SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
Train Wash Phosphor

Product no.
-

REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Cleaning liquid

Uses advised against
-
The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
Blue & Green AB
Stenorsvägen 52
261 44 Landskrona
Sweden
Tfn: +46 418 399000
Fax: +46 418 13199
www.blueandgreen.se

E-mail
info@blueandgreen.se

SDS date
2020-09-21

SDS Version
1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Corr. 1B; H314
Eye Dam. 1; H318
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

Signal word
Danger

Hazard statement(s)
Causes severe skin burns and eye damage. (H314)

Precautionary statements
General If medical advice is needed, have product container or label at hand. (P101).

	Keep out of reach of children. (P102).
Prevention	Do not breathe mist/vapours/fume/spray. (P260).
Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. (P303+P361+P353).
Storage	Store locked up. (P405).
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

orthophosphoric acid; 1-Heptanol, 2-propyl- , 5EO; 1-Heptanol, 2-propyl- , 8EO

Additional labelling

Not applicable

Unique formula identifier (UFI)

-

2.3. Other hazards

Not applicable

Additional warnings

Tactile warning. If this product is sold in retail, it must be delivered with child-resistant fastening.

VOC (volatile organic compound)

Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	orthophosphoric acid
IDENTIFICATION NOS.:	CAS-no: 7664-38-2 EC-no: 231-633-2 REACH-no: 01-2119485924-24 Index-no: 015-011-00-6
CONTENT:	5 - <10%
CLP CLASSIFICATION:	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1 H290, H302, H314, H318
NOTE:	L

NAME:	2-(2-butoxyethoxy)ethanol
IDENTIFICATION NOS.:	CAS-no: 112-34-5 EC-no: 203-961-6 REACH-no: 01-2119475104-44 Index-no: 603-096-00-8
CONTENT:	2.5 - <5%
CLP CLASSIFICATION:	Eye Irrit. 2 H319
NOTE:	L

NAME:	1-Heptanol, 2-propyl- , 5EO
IDENTIFICATION NOS.:	CAS-no: 160875-66-1
CONTENT:	1 - <2.5%
CLP CLASSIFICATION:	Eye Dam. 1 H318

NAME:	1-Heptanol, 2-propyl- , 8EO
IDENTIFICATION NOS.:	CAS-no: 160875-66-1
CONTENT:	1 - <2.5%
CLP CLASSIFICATION:	Acute Tox. 4, Eye Dam. 1 H302, H318

(*) L = European occupational exposure limit. See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

ATEmix(oral) > 2000
Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 2.5736 - 3.8604
Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 5.44 - 8.16

Detergent:
5 - 15%: PHOSPHATES
< 5%: NON-IONIC SURFACTANTS

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. The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service).

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

Bring the person into fresh air and stay with him/her.

Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water.

Eye contact

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.

Ingestion

In the case of ingestion, contact a doctor immediately and bring the safety data sheet or label. 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 to the 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.
This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist.

5.2. Special hazards arising from the substance or mixture

Nothing special

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

No specific requirements.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

No data available.

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

OEL

2-(2-butoxyethoxy)ethanol
Long-term exposure limit (8-hour TWA reference period): 10 ppm | 67,5 mg/m³
Short-term exposure limit (15-minute reference period): 15 ppm | 101.2 mg/m³

orthophosphoric acid
Long-term exposure limit (8-hour TWA reference period): - ppm | 1 mg/m³
Short-term exposure limit (15-minute reference period): - ppm | 2 mg/m³

DNEL / PNEC

DNEL (2-(2-butoxyethoxy)ethanol): 83 mg/kg
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (2-(2-butoxyethoxy)ethanol): 67.5 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (2-(2-butoxyethoxy)ethanol): 67.5 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers

DNEL (2-(2-butoxyethoxy)ethanol): 5 mg/kg bw/d
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-(2-butoxyethoxy)ethanol): 50 mg/kg bw/d
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-(2-butoxyethoxy)ethanol): 40.5 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - General population

DNEL (2-(2-butoxyethoxy)ethanol): 101.2 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - Workers

DNEL (2-(2-butoxyethoxy)ethanol): 40.5 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-(2-butoxyethoxy)ethanol): 60.7 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - General population

DNEL (orthophosphoric acid): 1 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers

DNEL (orthophosphoric acid): 10.7 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (orthophosphoric acid): 2 mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - Workers

DNEL (orthophosphoric acid): 0.36 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - General population

DNEL (orthophosphoric acid): 4.57 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (orthophosphoric acid): 0.1 mg/kg bw/d
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

PNEC (2-(2-butoxyethoxy)ethanol): 200 mg/l
Exposure: Sewage Treatment Plant

PNEC (2-(2-butoxyethoxy)ethanol): 0.44 mg/kg dw
Exposure: Marine water sediment

PNEC (2-(2-butoxyethoxy)ethanol): 4.4 mg/kg dw
Exposure: Freshwater sediment

PNEC (2-(2-butoxyethoxy)ethanol): 1 mg/l
Exposure: Freshwater

PNEC (2-(2-butoxyethoxy)ethanol): 0.1 mg/l
Exposure: Marine water

PNEC (2-(2-butoxyethoxy)ethanol): 3.9 mg/l
Exposure: Intermittent release

PNEC (2-(2-butoxyethoxy)ethanol): 0.32 mg/kg dw
Exposure: Soil

8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

There is no appendix to this safety data sheet.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Ensure emergency eyewash and -showers are clearly marked.

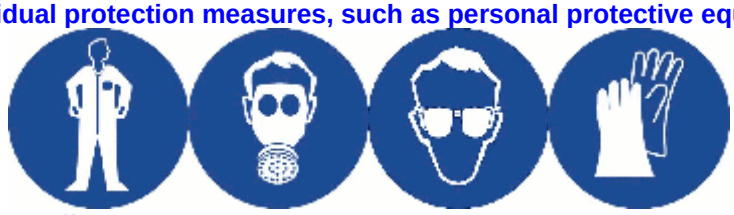
Hygiene measures

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 containment 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

In case of spray application: Use mask with particle filter S/SL

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester. Chemical resistant suit with helmet/hood (Type 4, 5, 6 Category III) is recommended for spray applications.

Hand protection

Nitrile rubber
Breakthrough time: > 480 minutes (Class 6)

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Colourless
Odour	None
Odour threshold (ppm)	No data available.
pH	1,25
Viscosity (40°C)	No data available.
Density (g/cm³)	1.23
Phase changes	
Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	No data available.
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.
Solubility	
Solubility in water	Soluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	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 the section “Handling and storage”.

10.3. Possibility of hazardous reactions
Nothing special

10.4. Conditions to avoid
Nothing 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 toxicological effects

Acute toxicity

Substance: 1-Heptanol, 2-propyl- , 8EO
Species: Rat
Test: LD50
Route of exposure: Oral
Result: >300-2000 mg/kg

Substance: 2-(2-butoxyethoxy)ethanol
Species: Rat
Test: LD50
Route of exposure: Oral
Result: >2000 mg/kg

Substance: 2-(2-butoxyethoxy)ethanol
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: 2764 mg/kg

Substance: 2-(2-butoxyethoxy)ethanol

Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: >29 ppm 2h

Substance: 2-(2-butoxyethoxy)ethanol
Species: Mouse
Test: LD50
Route of exposure: Oral
Result: 2410 mg/kg

Substance: orthophosphoric acid
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 300-2000 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Data on substance: 2-(2-butoxyethoxy)ethanol
Test: OECD Guideline 404
Organism: Rabbit
Result: not irritating

Serious eye damage/irritation

Causes serious eye damage.

Data on substance: 2-(2-butoxyethoxy)ethanol
Test: OECD Guideline 404
Organism: Rabbit
Result: irritating

Respiratory or skin sensitisation

Data on substance: 2-(2-butoxyethoxy)ethanol
Test: OECD Guideline 406
Organism: Guinea pig
Result: Negative

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

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.
This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: 1-Heptanol, 2-propyl- , 8EO
Species: Fish
Test: LC50
Duration: 96h
Result: 10-100 mg/l

Substance: 1-Heptanol, 2-propyl- , 8EO
Species: Daphnia
Test: EC50
Duration: 48h
Result: 10-100 mg/l

Substance: 1-Heptanol, 2-propyl- , 8EO
Species: Algae
Test: EC50
Duration: 72h
Result: 10-100 mg/l

Substance: 1-Heptanol, 2-propyl- , 8EO
Species: Fish
Test: NOEC
Duration:
Result: >1 mg/l

Substance: 1-Heptanol, 2-propyl- , 5EO
Species: Fish
Test: LC50
Duration: 96h
Result: 10-100 mg/l

Substance: 1-Heptanol, 2-propyl- , 5EO
Species: Daphnia
Test: EC50
Duration: 48h
Result: 10-100 mg/l

Substance: 2-(2-butoxyethoxy)ethanol
Species: Fish
Test: LC50
Duration: 96h
Result: >100 mg/l

Substance: 2-(2-butoxyethoxy)ethanol
Species: Algae
Test: EC50
Duration: 96h
Result: >100 mg/l

Substance: 2-(2-butoxyethoxy)ethanol
Species: Daphnia
Test: EC50
Duration: 48h
Result: >100 mg/l

Substance: orthophosphoric acid
Species: Daphnia
Test: EC50
Duration: 48h
Result: >100 mg/l

Substance: orthophosphoric acid
Species: Algae
Test: ErC50
Duration: 72h
Result: >100 mg/l

Substance: orthophosphoric acid
Species: Fish
Test: LC50
Duration: 96h
Result: 3-3.25 mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
1-Heptanol, 2-propyl- , 8EO	Yes	Closed Bottle Test	>60%
1-Heptanol, 2-propyl- , 5EO	Yes	Closed Bottle Test	>60%
2-(2-butoxyethoxy)ethanol	Yes	Modified OECD Screening Test	100%

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
1-Heptanol, 2-propyl- , 8EO	No	No data available	No data available
1-Heptanol, 2-propyl- , 5EO	No	No data available	No data available
2-(2-butoxyethoxy)ethanol	No	1	No data available

12.4. Mobility in soil

2-(2-butoxyethoxy)ethanol: Log Koc= 0.8703, Calculated from LogPow (High mobility potential.).

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. Other adverse effects

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

-

Specific labelling

Not applicable

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

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

ADR/RID

14.1. UN number	1805
14.2. UN proper shipping name	PHOSPHORIC ACID, LIQUID
14.3. Transport hazard class(es)	8
14.4. Packing group	III
Notes	-
Tunnel restriction code	E

IMDG

UN-no.	1805
Proper Shipping Name	PHOSPHORIC ACID, LIQUID
Class	8
PG*	III
EmS	F-A, S-B
MP**	No
Hazardous constituent	-

IATA/ICAO

UN-no.	1805
Proper Shipping Name	PHOSPHORIC ACID, LIQUID
Class	8
PG*	III

14.5. Environmental hazards

-

14.6. Special precautions for user

-

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

No data available

(*) Packing group

(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Demands for specific education

-

Additional information

Not applicable

Seveso

-

Biocidal reg. no.

Not applicable

Sources

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

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.
Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.
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 (CLP).
Regulation (EC) 1907/2006 (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.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.

The full text of identified uses as mentioned in section 1

-

Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:
The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion given by Regulation (EC) No. 1272/2008 (CLP)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.
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.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

Cecilia Evaldsson

Date of last essential change (First cipher in SDS version)

-

Date of last minor change (Last cipher in SDS version)

-