

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name: Revacil
Datasheet Number: 017 1.1.0

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

Pool / spa treatment

1.3 Details of the supplier of the safety data sheet

Name of Supplier:

Address of Supplier:

Plastica Ltd
Perimeter House
Napier Road
St Leonards on S

St Leonards-on-Sea
East Sussex TN38 9NY

United Kingdom
Telephone: +44 (0) 1424 857857

Fax:

Responsible Person:

Email: info@plasticapools.com

1.4 Emergency telephone number

0800 043 0891 - Technical 0800 043 0892 - Emergency

2 Hazards identification

- 2.1 Classification of the substance or mixture
 - Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
 - Acute Tox. 4, H332
 - Skin Irrit. 2, H315
 - Eye Dam. 1, H318
 - Aquatic Chronic 1, H410
 - Classification (67/548/EEC, 1999/45/EC)
 - Xn: R20
 - R38
 - Xi; R41
 - N; R50/53
 - Additional information: For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16

2 .2 Label elements







- Signal Word: Danger
- Symbols: GHS05, GHS07, GHS09



2 Hazards identification (....)

Hazard phrases

- Causes skin irritation.
- Causes serious eye damage.
- Harmful if inhaled.
- Very toxic to aquatic life with long lasting effects.

Precautionary Phrases

- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Get immediate medical advice/attention.
- Avoid release to the environment.

2.3 Other hazards

- None

3 Composition/information on ingredients

3.1 Mixtures

Chemical Name

Concentration CAS Number EC Number R/H Phrases* Symbols

Polyhexamethylene biguanide hydrochloride (PHMB) 10-25% 32289-58-0 H	02, H332	, GHS05, GHS07,
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H318, H317, GHS09 H400, H410 C, Xn, Xi, N

R20, R22, R41, R43, R50/53

Hydrogen chloride <1% 7647-01-0 231-595-7 H331, H314 GHS04, GHS06,

R23, R35 GHS05

T, C

*See Section 16

4 First aid measures

- 4 .1 Description of first aid measures
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - IF ON SKIN: Wash with plenty of soap and water.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 - Get medical advice/attention.
- 4 .2 Most important symptoms and effects, both acute and delayed
 - Can cause damage to the eyes
 - May cause coughing



4 First aid measures (....)

- 4 .3 Indication of immediate medical attention and special treatment needed
 - Treat symptomatically

5 Fire-fighting measures

- 5 .1 Extinguishing media
 - In case of fire: use water, alcohol resistant foam or dry agent for extinction
- 5 .2 Special hazards arising from the substance or mixture
 - See Section 10.6
- 5.3 Advice for firefighters
 - Wear protective clothing as per section 8

6 Accidental release measures

- 6 .1 Personal precautions, protective equipment and emergency procedures
 - Wear protective clothing as per section 8
- 6 .2 Environmental Precautions
 - 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
 - Absorb spillage in earth or sand
 - Remove contaminated material to safe location for subsequent disposal
- 6 .4 Reference to other sections
 - See Section 7 & 8

7 Handling and storage

- 7 .1 Precautions for safe handling
 - Ensure adequate ventilation
 - Avoid breathing dust/fume/gas/mist/vapours/spray.
- 7 .2 Conditions for safe storage, including any incompatibilities
 - Keep container tightly closed.
 - Keep only in original container.
- 7.3 Specific end use(s)
 - No information available.

8 Exposure controls/personal protection

8 .1 Control parameters

Hydrogen chloride

- WEL (short term) 5 ppm



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

- WEL (short term) 8 mg/m3
- WEL (long term) 1 ppm
- WEL (long term) 2 mg/m3

8 .2 Exposure controls

- Engineering controls should be provided to prevent the need for ventilation

Occupational exposure controls

- Wear rubber gloves
- When handling this substance, e.g. sampling, wear goggles giving complete eye protection
- Wear apron or other light protective clothing
- In case of inadequate ventilation wear respiratory protection.









Gloves

Sui

Respirator

9 Physical and chemical properties

- 9 .1 Information on basic physical and chemical properties
 - Odour: Characteristic odour
 - Appearance: blue, Liquid
 - pH 4-5
 - Boiling point 102 °C to 105 °C
 - Vapour pressure not known
 - Vapour density not known
 - Melting point -2 °C to -4 °C
 - Completely soluble in water
 - Specific gravity 1.030 1.050 g/cm3
 - Not flammable but will support combustion
 - Partition coefficient : n-Octanol/water not known
 - Evaporation rate not known
 - Viscosity 1.2 mPa.s

9.2 Other information

- No information available

10 Stability and reactivity

- 10 .1 Reactivity
 - No decomposition if stored normally.
- 10 .2 Chemical stability
 - No decomposition if stored normally.
- 10 .3 Possibility of hazardous reactions
 - No information available



10 Stability and reactivity (....)

- 10 .4 Conditions to avoid
 - Avoid overheating
- 10 .5 Incompatible materials
 - Contact with metallic cations (e.g. iron, copper, nickel); and anionic products (precipitate formed)
- 10 .6 Hazardous Decomposition Products
 - Decomposition products may include hydrogen chloride
 - Decomposition products may include nitrogen and carbon oxides

11 Toxicological information

- 11 .1 Information on toxicological effects
 - LD50 (oral,rat) >2000 mg/kg

Inhalation

- Harmful if inhaled.

Contact with skin

- May cause irritation

Contact with eyes

- Can cause damage to the eyes

Ingestion

- May cause gastro-intestinal disturbances

Carcinogenicity

- No information available

Teratogenicity

- No information available

Mutagenicity

- No information available

12 Ecological information

- 12 .1 Toxicity
 - LC50 (fish) 1 10 mg/l (96 hr)
 - IC50 (algae) >1 mg/l (72 hr)
- 12 .2 Persistence and degradability
 - No information available
- 12 .3 Bioaccumulation Potential
 - No information available



12 Ecological information (....)

- 12 .4 Mobility in soil
 - Completely soluble in water
- 12 .5 Results of PBT and vPvB assessment
 - Not a PBT according to REACH Annex XIII
- 12 .6 Other Adverse Effects
 - Very toxic to aquatic life with long lasting effects.

13 Disposal considerations

- 13 .1 Waste treatment methods
 - Disposal should be in accordance with local, state or national legislation

Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)

14 Transport information





Dangerous Substance ENVIRONMENTALLY HAZARDOUS

14.1 UN Number

3082

14.2 UN Proper Shipping Name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLY(HEXAMETHYLENEBIGUANIDE) HYDROCHLORIDE)

- 14.3 Transport hazard class(es)
- 14.4 Packing group

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- 14 .5 Environmental hazards
 - Marine pollutant
- 14 .6 Special precautions for user
 - See Section 7
- 14 .7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
 - Not applicable

Other information

Road/Rail (ADR/RID)



14 Transport information (....)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(POLY(HEXAMETHYLENEBIGUANIDE) HYDROCHLORIDE)

ADR UN No.: 3082

ADR Hazard Class: 9 ADR Packing Group: III

Tunnel Code: E

Sea (IMDG)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(POLY(HEXAMETHYLENEBIGUANIDE) HYDROCHLORIDE)

IMDG UN No.: 3082

IMDG Hazard Class.: 9 IMDG Pack Group.: III

Air (ICAO/IATA)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(POLY(HEXAMETHYLENEBIGUANIDE) HYDROCHLORIDE)

ICAO Un No.: 3082

ICAO Hazard Class.: 9 ICAO Packing Group.: III

15 Regulatory information

15 .1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Refer to current CPL Regulations
- Refer to current EC Directive 82/501/EEC (the Seveso Directive)
- The List of Wastes (England) Regulations 2005 apply in the UK

15 .2 Chemical Safety Assessment

16 Other information

Text of R and S phrase codes used in this safety data sheet:- H302: Harmful if swallowed.; H314: Causes severe skin burns and eye damage.; H317: May cause an allergic skin reaction.; H318: Causes serious eye damage.; H331: Toxic if inhaled.; H332: Harmful if inhaled.; H400: Very toxic to aquatic life.; H410: Very toxic to aquatic life with long lasting effects.; R20: Harmful by inhalation; R22: Harmful if swallowed; R23: Toxic by inhalation; R35: Causes severe burns; R41: Risk of serious damage to eyes; R43: May cause sensitisation by skin contact; R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.