

## SAFETY DATA SHEET

## Boiler Treat Combi

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

## 1.1. Product identifier

## Trade name

Boiler Treat Combi

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

## Relevant identified uses of the substance or mixture

No special

## Uses advised against

No special

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

## Company and address

**Vecom Marine B.V.**

Mozartlaan 3

3144 NA Maassluis

The Netherlands

+31 (0) 10-5930210

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<https://vecom-marine.com>

## Contact person

Vecom Marine B.V.

## E-mail

[sales@vecom-marine.com](mailto:sales@vecom-marine.com)

## Revision

11/04/2022

## SDS Version

2.0

## Date of previous version

11/04/2022 (2.0)

## 1.4. Emergency telephone number

National Poisons Information Centre (NVIC): +31 (0)88-755-8000 (24 hour service)

Only intended to inform professional emergency services in case of acute poisoning.

See section 4 on first aid measures.

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

Skin Corr. 1A; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

## 2.2. Label elements

## Hazard pictogram(s)



## Signal word

Danger

## Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

## Safety statement(s)

### General

-

### Prevention

Wear eye protection/protective gloves/protective clothing. (P280)

Do not breathe vapour/mist. (P260)

### Response

Immediately call a POISON CENTER/doctor. (P310)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303+P361+P353)

### Storage

-

### Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

## Hazardous substances

potassium hydroxide;caustic potash

## 2.3. Other hazards

### Additional labelling

Not applicable

### Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
potassium hydroxide;caustic potash	CAS No.: 1310-58-3 EC No.: 215-181-3 REACH: 01-2119487136-33-XXXX Index No.: 019-002-00-8	10-15%	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1B, H314 (SCL: 2.00 %) Skin Corr. 1A, H314 Skin Irrit. 2, H315 (SCL: 0.50 %) Eye Irrit. 2, H319 (SCL: 0.50 %)	
Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))	CAS No.: 13845-36-8 EC No.: 237-574-9 REACH: 01-2119485639-19-XXXX Index No.:	5-10%	Met. Corr. 1, H290 Skin Irrit. 2, H315 Eye Irrit. 2, H319	

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See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

### Other information

No special

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an

unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

#### Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

#### Burns

Not applicable

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Some metal oxides.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

### SECTION 6: Accidental release measures

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

Avoid direct contact with spilled substances.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

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

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.  
See section 8 "Exposure controls/personal protection" for protective measures.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid direct contact with the product.  
Smoking, drinking and consumption of food is not allowed in the work area.  
See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

##### Recommended storage material

Always store in containers of the same material as the original container.

##### Storage temperature

Dry, cool and well ventilated

##### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

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

This product should only be used for applications quoted in section 1.2

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

#### DNEL

Product/substance	potassium hydroxide;caustic potash
DNEL	1 mg/m <sup>3</sup>
Route of exposure	Inhalation
Duration	Long term – Local effects - Workers

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
DNEL	1 mg/m <sup>3</sup>
Route of exposure	Inhalation
Duration	Long term – Systemic effects - General population

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
DNEL	1 mg/m <sup>3</sup>
Route of exposure	Inhalation
Duration	Long term – Systemic effects - Workers

#### PNEC

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
PNEC	50 mg/l
Route of exposure	Sewage treatment plant
Duration of Exposure	

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
PNEC	0.05 mg/l
Route of exposure	Freshwater
Duration of Exposure	

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
PNEC	0.005 mg/l
Route of exposure	Marine water
Duration of Exposure	

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
PNEC	0.5 mg/l
Route of exposure	Intermittent release
Duration of Exposure	

## 8.2. Exposure controls

Control is unnecessary if the product is used as intended.

### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

### Exposure scenarios

There are no exposure scenarios implemented for this product.

### Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

### Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

### Measures to avoid environmental exposure


Keep damming materials near the workplace. If possible, collect spillage during work.

## Individual protection measures, such as personal protective equipment


### Generally

Use only CE marked protective equipment.


### Respiratory Equipment

Type	Class	Colour	Standards	
Respiratory protection is not needed in the event of adequate ventilation	-	-	-	
A	Class 1 (low capacity)	Brown	EN14387	


### Skin protection

Recommended	Type/Category	Standards	
Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester.	-	-	

### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	

### Eye protection

Type	Standards	
Wear safety glasses with side shields.	EN166	

## SECTION 9: Physical and chemical properties

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

#### Physical state

Liquid

#### Colour

Brown

#### Odour / Odour threshold

Characteristic

#### pH

13,5

#### Density (g/cm<sup>3</sup>)

1.18 (20 °C)

#### Relative density

1.18 (20 °C)

#### Kinematic viscosity

Testing not relevant or not possible due to nature of the product.

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

##### Melting point/Freezing point (°C)

Testing not relevant or not possible due to nature of the product.

##### Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

##### Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

##### Vapour pressure

Testing not relevant or not possible due to nature of the product.

##### Relative vapour density

Testing not relevant or not possible due to nature of the product.

##### Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

#### Data on fire and explosion hazards

##### Flash point (°C)

Testing not relevant or not possible due to nature of the product.

##### Ignition (°C)

Testing not relevant or not possible due to nature of the product.

##### Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

##### Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to nature of the product.

## Solubility

### Solubility in water

Testing not relevant or not possible due to nature of the product.

### n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

### Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

## 9.2. Other information

### Other physical and chemical parameters

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions

No special

### 10.4. Conditions to avoid

No special

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product/substance	potassium hydroxide;caustic potash
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	333 mg/kg
Other information	

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	1000 mg/kg
Other information	

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

Causes serious eye damage.

#### Respiratory sensitisation

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

#### 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.

### 11.2. Information on other hazards

#### Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

#### Endocrine disrupting properties

No special

#### Other information

No special

## SECTION 12: Ecological information

### 12.1. Toxicity

Product/substance	potassium hydroxide;caustic potash
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	80 mg/L
Other information	

Product/substance	Pentapotassium triphosphate (Kaliumtripolyfosfaat (KTPP))
Test method	
Species	Fish
Compartment	
Duration	48 hours
Test	LC0
Result	>800 mg/L
Other information	

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

### 12.6. Endocrine disrupting properties

No special

### 12.7. Other adverse effects



No special

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 8 – Corrosive

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

### EWC code

Not applicable




### Specific labelling

Not applicable

### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es) Labels: 8 Classification code: C5	14.4 PG*	14.5 Env**	Other information
ADR	UN1814	POTASSIUM HYDROXIDE SOLUTION	Class: 8 Labels: 8 Classification code: C5 	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN1814	POTASSIUM HYDROXIDE SOLUTION	Class: 8 Labels: 8 Classification code: C5 	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN1814	POTASSIUM HYDROXIDE SOLUTION	Class: 8 Labels: 8 Classification code: C5 	II	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

### Additional information

IMDG / See the Dangerous Goods List, section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

### 14.6. Special precautions for user

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

No data available

## SECTION 15: Regulatory information

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

#### Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

#### Demands for specific education

No specific requirements

#### SEVESO - Categories / dangerous substances

Not applicable

#### Additional information

Not applicable

#### Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

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 (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

### 15.2. Chemical safety assessment

No

## SECTION 16: Other information

### Full text of H-phrases as mentioned in section 3

H290, May be corrosive to metals.

H302, Harmful if swallowed.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H319, Causes serious eye irritation.

### Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
SCL = A specific concentration limit  
SVHC = Substances of Very High Concern  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
TWA = Time weighted average  
UN = United Nations  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

#### ▼ The safety data sheet is validated by

RK

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: NL-en