

# SAFETY DATA SHEET

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

### 1.1. Product identifier

#### Trade name

Train Wash Acid  
DL2122

#### 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](http://www.blueandgreen.se)

#### E-mail

[info@blueandgreen.se](mailto:info@blueandgreen.se)

#### SDS date

2021-05-19

#### SDS Version

3.0

### 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. 1C; 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

According to EC-Regulation 2015/830

|                   |  |
|-------------------|--|
| <b>General</b>    | If medical advice is needed, have product container or label at hand. (P101).<br>Keep out of reach of children. (P102).    |
| <b>Prevention</b> | Do not breathe mist/vapours/fume/spray. (P260).<br>Wash hands/exposed skin thoroughly after handling. (P264).              |
| <b>Response</b>   | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. (P303+P361+P353). |
| <b>Storage</b>    | -  |
| <b>Disposal</b>   | Dispose of contents/container to an approved waste disposal plant. (P501).   |

**▼ Identity of the substances primarily responsible for the major health hazards**

sulphuric acid; Ethanedioic acid, dihydrate

**Additional labelling**

Not applicable

**Unique formula identifier (UFI)**

S2Y2-1AG9-H103-7N46

**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:                | sulphuric acid   |
| IDENTIFICATION NOS.: | CAS-no: 7664-93-9 EC-no: 231-639-5 REACH-no: 01-2119458838-20 Index-no: 016-020-00-8 |
| CONTENT:             | 5 - <10%   |
| CLP CLASSIFICATION:  | Skin Corr. 1A<br>H314  |

|                      |   |
|----------------------|---|
| NAME:                | Ethanedioic acid, dihydrate                                   |
| IDENTIFICATION NOS.: | CAS-no: 6153-56-6 EC-no: 205-634-3 REACH-no: 01-2119534576-33 |
| CONTENT:             | 2.5 - <5%   |
| CLP CLASSIFICATION:  | Acute Tox. 4, Eye Dam. 1<br>H302, H312, H318                  |

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

**Other information**

ATEmix(dermal) > 2000  
ATEmix(oral) > 2000  
Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 1.7808 - 2.6712  
Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 1.4384 - 2.1576

Detergent:  
< 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

According to EC-Regulation 2015/830

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**

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Sulphur oxides. Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment.

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.

#### **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**

Room temperature 18 to 23°C

#### **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**

According to EC-Regulation 2015/830

## 8.1. Control parameters

### ▼ OEL

sulphuric acid

Long-term exposure limit (8-hour TWA reference period): - ppm | 0,05 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

### ▼ DNEL / PNEC

DNEL (sulphuric acid): 0.1 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Short term – Local effects

DNEL (sulphuric acid): 0.05 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term – Local effects

DNEL (Ethanedioic acid, dihydrate): 0.69 mg/m<sup>3</sup>

Exposure: Dermal

Duration of Exposure: Short term – Local effects - Workers

DNEL (Ethanedioic acid, dihydrate): 2.29 mg/kg/d

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (Ethanedioic acid, dihydrate): 4.03 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (Ethanedioic acid, dihydrate): 0.35 mg/m<sup>3</sup>

Exposure: Dermal

Duration of Exposure: Short term – Local effects - General population

DNEL (Ethanedioic acid, dihydrate): 1.14 mg/kg/d

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - General population

DNEL (Ethanedioic acid, dihydrate): 1.14 mg/m<sup>3</sup>

Exposure: Oral

Duration of Exposure: Long term – Systemic effects - General population

PNEC (sulphuric acid): 8.8 mg/l

Exposure: Sewage Treatment Plant

PNEC (sulphuric acid): 0.003 mg/l

Exposure: Freshwater

PNEC (sulphuric acid): 0.002 mg/kg dw

Exposure: Freshwater sediment

PNEC (sulphuric acid): 0.002 mg/kg dw

Exposure: Marine water sediment

PNEC (Ethanedioic acid, dihydrate): 0.1622 mg/l

Exposure: Freshwater

PNEC (Ethanedioic acid, dihydrate): 0.01622 mg/l

Exposure: Marine water

PNEC (Ethanedioic acid, dihydrate): 1.622 mg/l

Exposure: Intermittent release

## 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.

According to EC-Regulation 2015/830

### 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

Recommended: B. Gray

Recommended: S/SL. P2 . White

### 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

Neoprene

Material thickness: >0,5mm mm.

Breakthrough time: > 480 minutes (Class 6)

### Eye protection

Wear face shield alternatively 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                  |
| Viscosity (40°C)             | No data available. |
| Density (g/cm <sup>3</sup> ) | 1.08               |

### 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

According to EC-Regulation 2015/830

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: Ethanedioic acid, dihydrate

Species: Rat

Test: LD50

Route of exposure: Dermal

Result: 1100 mg/kg

Substance: Ethanedioic acid, dihydrate

Species: Rat

Test: LD50

Route of exposure: Oral

Result: 500 mg/kg

Substance: sulphuric acid

Species: Rat

Test: LD50

Route of exposure: Oral

Result: 2140 mg/kg

Substance: sulphuric acid

Species: Rat

Test: LD50

Route of exposure: Inhalation

Result: 375 mg/m3

**Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/irritation**

Causes serious eye damage.

**Respiratory or skin sensitisation**

No data available.

**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: Ethanedioic acid, dihydrate

Species: Daphnia

Test: EC50

Duration: 48h

According to EC-Regulation 2015/830

Result: 162.2 mg/l

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

Substance: sulphuric acid  
Species: Fish  
Test: LC50  
Duration: 96h  
Result: 16-28 mg/l

Substance: sulphuric acid  
Species: Algae  
Test: NOEC  
Duration:  
Result: 100 mg/l

### ▼ 12.2. Persistence and degradability

| Substance                   | Biodegradability | Test              | Result            |
|-----------------------------|------------------|-------------------|-------------------|
| Ethanedioic acid, dihydrate | Yes              | No data available | No data available |
| sulphuric acid              | Yes              | No data available | No data available |

### ▼ 12.3. Bioaccumulative potential

| Substance                   | Potential bioaccumulation | LogPow            | BCF               |
|-----------------------------|---------------------------|-------------------|-------------------|
| Ethanedioic acid, dihydrate | No                        | -0.81             | No data available |
| sulphuric acid              | No                        | No data available | No data available |

### ▼ 12.4. Mobility in soil

Ethanedioic acid, dihydrate: Log Koc= -0.563039, Calculated from LogPow ().

### 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                  | 2796  |
| 14.2. UN proper shipping name    | SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID |
| 14.3. Transport hazard class(es) | 8   |
| 14.4. Packing group              | II  |
| Notes                            | -   |
| Tunnel restriction code          | E   |

#### ▼ IMDG

|                       |   |
|-----------------------|---|
| UN-no.                | 2796  |
| Proper Shipping Name  | SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID |
| Class                 | 8   |
| PG*                   | II  |
| EmS                   | F-A, S-B  |
| MP**                  | No  |
| Hazardous constituent | 80  |

#### ▼ IATA/ICAO

According to EC-Regulation 2015/830

|                             |   |
|-----------------------------|---|
| <b>UN-no.</b>               | 2796  |
| <b>Proper Shipping Name</b> | SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID |
| <b>Class</b>                | 8   |
| <b>PG*</b>                  | II  |

#### 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

H302 - Harmful if swallowed.  
 H312 - Harmful in contact with skin.  
 H314 - Causes severe skin burns and eye damage.  
 H318 - Causes serious eye damage.

##### 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



According to EC-Regulation 2015/830

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**

Viktorija Evaldsson

**Date of last essential change**

**(First cipher in SDS version)**

2021-03-17(2.0)

**Date of last minor change**

**(Last cipher in SDS version)**

2021-03-17