



# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Reference number: Periodic review of SDS 26/008/2025  
Issue date: 14/04/2021 Revision date: 26/08/2022 Supersedes version of: 09/06/2021 Version: 1.5

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Proflush Marine Engine Descaler  
Product code : WP 2101  
Type of product : Aqueous mixture based on : Mineral acids, Organic acids  
Product group : Blend

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : Industrial  
For professional use only  
Use of the substance/mixture : Engine descaler

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Wessex Chemical Factors Ltd  
17 Crane Way, Woolsbridge Industrial Park,  
Three Legged Cross, Wimborne, Dorset  
BH21 6FA  
United Kingdom  
T +44 (0) 1202 823 699 - F +44 (0) 1202 813 863  
[www.wessexchemicalfactors.co.uk](http://www.wessexchemicalfactors.co.uk)  
E-mail address of competent person responsible for the SDS : [info@wessexchemicalfactors.co.uk](mailto:info@wessexchemicalfactors.co.uk)

#### 1.4. Emergency telephone number

Emergency number : +44 (0) 1202 823 699 (Office hours only 9am - 5pm Monday - Thursday, 9am - 4pm Friday.)  
+44 (0) 7973629367 (Out of hours emergency number)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1	H290
Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Full text of H- and EUH-statements: see section 16	

##### Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

Signal word (CLP) : Danger

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Contains	: phosphoric acid 81%, orthophosphoric acid 81%
Hazard statements (CLP)	: H290 - May be corrosive to metals. H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage.
Precautionary statements (CLP)	: P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear eye protection, face protection, protective clothing, protective gloves. P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor. P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor. P390 - Absorb spillage to prevent material damage.

### 2.3. Other hazards

Other hazards which do not result in classification : If the product is not neutralised, it may have harmful effects on the aquatic environment.

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
phosphoric acid 81%, orthophosphoric acid 81% (Component) (Note B)	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924-24-XXXX	40 – 50	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
citric acid	CAS-No.: 77-92-9 EC-No.: 201-069-1 EC Index-No.: 607-750-00-3 REACH-no: 01-2119457026-42-XXXX	3 – 5	Eye Irrit. 2, H319 STOT SE 3, H335
sulphamic acid; sulphamic acid; sulfamic acid	CAS-No.: 5329-14-6 EC-No.: 226-218-8 EC Index-No.: 016-026-00-0 REACH-no: 01-2119488633-28-XXXX	1 – 3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412
propan-2-ol; isopropyl alcohol; isopropanol	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558-25-XXXX	0.3 – 0.5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
benzotriazole	CAS-No.: 95-14-7 EC-No.: 202-394-1	0.01 – 0.1	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
phosphoric acid 81%, orthophosphoric acid 81% (Component)	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924-24-XXXX	( 10 ≤C < 25) Eye Irrit. 2, H319 ( 10 ≤C < 25) Skin Irrit. 2, H315 ( 25 ≤C < 100) Skin Corr. 1B, H314

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Call a physician immediately. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately. Immediately call a POISON CENTER/doctor.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Call a physician immediately. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Burns. Swallowing a small quantity of this material will result in serious health hazard.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: The product itself does not burn. On contact with ordinary metals (steel, galvanized, aluminium) corrosion may occur and generate highly flammable hydrogen gas.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe spray, mist, vapours. Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Absorb spillage to prevent material damage.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13. See Section 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe mist, spray, vapours. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash Both hands thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use.

Incompatible products : Strong bases. Sodium hypochlorite. Strong acids.

Incompatible materials : Metals. Sources of ignition. Direct sunlight.

Packaging materials : Store in corrosive resistant container with a resistant inner liner.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

phosphoric acid 81%, orthophosphoric acid 81% (7664-38-2)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Orthophosphoric acid
IOEL TWA	1 mg/m <sup>3</sup>
IOEL STEL	2 mg/m <sup>3</sup>
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Orthophosphoric acid
WEL TWA (OEL TWA) [1]	1 mg/m <sup>3</sup>
WEL STEL (OEL STEL)	2 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Propan-2-ol
WEL TWA (OEL TWA) [1]	999 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	400 ppm
WEL STEL (OEL STEL)	1250 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Chemical goggles or face shield. Safety glasses

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Wear protective gloves.

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. Wear appropriate mask

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

#### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: red.
Odour	: mild.
Odour threshold	: No data available
pH	: No data available
pH solution	: < 2
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: ~ 1.4
Solubility	: soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

### 10.2. Chemical stability

Stable under normal conditions.

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 10.3. Possibility of hazardous reactions

Contact with alkaline products gives exothermic reaction.

### 10.4. Conditions to avoid

High temperature. Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

metals. Strong acids. Strong bases. May be corrosive to metals.

### 10.6. Hazardous decomposition products

When heated to decomposition, emits toxic fumes. Phosphorus oxides. fume. Carbon monoxide. Carbon dioxide. Corrosive vapours.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

Proflush Marine Engine Descaler	
ATE CLP (oral)	636.2 mg/kg bodyweight
phosphoric acid 81%, orthophosphoric acid 81% (7664-38-2)	
LD50 oral rat	301 mg/kg
LD50 dermal rabbit	2750 mg/kg
sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
LD50 oral rat	2140 mg/kg bodyweight Animal: rat, Animal sex: female, Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
citric acid (77-92-9)	
LD50 oral rat	11700 mg/kg
LD50 oral	5400 mg/kg bodyweight Animal: (mouse)
LD50 dermal rat	> 2000 mg/kg bodyweight
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	12800 mg/kg
LC50, male, female, Inhalation, rat	> 10000 ppm (6 Hours, (OECD 403 method))
benzotriazole (95-14-7)	
LD50 oral rat	500 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Causes severe skin burns.  
Serious eye damage/irritation : Causes serious eye damage.  
Respiratory or skin sensitisation : Not classified  
Additional information : Based on available data, the classification criteria are not met  
Germ cell mutagenicity : Not classified  
Additional information : Based on available data, the classification criteria are not met  
Carcinogenicity : Not classified

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met

### sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)

NOAEL (animal/female, F1)	500 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OPP 83-4 (Reproduction and Fertility Effects)
---------------------------	--

STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met

### citric acid (77-92-9)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

### propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

STOT-single exposure	May cause drowsiness or dizziness.
----------------------	------------------------------------

STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

### sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)

Viscosity, kinematic	Not applicable
----------------------	----------------

### citric acid (77-92-9)

Viscosity, kinematic	Not applicable
----------------------	----------------

### propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)

Viscosity, kinematic	3.115 mm <sup>2</sup> /s
----------------------	--------------------------

Potential adverse human health effects and symptoms	: Harmful if swallowed.
---	-------------------------

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Ecology - water	: Phosphoric acid rapidly dissociates to soluble inorganic orthophosphate in wastewater, sewerage systems and natural waters. When released to the environment, phosphates may act as a plant nutrient and contribute to excessive algal growth, de-oxygenation of water and precipitate heavy metals.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### phosphoric acid 81%, orthophosphoric acid 81% (7664-38-2)

LC50 - Fish [1]	3 – 3.25 mg/l Bluegill, ( <i>Lepomis macrochirus</i> )
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): <i>Daphnia magna</i>
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): <i>Desmodesmus subspicatus</i> (previous name: <i>Scenedesmus subspicatus</i> )
ErC50 algae	> 100 mg/l
TLM - Fish [1]	138 ppm Western mosquitofish ( <i>Gambusia affinis</i> )

### sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)

LC50 - Fish [1]	70.3 mg/l Test organisms (species): <i>Pimephales promelas</i>
-----------------	--



# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<b>sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)</b>	
EC50 - Crustacea [1]	71.6 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	48 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	33.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	34 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	19 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 60 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'

<b>citric acid (77-92-9)</b>	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Fathead minnow, (P. promelas)
EC50 - Other aquatic organisms [1]	> 50 mg/l Test organisms (species): (Zebra mussel D. polymorpha)
NOEC chronic algae	425 mg/l Test organisms (species): (Algae S. quadricauda)

<b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b>	
LC50 - Fish [1]	9640 mg/l Test organisms (species): Fathead minnow (Pimephales promelas)
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): (Desmodesmus subspicatus)
EC50, daphnia, short term	9714 mg/l (24 Hours, (OECD 202 method))
EC5, microorganisms, Pseudomonas putida	1050 mg/l (16 Hours)

<b>benzotriazole (95-14-7)</b>	
LC50 - Fish [1]	55 mg/l Test organisms (species): Cyprinodon variegatus
LC50 - Fish [2]	180 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	137 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	75 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	29 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC chronic crustacea	0.97 mg/l
NOEC chronic algae	1.18 mg/l

## 12.2. Persistence and degradability

<b>Proflush Marine Engine Descaler</b>	
Persistence and degradability	Not established.

<b>phosphoric acid 81%, orthophosphoric acid 81% (7664-38-2)</b>	
Persistence and degradability	Readily biodegradable.

<b>sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)</b>	
Persistence and degradability	May cause long-term adverse effects in the environment.

<b>citric acid (77-92-9)</b>	
Persistence and degradability	Readily biodegradable.

<b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b>	
Persistence and degradability	Readily biodegradable.

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Biochemical oxygen demand (BOD)	1.19 – 1.72 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.23 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

Proflush Marine Engine Descaler	
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4).

phosphoric acid 81%, orthophosphoric acid 81% (7664-38-2)	
Bioaccumulative potential	No bioaccumulation data available.

sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
Bioaccumulative potential	Does not significantly accumulate in organisms.

citric acid (77-92-9)	
Partition coefficient n-octanol/water (Log Kow)	-1.8 – -1.6
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4).

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05
Bioaccumulative potential	No bioaccumulation.

### 12.4. Mobility in soil

phosphoric acid 81%, orthophosphoric acid 81% (7664-38-2)	
Ecology - soil	Product adsorbs onto the soil.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Surface tension	22.7 mN/m
Ecology - soil	Very mobile. Soluble material/quickly disperses in water.

### 12.5. Results of PBT and vPvB assessment

Component	
phosphoric acid 81%, orthophosphoric acid 81% (7664-38-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
citric acid (77-92-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

Other adverse effects	: Before neutralisation the acidity of the product may represent a danger to aquatic organisms. May cause pH changes in aqueous ecological systems.
Additional information	: Avoid release to the environment.

citric acid (77-92-9)	
Dissociation constant	pKa = 3.13, 4.76 and 6.4 at 25°C

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830






### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 1805	UN 1805	UN 1805	UN 1805	UN 1805
<b>14.2. UN proper shipping name</b>				
PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID SOLUTION	Phosphoric acid, solution	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION
<b>Transport document description</b>				
UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III, (E)	UN 1805 PHOSPHORIC ACID SOLUTION, 8, III	UN 1805 Phosphoric acid, solution, 8, III	UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III	UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

#### 14.6. Special precautions for user


##### Overland transport

Classification code (ADR)	: C1
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Hazard identification number (Kemler No.)	: 80

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Orange plates : 

Tunnel restriction code (ADR) : E  
EAC code : 2R

### Transport by sea

Special provisions (IMDG) : 223  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP1  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Stowage category (IMDG) : A  
Properties and observations (IMDG) : Miscible in water. Mildly corrosive to most metals.

### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y841  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 852  
PCA max net quantity (IATA) : 5L  
CAO packing instructions (IATA) : 856  
CAO max net quantity (IATA) : 60L  
Special provisions (IATA) : A3, A803  
ERG code (IATA) : 8L

### Inland waterway transport

Classification code (ADN) : C1  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : C1  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T4  
Portable tank and bulk container special provisions (RID) : TP1  
Tank codes for RID tanks (RID) : L4BN  
Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W12  
Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 80

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### 15.1.1. EU-Regulations

###### REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

###### REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

###### REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

###### PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

###### POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

###### Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

###### Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

###### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

##### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

#### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

# Proflush Marine Engine Descaler

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### Abbreviations and acronyms:

SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

### Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.