

1. Identification of the substance/preparation and of the company/undertaking

- **Trade Name:** Hot Tub Flush
- **Intended use of chemical** Cleaning Agent/Cleaner
- **Manufacturer/Supplier** Complete Pool Controls Ltd
Unit 2, The Park
Stoke Orchard
Bishops Cleeve
Gloucestershire
GL52 7RS

Tel: +44 (0) 8712 229081 Fax: +44 (0) 8712 229083
- **Contact E-mail for advice** E-mail: sales@cpc-chemicals.co.uk
- **Emergency Telephone** Tel: +44 (0) 8712 229081 (office hours)

2. Hazard Identification



C: Corrosive

• Hazard Information concerning particular hazards for human and the environment

The product has to be labelled due to the calculation procedure of the 'General Classification guideline for preparations in the EU' in the latest valid version.

R34 Causes burns

• GHS label elements



Danger

H314: Causes severe skin burns and eye damage

• Prevention

P405+P102 Store locked up/Keep out of reach of children

P262: Do not get in eyes, on skin, or on clothing.

• Response

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P314: Get medical advice/attention if you feel unwell

• Storage

P405+P102 Store locked up/Keep out of reach of children

• Disposal

P501: Dispose of contents/container in accordance with local/regional/national/international regulations

3. Composition/information on ingredients

• Chemical characterization:

CAS No	Description	EINECS Number:	%
7664-93-9	Sulphuric Acid	231-639-5	2.5 - 10% R35
7664-38-2	Phosphoric Acid	231-633-2	2.5 - 10% R34

• **Additional Information:** For the wording of the listed phrases refer to section 16

4. First Aid measures

- **General Information:** Immediately remove any clothing soiled by the product

- **After inhalation:**

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

Wash with plenty water for a minimum of 15 minutes. If skin irritation persists, seek medical attention.

- **After eye contact:**

Check for and remove any contact lenses. Flush eyes with cold flowing water for at least 15 minutes. Seek medical attention immediately.

- **After Ingestion:**

Wash mouth out with water. Drink large quantities of water. Seek medical attention.

5. Fire fighting measures

- **Special extinguishing media:**

Use fire extinguishing methods suitable to surrounding conditions.

- **Special exposure hazards in fire:**

Sulphur Dioxide (SO₂)

- **Special protective equipment:**

Wear self-contained breathing apparatus and full protective clothing. Do not inhale explosion or combustion gases.

6. Accidental release Measures

- **Personal Protection**

Ensure adequate ventilation. Wear appropriate personal protective clothing as detailed in section 8. Keep unprotected persons away.

- **Environmental Protection**

Do not allow to penetrate the ground/soil. Do not allow to enter the drains/surface or groundwater.

- **Methods for cleaning:**

Absorb with liquid-binding material (sand, diatome, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles.

7. Handling and storage

- **Personal Protection**

Prevent formation of aerosols.

Do not mix with other chemicals in their concentrated form.

- **Information about Fire & explosion protection**

No special measures required.

- **Storage**

- **Requirements to be met:** Prevent any seepage into the ground

- **Information about Storage in common storage facility:** Prevent any seepage into the ground.

- **Information about Storage in common storage facility:** Store in cool, dry conditions in well sealed receptacles.

8. Exposure control/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7

- **Ingredients with limit values that require monitoring at the workplace:**

7664-38 -2	Phosphoric Acid	
WEL	Short Term Value	2 mg/m ³
	Long Term Value	1 mg/m ³

- **Additional Information:** The lists valid during making were used as basis.

- **Personal Protective Equipment**

Select PPE appropriate for the operations taking place taking into account the product properties.

- **General protective and hygienic measures:**

Avoid close or long term contact with the skin. Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing. Wash hands before break and at the end of work.

Avoid contact with the eyes and skin.

- **Respiratory Protection:** Not required

- **Hand Protection**

Wear suitable chemical resistant gloves

The glove material has to be impermeable and resistant to the product.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**

The selection of the 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 cannot 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** Tightly sealed goggles

- **Skin Protection** Impervious protective clothing



9. Physical and chemical properties

- **Appearance at 20°C** Light Brown Liquid
- **Odour** Mild
- **Self-igniting** Product is not self igniting
- **Danger of explosion** Product does not present an explosion hazard
- **Vapour pressure at 20°C** 23 hPa
- **pH (conc)** 1
- **Density at 20°C** 1.02g/cm³
- **Boiling Point** 110°C
- **Melting Point** 5°C
- **Flash Point** Not applicable
- **Solubility in water** Fully miscible

10. Stability and reactivity

- **Thermal decomposition/conditions to be avoided:**

No decomposition if used and stored according to specifications

- **Materials to be avoided**

Strong bases, strong oxidising agents. Do not mix with other chemicals in their concentrated form.

- **Dangerous reactions**

No dangerous reactions known

- **Dangerous decomposition products**

Phosphorus Oxides (e.g. P2O5)

Sulphur Dioxide (SO2)

11. Toxicological Information

- **Acute toxicity**

- **Primary irritant effect:**

- **On the skin:** Caustic effect on skin and mucous membranes

- **On the eye:** Strong caustic effect

- **Sensitization:** no sensitizing effects known

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the general EU Classification for Guidelines for Preparations as issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on the throat and mouth and to the danger of perforation of esophagus and stomach.

12. Ecological Information

- **Behaviour in environmental systems:**

- **Mobility and bioaccumulation potential:** Product is not expected to bioaccumulate

- **General Notes**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized..

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH values. A low pH value harms aquatic organisms. In the dilution of the use level the pH value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water dangerous.

13. Disposal Considerations

- **Product**

- **Recommendation**

Contact waste processors for recycling information. Must not be disposed of with household waste. Do not allow product to reach sewage system. Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

- **European waste catalogue**

Waste key numbers in accordance with the European waste catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

- **Uncleaned packaging**

- **Recommendation**

Container remains hazardous when empty. Continue to observe all precautions. Do not mix with other waste streams.

- **Recommended cleansing agents**

Water, if necessary together with cleansing agents.

14. Transport Information



- **Land Transport ADR/RID (cross border)**

- **ADR/RID class** 8 Corrosive Substances
- **Danger code (Kemler)**
- **U N No** 3264
- **Packing group** II
- **Proper shipping name** 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (contains sulphuric acid)
- **Tunnel Code** E

- **Maritime Transport IMDG**

- **IMDG class** 8
- **U N No** 3264
- **Packing group** II
- **Marine Pollutant** No
- **Proper shipping name** 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (contains sulphuric acid)

- **Air Transport ICAO-TI and IATA-DGR**

- **ICAO/IATA class** 8
- **U N No** 3264
- **Packing group** II
- **Proper shipping name** 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (contains sulphuric acid)

15. Regulatory information

Classification of the substance or mixture [DSD 67/548/EEC classification]

- **Product Name** Hot Tub Flush
- **Symbol** C
- **Indications of danger** Corrosive
- **Risk phrases** R34 Causes burns
- **Safety phrases** S1/2 Keep locked up and out of reach of children
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Classification of the substance or mixture [CLP classification]

- **Product Identifier** Hot Tub Flush
contains Sulphuric Acid and Phosphoric Acid
- **Hazard class** Skin Corr. 1B
- **Signal word** Danger
- **Hazard Statement Code(s)** H314 Causes severe skin burns and eye damage
- **Precautionary Statement Code(s)** P405+P102 Store locked up/Keep out of reach of children
P262 Do not get in eyes, on skin, or on clothing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P314 Get medical advice/attention if you feel unwell
P501 Dispose of contents/container in accordance with local/regional /national/international regulations

Trade Name: Hot Tub Flush

16. Other information

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and uses.

• Abbreviations and acronyms:

ADR: Accord europeen sur le transport des marchandises dangereuse par Route (European Agreement concerning
RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR Dangerous goods Regulations by the 'International Air Transport Association' (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the 'International Civil Aviation Organization' (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances.
CAS: Chemicals Abstracts Service (division of the Americal Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

Revision	Date	By	Amendment
1	18/10/10	Linda Brueford	GHS label elements added and other minor editorial amendments