

Revision: 13/12/2017

---

**SAFETY DATA SHEET**

---

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

## 1.1 Product identifier

- Product Name: Spa and Hot Tub Flush
- Product Part Number: 015
- Contains amides, tall-oil fatty, N,N-di-Me

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

- Use of the substance/mixture: Pipe-work cleaner for hot tubs and spas
- Use advised against: No information available

## 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]: Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319
- Additional information: For full text of Hazard and EU Hazard statements: see section 16

## 2.2 Label elements



GHS07

- Signal Word: Warning
- Symbols: GHS07
- Hazard statements
  - H315 - Causes skin irritation.
  - H317 - May cause an allergic skin reaction.
  - H319 - Causes serious eye irritation.
- Precautionary statements
  - P280 - Wear protective gloves/protective clothing/eye protection/face protection.
  - P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

Revision: 13/12/2017

---

**SECTION 2: Hazards identification (....)**

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P501 - Dispose of contents/container to an authorised waste collection point

- 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
- 

**SECTION 3: Composition/information on ingredients****3.1 Substances****3.2 Mixtures**

- sulphuric acid ... %  
Concentration: 1-10%  
CAS Number: 7664-93-9  
EC Number: 231-639-5  
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Skin Corr. 1A, H314  
Substance with a workplace exposure limit, see Section 8
  - 2-(8-methylnonyloxy)ethanol  
Concentration: 1-10%  
CAS Number: 61827-42-7  
EC Number: 612-519-5  
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Acute Tox. 4, H302; Eye Dam. 1, H318
  - amides, tall-oil fatty, N,N-di-Me  
Concentration: 1-10%  
CAS Number: 68308-74-7  
EC Number: 269-665-4  
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Skin Sens. 1B, H317;  
Aquatic Acute 1, H400; Aquatic Chronic 3, H412
  - alcohols, C9-11, branched and linear, ethoxylated  
Concentration: <1%  
CAS Number: 68439-46-3  
EC Number: 500-446-0  
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Acute Tox. 4, H302; Eye Dam. 1, H318
- 

**SECTION 4: First aid measures****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
-

Revision: 13/12/2017

---

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

If skin irritation or rash 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.  
If eye irritation persists: Get medical advice/attention.
- Ingestion  
Rinse mouth with water (do not swallow)  
Never give anything by mouth to an unconscious person  
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  
Get medical advice/attention.

**4.2 Most important symptoms and effects, both acute and delayed**

- Contact with eyes  
Causes redness and irritation  
Lachrymatory effects (makes eyes water)
- Contact with skin  
Causes redness and irritation  
May cause an allergic skin reaction.  
May cause skin sensitisation. Stop using product if skin sensitisation occurs.
- Ingestion  
Can cause soreness and redness of the mouth and throat.  
May cause nausea/vomiting
- Inhalation  
May cause respiratory tract irritation.  
May cause coughing  
May cause wheeziness

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

- Treat symptomatically
- 

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

- In case of fire use extinguishing media appropriate to surrounding conditions.
- Use water to cool containers exposed to fire.

**5.2 Special hazards arising from the substance or mixture**

- Gives off irritating or toxic fumes (or gases) in a fire.

**5.3 Advice for firefighters**

- Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

Revision: 13/12/2017

---

**SECTION 5: Firefighting measures (....)**

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
- 

**SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions for non-emergency personnel: Evacuate the area and keep personnel upwind; Wear protective clothing as per section 8; Avoid contact with skin and eyes; Do not breathe dust/fume/gas/mist/vapours/spray; Eyewash bottles should be available; Wash thoroughly after handling.
- Personal precautions for emergency responders: Wear chemical protection suit; Wear self-contained breathing apparatus (SCBA).

## 6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses

## 6.3 Methods and material for containment and cleaning up

- Evacuate the area and keep personnel upwind
- Stop leak if safe to do so.
- Absorb spillage in earth or sand
- Place in appropriate container
- Remove contaminated material to safe location for subsequent disposal
- 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 breathing dust/fume/gas/mist/vapours/spray.
- Do not get in eyes, on skin, or on clothing.
- 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
- Keep container tightly closed.
- Opened containers should be carefully resealed and stored in an upright position
- Keep away from food, drink and animal feedingstuffs
- Keep away from heat and sources of ignition

## 7.3 Specific end use(s)

- Pipe-work cleaner for hot tubs and spas
- 

**SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

Revision: 13/12/2017

---

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

- sulphuric acid ... %
  - (EU) OELV (long term TWA) (thoracic fraction) 0.05 mg/m<sup>3</sup>
  - DNEL (inhalational) 50 ug/m<sup>3</sup> Industry, Long Term, Local Effects
  - DNEL (inhalational) 100 ug/m<sup>3</sup> Industry, Acute/Short Term, Local Effects
  - PNEC aqua (freshwater) 2.5 ug/l
  - PNEC aqua (marine water) 250 ng/l
  - PNEC (STP) 8.8 mg/l
  - PNEC sediment (freshwater) 2 ug/kg
  - PNEC sediment (marine water) 2 ug/kg
- 2-(8-methylnonoxy)ethanol
  - No exposure limits have been set for this substance
- amides, tall-oil fatty, N,N-di-Me
  - DNEL (inhalational) 600 ug/m<sup>3</sup> Industry, Long Term, Systemic Effects
  - DNEL (dermal) 200 ug/kg (bw/day) Industry, Long Term, Systemic Effects
  - DNEL (dermal) 61 ug/cm<sup>2</sup> Industry, Long Term, Local Effects
  - DNEL (dermal) 61 ug/cm<sup>2</sup> Industry, Acute/Short Term, Local Effects
  - DNEL (inhalational) 150 ug/m<sup>3</sup> Consumer, Long Term, Systemic Effects
  - DNEL (dermal) 100 ug/kg (bw/day) Consumer, Long Term, Systemic Effects
  - DNEL (dermal) 30 ug/cm<sup>2</sup> Consumer, Acute/Short Term, Local Effects
  - DNEL (oral) 100 ug/kg (bw/day) Consumer, Long Term, Systemic Effects
  - PNEC aqua (freshwater) 6.4 ug/l
  - PNEC aqua (marine water) 640 ng/l
  - PNEC (STP) 100 mg/l
  - PNEC sediment (freshwater) 273.3 mg/kg
  - PNEC sediment (marine water) 27.33 mg/kg
  - PNEC terrestrial (soil) 54.64 mg/kg
- alcohols, C9-11, branched and linear, ethoxylated
  - DNEL (inhalational) 294 mg/m<sup>3</sup> Industry, Long Term, Systemic Effects
  - DNEL (dermal) 2 080 mg/kg (bw/day) Industry, Long Term, Systemic Effects
  - DNEL (inhalational) 87 mg/m<sup>3</sup> Consumer, Long Term, Systemic Effects
  - DNEL (dermal) 1 250 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
  - DNEL (oral) 25 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
  - PNEC aqua (freshwater) 103.79 ug/l
  - PNEC aqua (intermittent releases) (freshwater) 14 ug/l
  - PNEC aqua (marine water) 103.79 ug/l
  - PNEC (STP) 1.4 mg/l
  - PNEC sediment (freshwater) 13.7 mg/kg
  - PNEC sediment (marine water) 13.7 mg/kg
  - PNEC terrestrial (soil) 1 mg/kg

**8.2 Exposure controls**

- Do not eat, drink or smoke when using this product.
- Engineering controls should be provided to prevent the need for ventilation
- In case of insufficient ventilation, wear suitable respiratory equipment
- Wear suitable protective clothing
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.

Revision: 13/12/2017

---

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

- 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 safety glasses approved to standard EN 166.
- When handling this substance, e.g. sampling, wear goggles giving complete eye protection
- Ensure eyewash stations and safety showers are close to hand.



Goggles



Gloves



Suit



Respirator



No Flames



No Smoking

---

**SECTION 9: Physical and chemical properties**
**9.1 Information on basic physical and chemical properties**

- Appearance: Liquid; pale brown
- Odour: No information available
- Odour threshold: No information available
- pH: No information available
- Melting point/freezing point: No information available
- Initial boiling point and boiling range: No information available
- Flashpoint: No information available
- Evaporation Rate: No information available
- Flammability (solid,gas): No information available
- Upper/lower flammability or explosive limits: No information available
- Vapour Pressure: No information available
- Vapour Density: No information available
- Relative Density: 1.021
- Solubility(ies): Soluble in water
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: No information available
- Decomposition temperature: No information available
- Viscosity: No information available
- Explosive Properties: No information available
- Oxidising Properties: Not oxidising

**9.2 Other information**

- None

---

**SECTION 10: Stability and reactivity**
**10.1 Reactivity**

- Stable under normal conditions

**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**

Revision: 13/12/2017

---

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

- Avoid extremes of temperature
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## 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 toxic and irritant fumes
  - Decomposition products may include nitrogen and carbon oxides
- 

**SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

- Acute Toxicity  
Based on available data, the classification criteria are not met  
ATE mix (oral) (calculated ) >2000 mg/kg  
LD50 (oral, rat) (sulphuric acid) 2 140 mg/kg bw  
LC50 (inhalation, mouse) (sulphuric acid) 850 mg/m<sup>3</sup>/4h  
LD50 (oral, rat) (amides, tall-oil fatty, N,N-di-Me) 5 000 - 20 000 mg/kg bw  
LD50 (dermal, rabbit) (amides, tall-oil fatty, N,N-di-Me) 8 ml/kg bw  
LD50 (oral, rat) (alcohols, C9-11, branched and linear, ethoxylated) 3 488 - 5 130 mg/kg bw  
LC50 (inhalation, rat) (alcohols, C9-11, branched and linear, ethoxylated) 100 mg/m<sup>3</sup>/6h  
LD50 (dermal, rabbit) (alcohols, C9-11, branched and linear, ethoxylated) 2 000 - 2 216 mg/kg bw
- Skin corrosion/irritation  
Classification based on calculation and concentration thresholds  
Causes skin irritation.
- Serious eye damage/irritation  
Classification based on calculation and concentration thresholds  
Causes serious eye irritation.
- Respiratory or skin sensitisation  
Classification based on calculation and concentration thresholds  
May cause an allergic skin reaction.
- Germ cell mutagenicity  
No evidence of mutagenic effects
- Carcinogenicity  
No evidence of carcinogenic effects
- Reproductive toxicity  
No evidence of reproductive effects
- 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

Revision: 13/12/2017

---

**SECTION 11: Toxicological information (....)**

- Aspiration hazard  
Based on available data, the classification criteria are not met
- Contact with eyes  
Causes redness and irritation  
Lachrymatory effects (makes eyes water)
- Contact with skin  
Causes redness and irritation  
May cause an allergic skin reaction.  
May cause skin sensitisation. Stop using product if skin sensitisation occurs.
- Ingestion  
Can cause soreness and redness of the mouth and throat.  
May cause nausea/vomiting
- Inhalation  
May cause respiratory irritation  
May cause coughing  
May cause wheeziness

---

**SECTION 12: Ecological information**

## 12.1 Toxicity

- Based on available data, the classification criteria are not met
- sulphuric acid ... %  
EC50 (aquatic invertebrates) 100 mg/l (48 hr)  
EC50 (aquatic algae) 100 mg/l (72 hr)
- 2-(8-methylnonoxy)ethanol  
No information available
- amides, tall-oil fatty, N,N-di-Me  
LL50 (fish) 1 mg/l (4 days)  
EL50 (aquatic invertebrates) 750 ug/l (48 hr)  
EL50 (aquatic algae) 3 - 32 mg/l (72 hr)
- alcohols, C9-11, branched and linear, ethoxylated  
LC50 (fish): 5 - 7 mg/l (96 hr)  
EC50 (aquatic invertebrates) 2.5 mg/l (48 hr)  
EC50 (aquatic algae) 1.4 mg/l (96 hr)

## 12.2 Persistence and degradability

- No information available

## 12.3 Bioaccumulative potential

- No information available

## 12.4 Mobility in soil

- Absorbs on soil
- Do not allow to penetrate the ground/soil.

## 12.5 Results of PBT and vPvB assessment

- No information available

## 12.6 Other adverse effects

- Do not empty into drains



**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

- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.
  - The waste must be identified according to the List of Wastes (2000/532/EC)
- 

**SECTION 14: Transport information**

Not classified as hazardous for transport

## 14.1 UN number

- UN No.: Not applicable

## 14.2 UN proper shipping name

- Proper Shipping Name: Not applicable

## 14.3 Transport hazard class(es)

- Hazard Class: Not applicable

## 14.4 Packing group

- Packing Group: Not applicable

## 14.5 Environmental hazards

- Not Classified

## 14.6 Special precautions for user

- No special precautions are required for this product

## 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.: Not applicable
- Proper Shipping Name: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

## 14.9 Sea (IMDG)

- IMDG UN No.: Not applicable
- Proper Shipping Name: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Pack Group.: Not applicable

## 14.10 Air (ICAO/IATA)

Revision: 13/12/2017

---

**SECTION 14: Transport information (....)**

- ICAO UN No.: Not applicable
  - Proper Shipping Name: Not applicable
  - ICAO Hazard Class: Not applicable
  - ICAO Packing Group: Not applicable
- 

**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
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- The Hazardous Waste (England and Wales) Regulations 2005 apply in the UK

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.

Revision No. 3.0.0. Revised December 2017.

Changes made: Updated to conform to latest version of REACH and revised formulation

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

- Skin Irrit. 2, H315: Classification based on calculation and concentration thresholds
- Skin Sens. 1, H317: Classification based on calculation and concentration thresholds
- Eye Irrit. 2, H319: Classification based on calculation and concentration thresholds

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

- 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
- H319: Causes serious eye irritation.
- H400: Very toxic to aquatic life
- H412: Harmful to aquatic life with long lasting effects

--- end of safety datasheet ---

---