are not met

Substances

Chemical Name	LD ₅₀ (oral, rat)	LC ₅₀ (inhalation, rat)	LD ₅₀ (dermal, rabbit)
Nitritotrimethylenetris(phosphonic acid)	2 910 mg/kg	No data available	6 310 mg/kg
Phosphonic acid	1 560 - 1 580 mg/kg	No data available	No data available

- Skin corrosion/irritation
Causes skin irritation.
Classification based on calculation and concentration thresholds
- Serious eye damage/irritation
Causes serious eye damage
Classification based on calculation and concentration thresholds
- Respiratory or skin sensitisation
Based on available data, the classification criteria are not met
- Germ cell mutagenicity
No evidence of mutagenic effects
- Carcinogenicity
No evidence of carcinogenic effects

Substances

Chemical Name	NOAEL (oral, rat)
Nitritotrimethylenetris(phosphonic acid)	500 mg/kg bw/day

- Reproductive toxicity
No evidence of reproductive effects

Substances

Chemical Name	NOAEL (oral, rat)
Phosphonic acid	250 mg/kg bw/day (Effect on fertility)

- Specific target organ toxicity (STOT) - single exposure
Based on available data, the classification criteria are not met
- Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Nitritotrimethylenetris(phosphonic acid)	500 mg/kg bw/day	No data available	No data available
Phosphonic acid	250 mg/kg bw/day	No data available	No data available

SECTION 11: Toxicological information (....)

- Aspiration hazard
Based on available data, the classification criteria are not met
 - Contact with eyes
Causes redness and swelling
May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
 - Contact with skin
Causes redness and irritation
 - Ingestion
May cause irritation of the throat
May cause nausea/vomiting
 - Inhalation
May cause respiratory irritation
May cause coughing
-

SECTION 12: Ecological information

12.1 Toxicity

- Based on available data, the classification criteria are not met

Substances

Chemical Name	LC ₅₀ (fish)	EC ₅₀ (aquatic invertebrates)	EC ₅₀ (aquatic algae)
Nitrotrimethylenetris(phosphonic acid)	(4 days) 160 - 1 000 mg/L	(48 h) 297 mg/L	No data available
Phosphonic acid	(4 days) 100 mg/L	(48 h) 1 g/L	(72 h) 13.5 - 153 mg/L

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulative potential

- Bioaccumulation is not expected

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Other adverse effects

- No information available
-

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- This material and/or its container must be disposed of as hazardous waste
- Disposal should be in accordance with local, state or national legislation
- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Do not reuse empty containers without commercial cleaning or reconditioning

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
 - Hazardous Property Code(s): HP 4 Irritant
-

SECTION 14: Transport information

14.1 UN number or ID number

- UN No.: 3265

14.2 UN proper shipping name

- Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Nitrilotrimethylenetris (phosphonic acid))

14.3 Transport hazard class(es)

- Hazard Class: 8

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Not applicable

14.6 Special precautions for user

- No information available

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable

14.8 Road/Rail (ADR/RID)

- ADR UN No.: 3265
- Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Nitrilotrimethylenetris (phosphonic acid))
- ADR Hazard Class: 8
- ADR Packing Group: III
- Tunnel Code: E

14.9 Sea (IMDG)

- IMDG UN No.: 3265
- Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Nitrilotrimethylenetris (phosphonic acid))
- IMDG Hazard Class: 8
- IMDG Pack Group.: III

14.10 Air (ICAO/IATA)

- ICAO UN No.: 3265
- Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Nitrilotrimethylenetris (phosphonic acid))
- ICAO Hazard Class: 8
- ICAO Packing Group: III

SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830

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SECTION 15: Regulatory information (....)

- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe

15.2 Chemical safety assessment

- A REACH chemical safety assessment has not been carried out
-

SECTION 16: Other information

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 PLASTICA'S limited knowledge and belief, accurate, and reliable as of the date of authorisation of this safety data sheet. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to be satisfied as to the suitability and completeness of such information for the product as used.

Sources of data: Information from published literature and supplier safety data sheets

Revision No. 2.0.0. Revised December 2020.

Changes made: Updated to conform to latest version of REACH

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

- Met. Corr. 1, H290: Classification based on bridging principles of substantially similar mixtures
- Skin Irrit. 2, H315: Classification based on calculation and concentration thresholds
- Eye Dam. 1, H318: Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- H290: May be corrosive to metals
- H302: Harmful if swallowed
- H314: Causes severe skin burns and eye damage
- H315: Causes skin irritation.
- H318: Causes serious eye damage
- H319: Causes serious eye irritation.

Acronyms

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC₅₀: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LC₅₀: Lethal Concentration, 50%
- LD₅₀: Lethal Dose, 50%
- NOAEC: No observed adverse effect concentration
- NOAEL: No observed adverse effect level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- SCL: Specific Concentration Limit
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---
