

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

Product Name :	Spa & Hot Tub Flush
Datasheet Number :	SDS015
Unique Formula Identifier:	2910-G00G-K00U-AFFS

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

Application of the substance / the mixture	Pipe-work and internal system cleaner for hot tubs.
Identified Use(s)	Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).
Uses advised against	Processes involving extreme heat use advised against. The product is intended exclusively for industrial and professional use.

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 TN38 9NY, United Kingdom
Telephone	+44 (0) 1424 857857
E-mail (competent person)	info@plasticapools.net

1.4 Emergency Telephone Number

Emergency Phone No	0800 043 0891 (Technical) 24 Hours a day 0800 043 0892 (Emergency)
Languages Spoken	English

Members of the public seeking specific information on poisons should contact: In England and Wales: NHS 111 - dial 111

SECTION 2 : Hazards Identification
2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008


GHS07

2.2 Label elements

Hazard Pictograms	According to Regulation (EC) No. 1272/2008 (CLP) GHS07
Signal Word(s)	Warning
Hazard Statement(s)	H317 May cause an allergic skin reaction
Precautionary statements	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves. P302+P352 IF ON SKIN: Wash with plenty of water. P362+P364 Take off contaminated clothing and wash it before reuse. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3 : Composition/Information on Ingredients**3.2 Chemical characterisation:**

Mixtures

Description:

Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 7664-93-9 EINECS: 231-639-5 Index number: 016-020-00-8 Reg.nr.: 01-2119458838-20-XXXX	Sulphuric acid Skin Corr. 1A, H314 Note: B Specific concentration limits: Skin Corr. 1A; H314: C ≥ 15% Skin Irrit. 2; H315: 5 % ≤ C < 15 % Eye Irrit. 2; H319: 5 % ≤ C < 15 %	2.5 – < 5%
CAS: 68308-74-7 EINECS: 269-665-4 Reg.nr.: 01-2119983524-29-XXXX	Amides, tall-oil fatty, N,N-di-Me Aquatic Acute 1, H400; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	1 – < 2.5%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60-XXXX	Dipropylene glycol monomethyl ether substance with a Community workplace exposure limit	1 – 2.5%
CAS: 160901-09-7 NLP: 500-446-0 Reg.nr.: 01-2119979533-26-XXXX	Alcohols, C9-11, branched and linear, ethoxylated Eye Irrit. 2, H319; Aquatic Chronic 3, H412	0.1 – 1%

Additional information:

For the wording of the listed hazard phrases refer to section 16.

SECTION 4 : First Aid Measures**4.1 Description of first aid measures**

General information:

Immediately remove any clothing soiled by the product.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water.

If symptoms persist, consult a doctor

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Information for doctor:

Treat symptomatically and supportively.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5 : Firefighting Measures

- 5.1 **Extinguishing Media :**
 Suitable Extinguishing Agents: CO₂, powder or water spray. Fight larger fires with water spray. Use fire extinguishing methods suitable to surrounding conditions.
 Unsuitable Extinguishing Media: Water with full jet
- 5.2 **Special hazards arising from the substance or mixture :**
 In case of fire, the following can be released:
 Carbon monoxide (CO)
 Nitrogen oxides (NO_x)
 Phosphorous oxides
 Sulphur Oxides (SO_x)
- 5.3 **Advice for Firefighters :**
 Wear fully protective suit.
 Wear self-contained respiratory protective device.
 Do not inhale explosion gases or combustion gases.
- Additional information:**
 Cool endangered receptacles with water spray.
 Collect contaminated fire fighting water separately.
 It must not enter the sewage system.

SECTION 6 : Accidental Release Measures

- 6.1 **Personal precautions, protective equipment and emergency procedures :**
 Ensure adequate ventilation.
 Particular danger of slipping on leaked/spilled product.
 Wear protective equipment.
 Keep unprotected persons away
- 6.2 **Environmental Precautions:**
 Do not allow to penetrate the ground/soil.
 Do not allow to enter sewers/ surface or ground water.
- 6.3 **Methods and material for containment and cleaning up:**
 Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
- 6.4 **Reference to other sections**
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.

SECTION 7 : Handling and Storage

- 7.1 **Precautions for Safe Handling**
 Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from oxidising agents.
Store away from metals.
Store away from foodstuffs.

Further information about storage conditions:

Protect from frost.
Store in cool, dry conditions in well sealed receptacles.

Storage class:

12

7.3 Specific end use(s)

No further relevant information available.

SECTION 8 : Exposure Controls/Personal Protection

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace:		
CAS: 7664-93-9 Sulphuric acid		
WEL	Long-term value: 0.05* mg/m ³ *mist: defined as thoracic fraction	
CAS: 34590-94-8 Dipropylene glycol monomethyl ether		
WEL	Long-term value: 308 mg/m ³ , 50 ppm Sk	
DNELs		
CAS: 7664-93-9 Sulphuric acid		
Inhalative	Long-term local effects Short-term local effects	50 µg/m ³ (worker) 100 µg/m ³ (worker)
CAS: 68308-74-7 Amides, tall-oil fatty, N,N-di-Me		
Oral Dermal	Long-term systemic effects Long-term systemic effects Long-term local effects Short-term local effects	100 µg/kg bw/day (general population) 100 µg/kg bw/day (general population) 200 µg/kg bw/day (worker) 30 µg/kg bw/day (general population) 61 µg/kg bw/day (worker) 30 µg/kg bw/day (general population)
Inhalative	Long-term systemic effects	61 µg/kg bw/day (worker) 150 µg/m ³ (general population) 600 µg/m ³ (worker)
CAS: 34590-94-8 Dipropylene glycol monomethyl ether		
Oral Dermal Inhalative	Long-term systemic effects Long-term systemic effects Long-term systemic effects	36 mg/kg bw/day (general population) 121 mg/kg bw/day (general population) 283 mg/kg bw/day (worker) 37.2 mg/m ³ (general population) 308 mg/m ³ (worker)

8.1 cont..

CAS: 160901-09-7 Alcohols, C9-11, branched and linear, ethoxylated		
Oral	Long-term systemic effects	3 mg/kg bw/day (general population)
Dermal	Long-term systemic effects	150 mg/kg bw/day (general population)
		420 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	7.84 mg/m ³ (general population)
		44.4 mg/m ³ (worker)

PNECs		
CAS: 68308-74-7 Amides, tall-oil fatty, N,N-di-Me		
Freshwater		6.4 µg/L
Marine water		640 ng/L
Sewage Treatment Plant		100 mg/L
Sediment (freshwater)		273.3 mg/kg
Sediment (marine water)		27.33 mg/kg
Soil		54.64 mg/kg
Secondary poisoning		66.667 mg/kg food

CAS: 34590-94-8 Dipropylene glycol monomethyl ether		
Freshwater		19 mg/L
Freshwater - Intermittent releases		190 mg/L
Marine water		1.9 mg/L
Sewage Treatment Plant		4,168 mg/L
Sediment (freshwater)		70.2 mg/kg
Sediment (marine water)		7.02 mg/kg
Soil		2.74 mg/kg

CAS: 160901-09-7 Alcohols, C9-11, branched and linear, ethoxylated		
Freshwater		10.7 µg/L
Freshwater - Intermittent releases		19.5 µg/L
Marine water		1.07 µg/L
Marine Water - Intermittent releases		1.95 µg/L
Sewage Treatment Plant		10 mg/L
Sediment (freshwater)		73.9 µg/kg
Sediment (marine water)		7.39 µg/kg
Soil		8.6 µg/kg

Additional information:

The lists valid during the making were used as basis

8.2

Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.
 Do not eat or drink while working.
 Take note of assigned Workplace Exposure Limits.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
 Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

8.2 cont..

Protection of hands:

Protective gloves

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves :

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye Protection

Safety glasses with side-shields conforming to EN166.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection:

Impervious protective clothing.

Body protection must be chosen depending on product properties, activity and possible exposure.

Environmental exposure controls

Do not allow to enter drains, sewers or watercourses.

Risk management measures

The operators shall be instructed adequately.

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

General Information

Appearance:

Form:	Fluid
Colour:	Light Brown
Odour:	Mild
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
Flammability:	Not applicable.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH-value at 20 °C 4-:	6
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solubility water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Vapour pressure:	Not determined.
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other Information:

NOTE: The physical data presented above are typical values and should not be construed as a specification.

Appearance:

Form:

Fluid

Important information on protection of health and environment, and on safety

Ignition temperature:

Product is not self-igniting

Explosive properties:

Product does not present an explosion hazard

Solvent content:

VOC (EC):

1.65%

Change in condition

Evaporation rate:

Not determined

Information with regard to physical hazard classes

Explosives:

Void

Flammable gases:

Void

Aerosols:

Void

Oxidising gases:

Void

Gases under pressure:

Void

Flammable liquids:

Void

Flammable solids:

Void

Self-reactive substances and mixtures:

Void

Pyrophoric liquids:

Void

Pyrophoric solids:

Void

Self-heating substances and mixtures:

Void

Substances and mixtures, which emit flammable gases in contact with water:

Void

Oxidising liquids:

Void

Oxidising solids:

Void

Organic peroxides:

Void

Corrosive to metals:

Void

Desensitised explosives:

Void

SECTION 10 : Stability and Reactivity
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10.1 Reactivity

No further relevant information available.

10.2 Chemical stability Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions:

No dangerous reactions known.

10.4 Conditions to avoid:

Heat and static discharge.

10.5 Incompatible materials:

Finely powdered metals.
Strong oxidising agents.

10.6 Hazardous decomposition products:

Phosphorus compounds
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Sulphur oxides (SO_x)

SECTION 11 : Toxicological Information**11.1 Information on toxicological effects**

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

LD/LC50 values relevant for classification:		
CAS: 7664-93-9 Sulphuric acid		
Oral	LD50	2,140 mg/kg (rat)
CAS: 68308-74-7 Amides, tall-oil fatty, N,N-di-Me		
Oral	LD50	> 5,000 mg/kg (rat)
CAS: 34590-94-8 Dipropylene glycol monomethyl ether		
Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rab)

Primary irritant effect:

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

Subacute to chronic toxicity: Prolonged or repeated skin contact may irritate and cause dermatitis.

Additional toxicological information: Repeated or prolonged skin contact may induce sensitisation.

11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients are listed.

SECTION 12 : Ecological Information**12.1 Toxicity**

Aquatic toxicity:	
CAS: 7664-93-9 Sulphuric acid	
EC50 (96 h)	16 mg/l (Fish)
EC50 (72 h)	> 100 mg/l (Daphnia)
CAS: 68308-74-7 Amides, tall-oil fatty, N,N-di-Me	
EC50 (72 h)	32 mg/l (algae)
EC50 (3 h)	1,000 mg/L (microorganisms)
CAS: 34590-94-8 Dipropylene glycol monomethyl ether	
EC50 (96 h)	> 1,000 mg/l (Bacteria)

12.2 Persistence and degradability

The organic portion of the product is biodegradable.

12.3	Bioaccumulative potential	Product is not expected to bioaccumulate.
12.4	Mobility in soil	No further relevant information available.
12.5	Results of PBT and vPvB assessment	
	PBT:	Not applicable.
	vPvB:	Not applicable.
12.6	Endocrine disrupting properties	The product does not contain substances with endocrine disrupting properties.
12.7	Other adverse effects	
	Additional ecological information:	
	General notes:	
		Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
		Do not allow product to reach ground water, water course or sewage system.
		Danger to drinking water if even small quantities leak into the ground.

SECTION 13 : Disposal Considerations

13.1	Waste treatment methods	
	Recommendation	
	Recommended Hierarchy of Controls:	
	Minimize waste;	
	Reuse if not contaminated;	
	Recycle, if possible; or	
	Safe disposal (if all else fails).	
	Must not be disposed together with household rubbish.	
	Do not allow product to reach sewage system.	
	Contact waste processors for recycling information.	
	Used, degraded or contaminated products may be classified as hazardous waste.	
	Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.	
	Uncleaned packaging:	
	Recommendation:	
	Empty contaminated packagings thoroughly.	
	They may be recycled after thorough and proper cleaning.	
	Disposal must be made according to official regulations.	
	Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating.	
	Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.	
	Recommended cleansing agents:	Water, if necessary together with cleansing agents

SECTION 14 : Transport Information

14.1	UN-Number	
	ADR/RID/ADN, ADN, IMDG, IATA	Not applicable
14.2	UN proper shipping name	
	ADR/RID/ADN, ADN, IMDG, IATA	Not applicable
14.3	Transport hazard class(es)	
	ADR/RID/ADN, ADN, IMDG, IATA	
	Class	Not applicable
14.4	Packing group	
	ADR/RID/ADN, IMDG, IATA	Not applicable

- 14.5 **Environmental hazards:**
Marine pollutant: No
- 14.6 **Special precautions for user** Not applicable
- 14.7 **Maritime transport in bulk according to IMO instruments** Not applicable
- Transport/Additional information:** Not dangerous according to the above specifications
- UN "Model Regulation":** Not applicable

SECTION 15 : Regulatory Information

- 15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**
Poisons Act

Regulated explosives precursors		
CAS: 7664-93-9	Sulphuric acid	15%
CAS: 7664-38-2	Phosphoric acid	30%

Regulated poisons: None of the ingredients are listed.

Reportable explosives precursors: None of the ingredients are listed.

Reportable poisons: None of the ingredients are listed.

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

- 15.2 **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16 : Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

Relevant phrases

H314 Causes severe skin burns and eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Training hints

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative ATE: Acute toxicity estimate values

Skin Corr. 1A: Skin corrosion/irritation – Category 1A Eye Irrit. 2: Serious eye damage/eye irritation –

Category 2 Skin Sens. 1B: Skin sensitisation – Category 1B

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 Aquatic Chronic

3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3