

Product: **Barnacle Buster Concentrate**
 SDS Preparation Date: **May 11, 2017**

Product Number: **1206**
Meets GHS and ISO 11014-1

2. Hazards identification; *continued*

GHS label elements, including precautionary statements:

- P101 If medical advice is needed, have product container or label at hand
- P102 Keep out of reach of children
- P262 Avoid contact with eyes, skin, or clothing
- P264 Wash hands thoroughly after handling
- P280 Wear protective gloves/protective clothing/eye protection/face protection

Other hazards:

- This product does not contain substances which are classified as persistent, bio-accumulative and/or toxic (PBT) or very persistent and very bio-accumulative (vPvB).

3. Composition/information on ingredients and Substance Chemical Identity:

Chemical composition:

- Mixtures of below listed substances and other unlisted ingredients. Unlisted ingredients are not "hazardous" per the GHS Classification.

Hazardous substances			
CAS: 7664-38-2 EINECS: 231-633-2	Phosphoric Acid	H303 H315 H320 H333	< 50%

Additional information:

- For wording of the listed risk phrases please refer to section 16.

4. First aid measure:

- **General:** In case of emergency, remove contaminated clothing.
- **Inhalation:** Remove to fresh air; if breathing is difficult, give oxygen. Observe for possible delayed reaction.
- **Eyes:** Immediately flush eyes with plenty of water for a few minutes. Seek medical attention if symptoms persist.
- **Skin:** Immediately flush skin with plenty of water while removing contaminated clothing. Seek medical attention if irritation develops and persists.
- **Ingestion:** Do not induce vomiting. Drink plenty of water (or milk if available). Seek for medical attention if symptoms persist.

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5. Firefighting measures:

Suitable (and unsuitable) extinguishing media:

- Barnacle Buster Concentrate is not flammable; use most appropriate agent to extinguish surrounding material, water - foam - powder - dry chemical.

Specific hazards arising from the chemical:

- None

Special protective equipment and precautions for firefighters:

- No special equipment and no special measures required.

6. Accidental release measures:

Personal precautions, protective equipment and emergency procedures:

- Wear protective equipment, like:
 - gloves : rubber gloves
 - respiration protection : none
 - eyes protection : safety glasses
 - shoes : normal
 - clothing : normal
 - control mechanic device : none
- Keep unprotected persons away.

Environmental precautions:

- Rinse with water, and dispose to sewage according to Federal, National and local regulations.

Methods and materials for containment and cleaning up:

- Should be absorbed by absorbents for disposal. Must conform to Federal, National and Local regulations.

7. Handling and storage:

Precautions for safe handling:

- No special measures required.
- Information about fire - and explosion protection: Store drums away from excessive heat, basically no special measures required

Conditions for safe storage, including any incompatibilities:

- No special measures required;
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
 - Store in normal conditions, keep containers/drums sealed

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8. Exposure controls/personal protection:

Phosphoric Acid CAS: 7664-38-2 EINECS: 231-633-2 <50%				
	TWA	STEL	MAK	Ceilings
ACGIH	1 mg/m3	3 mg/m3	Not established	Not established
Argentina	1 mg/m3	3 mg/m3	Not established	Not established
Australia	1 mg/m3	3 mg/m3	Not established	Not established
Canada Ontario	1 mg/m3 TWAEV	3 mg/m3 STEV	Not established	Not established
Canada Quebec	1 mg/m3 TWAEV	3 mg/m3 STEV	Not established	Not established
China	1 mg/m3	3 mg/m3	Not established	Not established
France	1 mg/m3 VME	3 mg/m3 VLE		
Japan	1 mg/m3	Not established	Not established	Not established
New Zealand	1 mg/m3	Not established	Not established	Not established
OSHA	1 mg/m3	Not established	Not established	Not established
OSHA Vacated	1 mg/m3	3 mg/m3	Not established	Not established
Singapore	1 mg/m3	3 mg/m3	Not established	Not established
South Africa	1 mg/m3	3 mg/m3	Not established	Not established
Switzerland	Not established	2 mg/m3	1 mg/m3	Not established
EU	1 mg/m3	2 mg/m3		
UK	1 mg/m3	2 mg/m3	Not established	Not established
USA	1 mg/m3	3 mg/m3	Not established	Not established

Personal protection:

- **Gloves:** rubber gloves
- **Respiration protection:** none
- **Eyes protection:** goggle
- **Shoes:** normal
- **Clothing:** normal
- **Control mechanic device:** none

9. Physical and chemical properties:

- Appearance liquid
- Color: Blue
- Odor: Clear, light amine odor
- pH: .9
- Melting point: NA
- Boiling point: 167 °C
- Freezing point: - 37 °C
- Flash point: NA
- Evaporation rate: Same as water
- Flammability (solid, gas): NA
- Upper/lower flammability or explosive limits: NA
- Vapor pressure: 14 mm hg/20 °C
- Vapor density: NA
- Relative density: 1.61
- Solubility(ies): NA
- Partition coefficient: n-octanol/water: NA
- Auto ignition temperature: NA
- Decomposition temperature: NA

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10. Stability and reactivity:

- Chemical stability: Stable when stored at normal conditions and recommended temperature
- Possibility of hazardous reactions: Non Described
- Conditions to avoid: Non Described
- Incompatible materials: Avoid contact with materials such as sulphides and sulphites which could release toxic gases, and be cautious in mixing with strong Alkali bases because high heat of reaction can generate steam.
- Hazardous decomposition products: None.

11. Toxicological information:

PHOSPHORIC ACID (Mixture):

LD50 Rabbit: 200 – 2000 mg/kg

- Test results not available;
- No LD50 data available for the product TRAC Barnacle Buster Concentrate

Acute toxicity	Not classified.
Skin corrosion/irritation	Skin irritation and possible eye damage.
Respiratory sensitisation	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Specific target organ toxicity - single exposure	Not classified.
Carcinogenicity	Not classified.
Germ cell mutagenicity	Not classified.
Reproductive toxicity	Not classified.
Information on likely routes of exposure	
Ingestion	Irritation in mouth, throat and/or stomach.
Inhalation	May cause irritation to respiratory organs.
Skin contact	Causes irritation
Eye contact	Causes irritation
Symptoms	Not available.
Mixture versus substance	
Information	Not available.
Other information	Not available.

Acute toxicity of components present at relevant concentrations: see section 3.

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12. Ecological information:

Toxicity	No toxicity data noted for the ingredient(s).
Persistence and (BIO)degradability	No data available
Bio-accumulative potential	Not available.
Partition coefficient; n-octanol/water (log Kow);	Not available.
Bio-concentration factor (BCF)	Not available.
Mobility in soil	Not available.
Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
Other adverse effects	Not available.

Summary: The product is not classified as dangerous for the environment. The evaluation of environmental hazards is based on the concentration limits as set out in directive 1999/45/EC.

13. Disposal considerations:

Waste treatment methods:

- Dispose used or expended material to local sewage systems according to Federal, National and Local regulations and instructions
- After rinsing with plenty of water, empty containers may be recycled.
 - Waste code according to 2000/532/EC (product):
 - Waste code according to 2000/532/EC (package):

14. Transport information:

ADR:

- 14.1. UN number UN1805
- 14.2. UN proper shipping name Phosphoric acid, solution
- 14.3. Transport hazard 8 class(es)
- Subsidiary class(es) -
- 14.4. Packing group III
- 14.5. Environmental hazards No
- Tunnel restriction code (E)
- 14.6. Special precautions for Not available.

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14. Transport information *continued*:

RID:

- 14.1. UN number UN1805
- 14.2. UN proper shipping name Phosphoric acid, solution
- 14.3. Transport hazard 8 class(es)
- Subsidiary class(es) -
- 14.4. Packing group III
- 14.5. Environmental hazards No
- 14.6. Special precautions for Not available

AND:

- 14.1. UN number UN1805
- 14.2. UN proper shipping name Phosphoric acid, solution
- 14.3. Transport hazard 8 class(es)
- Subsidiary class(es) -
- 14.4. Packing group III
- 14.5. Environmental hazards No
- 14.6. Special precautions for Not available.

IATA:

- 14.1. UN number UN1805
- 14.2. UN proper shipping name Phosphoric acid, solution
- 14.3. Transport hazard 8 class(es)
- Subsidiary class(es) -
- 14.4. Packing group III
- 14.5. Environmental hazards No
- ERG Code Not available
- 14.6. Special precautions for Not available

IMDG:

- 14.1. UN number UN1805
- 14.2. UN proper shipping name Phosphoric acid, solution
- 14.3. Transport hazard 8 class(es)
- Subsidiary class(es) -
- 14.4. Packing group III
- Environmental hazards
- Marine pollutant No
- EmS No. F-A, S-B
- 14.6. Special precautions for Not available
- 14.7. Transport in bulk Not intended to be transported in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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15. Regulatory Information

Safety, health and environmental regulations specific for the product in question:

- GHS system for labelling and SDS
- Current regulation in US and Canada:
 - In USA: OSHA (29 CFR 1910.1200)
 - Canada: WHMIS
- EU regulations
 - Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances; Not regulated.
 - Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work; Phosphoric acid mixture (CAS 7664-38-2)
 - Directive 94/33/EC on the protection of young people at work; Phosphoric acid mixture (CAS 7664-38-2)

Chemical safety assessment:

- Not available

16. Other information including information on preparation and revision of the SDS:

List of abbreviations:

- CAS: Chemical Abstract Service Registration Number
- TWA: Time Weighted Average
- STEL: Short Term Exposure Limit
- LD50: Lethal Dose, 50%
- LC50: Lethal Concentration, 50%
- EC50: Effect Concentration, 50%
- NOEL: No Observed Effect Level
- COD: Chemical Oxygen Demand
- BOD: Biochemical Oxygen Demand
- TOC: Total Organic Carbon
- CEN: European Committee for Standardisation
- EC-No: European Commission Number
- CLP: Regulation on classification, labelling and packaging of substances and mixtures
- DSD: Dangerous Substances Directive
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- IATA: International Air Transport Association
- IMDG: International Maritime Dangerous Goods Code
- RID: International Rule for Transport of Dangerous Substances by Railway
- GHS: Global Harmonised System
- HCS: harmonized classification scheme

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16. Other information including information on preparation and revision of the SDS *continued*:

References Safety data: sheets of raw materials

Information on evaluation method leading to the classification of mixture, the health, and environmental hazards of this mixture are assessed by applying the conventional methods as described in GHS and EU Annex II and III to Directive 1999/45/EC.

P phrases and H statements:

- H303 May be harmful if swallowed
- H315 Causes skin irritation
- H320 Causes eye irritation
- H335 May cause respiratory irritation
- P101 If medical advice is needed, have product container or label at hand
- P102 Keep out of reach of children
- P233 Keep container tightly closed
- P260 Do not breathe mist/vapours/spray
- P262 Do not get in eyes, on skin, or on clothing
- P264 Wash hands thoroughly after handling
- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P285 In case of inadequate ventilation wear respiratory protection

Process categories according to ECHA and GHS