

# SAFETY DATA SHEET

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

### 1.1. Product identifier

**Trade name**

Ironman

**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**

2020-11-16

**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).

According to EC-Regulation 2015/830

**Prevention  
Response**

Keep out of reach of children. (P102).  
Do not breathe fume/vapours. (P260).  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. (P303+P361+P353).

**Storage  
Disposal**

Store locked up. (P405).  
Dispose of contents/container to an approved waste disposal plant. (P501).

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

Ethanedioic acid, dihydrate

**Additional labelling**

Not applicable

**Unique formula identifier (UFI)**

UNVQ-G9KD-C10K-8474

**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:	Ethanedioic acid, dihydrate
IDENTIFICATION NOS.:	CAS-no: 6153-56-6 EC-no: 205-634-3 REACH-no: 01-2119534576-33
CONTENT:	5 - <10%
CLP CLASSIFICATION:	Acute Tox. 4, Eye Dam. 1 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) = 1.4472 - 2.1708

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 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.

According to EC-Regulation 2015/830

### 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: 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

#### 8.1. Control parameters

##### OEL

No substances are listed in The Control of Substances Hazardous to Health Regulations with an occupational exposure limit.

##### DNEL / PNEC

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

Exposure: Dermal

Duration of Exposure: Short term – Local effects - Workers

According to EC-Regulation 2015/830

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 (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

Control is unnecessary if the product is used as intended.

### General recommendations

Observe general occupational hygiene standards.

### Exposure scenarios

There is no appendix to this safety data sheet.

### 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 gas or dust.

### 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

NA

### Skin protection

Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.

### 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

According to EC-Regulation 2015/830

Form	Gel
Colour	White
Odour	Sharp/pungent
Odour threshold (ppm)	No data available.
pH	1.0
Viscosity (40°C)	No data available.
Density (g/cm <sup>3</sup> )	1.05
<b>Phase changes</b>	
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.
<b>Data on fire and explosion hazards</b>	
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.
<b>Solubility</b>	
Solubility in water	Soluble
n-octanol/water coefficient	No data available.
<b>9.2. Other information</b>	
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: 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

#### 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

According to EC-Regulation 2015/830

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

Result: 162.2 mg/l

### 12.2. Persistence and degradability

**Substance**

Ethanedioic acid, dihydrate

**Biodegradability**

Yes

**Test**

No data available

**Result**

No data available

### 12.3. Bioaccumulative potential

**Substance**

Ethanedioic acid, dihydrate

**Potential bioaccumulation**

No

**LogPow**

-0.81

**BCF**

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 not covered by regulations on dangerous 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** 3265

**14.2. UN proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

**14.3. Transport hazard class(es)** 8

**14.4. Packing group** III

**Notes** -

**Tunnel restriction code** E

#### IMDG

**UN-no.** 3265

**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

**Class** 8

**PG\*** III

**EmS** F-A, S-B

**MP\*\*** No

**Hazardous constituent** -

According to EC-Regulation 2015/830

<b>IATA/CAO</b>	
<b>UN-no.</b>	3265
<b>Proper Shipping Name</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
<b>Class</b>	8
<b>PG*</b>	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.

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.

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 specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is

According to EC-Regulation 2015/830

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**

David Löwenstein

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

-

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

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