

**StainBlaster Rust Remover****Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : StainBlaster Rust Remover  
Product code : 116324E  
Use of the Substance/Mixture : Laundry product  
Substance type: : Mixture

**For professional users only.**

Product dilution information : No dilution information provided.

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

Identified uses : Prespotter/Stain remover. Manual process  
Recommended restrictions on use : Reserved for industrial and professional use.

**1.3 Details of the supplier of the safety data sheet**

Company : Ecolab Ltd.  
PO Box 11; Winnington Avenue  
Northwich, Cheshire, United Kingdom CW8 4DX  
+ 44 (0)1606 74488  
ccs@ecolab.com

**1.4 Emergency telephone number**

Emergency telephone number : Food & Beverage, Institutional, Agriculture, Textile Hygiene:  
Northwich: +44 (0)1606 74488  
Healthcare Leeds: +44 (0)113 232 2480  
Healthcare Swansea: +44 (0)1252 717616

Poison Information Centre telephone number : Not Available

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Version : 1.0

**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Skin irritation , Category 2 H315

**Classification (67/548/EEC, 1999/45/EC)**

C; CORROSIVE R21/22  
The classification of this product is based on toxicological assessment. R38

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For the full text of the R-phrases mentioned in this Section, see Section 16.  
For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms

:



Signal Word

: Warning

Hazard Statements

: H315

Causes skin irritation.

Precautionary Statements

: **Prevention:**  
P280

Wear protective gloves.

**2.3 Other hazards**

None known.

**Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Hazardous components**

| Chemical Name                  | CAS-No.<br>EC-No.<br>REACH No.             | Classification<br>(67/548/EEC) | Classification<br>(REGULATION (EC) No<br>1272/2008)                                                                                                                                                                              | Concentration:<br>[%] |
|--------------------------------|--------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| ethanedioic acid,<br>dihydrate | 6153-56-6<br>205-634-3<br>01-2119534576-33 | Xn; R21/22                     | Acute toxicity Category 4;<br>H302<br>Acute toxicity Category 4;<br>H312                                                                                                                                                         | >= 5 - < 10           |
| monoethanolamine               | 141-43-5<br>205-483-3<br>01-2119486455-28  | C; R34-<br>R20/21/22-R37       | Acute toxicity Category 4;<br>H302<br>Acute toxicity Category 4;<br>H332<br>Acute toxicity Category 4;<br>H312<br>Skin corrosion Category 1B;<br>H314<br>Specific target organ toxicity -<br>single exposure Category 3;<br>H335 | >= 1 - < 2.5          |

For the full text of the R-phrases mentioned in this Section, see Section 16.  
For the full text of the H-Statements mentioned in this Section, see Section 16.

**Section: 4. FIRST AID MEASURES****4.1 Description of first aid measures**

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- |                         |                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| In case of eye contact  | : Rinse with plenty of water.                                                                                                                                                                                                                  |
| In case of skin contact | : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Get medical attention if irritation develops and persists. Apply calcium gluconate gel, if available, or milk of magnesia to affected area. |
| If swallowed            | : Rinse mouth. Get medical attention if symptoms occur. If available, take several calcium antacid tablets (eg Tums) or several tablespoons of milk of magnesia.                                                                               |
| If inhaled              | : Get medical attention if symptoms occur.                                                                                                                                                                                                     |

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Indication of immediate medical attention and special treatment needed**

- |           |                          |
|-----------|--------------------------|
| Treatment | : Treat symptomatically. |
|-----------|--------------------------|

**Section: 5. FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

- |                                |                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media   | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : None known.                                                                                             |

**5.2 Special hazards arising from the substance or mixture**

- |                                      |                                                                                                                                                   |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Specific hazards during firefighting | : Not flammable or combustible.                                                                                                                   |
| Hazardous combustion products        | : Decomposition products may include the following materials:<br>Carbon oxides<br>nitrogen oxides (NOx)<br>Sulphur oxides<br>Oxides of phosphorus |

**5.3 Advice for firefighters**

- |                                               |                                                                                                                                                                                 |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Special protective equipment for firefighters | : Use personal protective equipment.                                                                                                                                            |
| Further information                           | : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. |

**Section: 6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

- |                                    |                                                                                                                    |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Advice for non-emergency personnel | : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------|

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Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

### 6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### 6.4 Reference to other sections

See Section 1 for emergency contact information.  
For personal protection see section 8.  
See Section 13 for additional waste treatment information.

## Section: 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes. Use only with adequate ventilation. Wash hands thoroughly after handling.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

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

Requirements for storage areas and containers : Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 5 °C to 40 °C

### 7.3 Specific end uses

Specific use(s) : Prespotter/Stain remover. Manual process

## Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational Exposure Limits

| CAS-No.   | Components                  | Value type (Form of exposure) | Control parameters  | Update     | Basis    |
|-----------|-----------------------------|-------------------------------|---------------------|------------|----------|
| 6153-56-6 | ethanedioic acid, dihydrate | TWA                           | 1 mg/m <sup>3</sup> | 2005-04-06 | UKCOSSTD |

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|          |                   |      |                    |            |          |
|----------|-------------------|------|--------------------|------------|----------|
|          |                   | STEL | 2 mg/m3            | 2005-04-06 | UKCOSSTD |
| 141-43-5 | monoethanola mine | TWA  | 1 ppm<br>2.5 mg/m3 | 2007-08-01 | UKCOSSTD |
|          |                   | STEL | 3 ppm<br>7.6 mg/m3 | 2007-08-01 | UKCOSSTD |

**8.2 Exposure controls****Appropriate engineering controls**

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Eye/face protection (EN 166) : No special protective equipment required.

Hand protection (EN 374) : Wear the following personal protective equipment:  
Nitrile rubber  
butyl-rubber  
Impervious gloves  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection (EN 14605) : No special protective equipment required.

Respiratory protection (EN 143, 14387) : None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, 89/686/EEC ), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

**Environmental exposure controls**

General advice : Consider the provision of containment around storage vessels.

**Section: 9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance : liquid  
 Colour : colourless  
 Odour : pungent  
 pH : 0.5 - 1.5, 100 %  
 Flash point : Not applicable.  
 Odour Threshold : Not applicable and/or not determined for the mixture

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|                                         |                                                            |
|-----------------------------------------|------------------------------------------------------------|
| Melting point/freezing point            | : Not applicable and/or not determined for the mixture     |
| Initial boiling point and boiling range | : Not applicable and/or not determined for the mixture     |
| Evaporation rate                        | : Not applicable and/or not determined for the mixture     |
| Flammability (solid, gas)               | : Not applicable and/or not determined for the mixture     |
| Upper explosion limit                   | : Not applicable and/or not determined for the mixture     |
| Lower explosion limit                   | : Not applicable and/or not determined for the mixture     |
| Vapour pressure                         | : Not applicable and/or not determined for the mixture     |
| Relative vapour density                 | : Not applicable and/or not determined for the mixture     |
| Relative density                        | : 1.01 - 1.05                                              |
| Water solubility                        | : soluble                                                  |
| Solubility in other solvents            | : Not applicable and/or not determined for the mixture     |
| Partition coefficient: n-octanol/water  | : Not applicable and/or not determined for the mixture     |
| Auto-ignition temperature               | : Not applicable and/or not determined for the mixture     |
| Thermal decomposition                   | : Not applicable and/or not determined for the mixture     |
| Viscosity, kinematic                    | : 11.671 mm <sup>2</sup> /s (40 °C)                        |
| Explosive properties                    | : Not applicable and/or not determined for the mixture     |
| Oxidizing properties                    | : The substance or mixture is not classified as oxidizing. |

**9.2 Other information**

Not applicable and/or not determined for the mixture

**Section: 10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.4 Conditions to avoid**

None known.

**10.5 Incompatible materials**

Bases  
Metals  
Organic materials

**10.6 Hazardous decomposition products**

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Decomposition products may include the following materials:

Carbon oxides  
nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides  
Oxides of phosphorus

**Section: 11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

**Toxicity**

Acute oral toxicity : Acute toxicity estimate : > 2,000 mg/kg

Acute inhalation toxicity : 4 h Acute toxicity estimate : > 5 mg/l

Acute dermal toxicity : Acute toxicity estimate : > 2,000 mg/kg

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye irritation : There is no data available for this product.

Respiratory or skin sensitization : There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

**Components**

Acute oral toxicity : ethanedioic acid, dihydrate  
LD50 rat: 375 mg/kg

monoethanolamine  
LD50 rat: 1,089 mg/kg

**Components**

Acute inhalation toxicity : monoethanolamine  
4 h LC50 rat: > 1.6 mg/l

**Components**

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Acute dermal toxicity : ethanedioic acid, dihydrate  
LD50 rat: 1,500 mg/kg

monoethanolamine  
LD50 rabbit: 1,025 mg/kg

**Potential Health Effects**

Eyes : Health injuries are not known or expected under normal use.

Skin : Causes skin irritation.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

**Experience with human exposure**

Eye contact : No symptoms known or expected.

Skin contact : Redness, Irritation

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

**Section: 12. ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity**

Environmental Effects : This product has no known ecotoxicological effects.

**Product**

Toxicity to fish : no data available

Toxicity to daphnia and other aquatic invertebrates : no data available

Toxicity to algae : no data available

**Components**

Toxicity to daphnia and other aquatic invertebrates : ethanedioic acid, dihydrate  
48 h EC50 Daphnia: 137 mg/l

monoethanolamine  
48 h EC50 Daphnia: 65 mg/l

**12.2 Persistence and degradability**

**Product**

no data available

**Components**

Biodegradability : ethanedioic acid, dihydrate  
Result: Readily biodegradable.



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monoethanolamine  
Result: Readily biodegradable.

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

**Product**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

no data available

**Section: 13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**13.1 Waste treatment methods**

Product : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

European Waste Catalogue : 200114\* - acids

**Section: 14. TRANSPORT INFORMATION**

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

**Land transport (ADR/ADN/RID)**

14.1 UN number : Not dangerous goods  
14.2 UN proper shipping name : Not dangerous goods  
14.3 Transport hazard class(es) : Not dangerous goods  
14.4 Packing group : Not dangerous goods  
14.5 Environmental hazards : Not dangerous goods  
14.6 Special precautions for : Not dangerous goods

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user

**Air transport (IATA)**

|                                   |                       |
|-----------------------------------|-----------------------|
| 14.1 UN number                    | : Not dangerous goods |
| 14.2 UN proper shipping name      | : Not dangerous goods |
| 14.3 Transport hazard class(es)   | : Not dangerous goods |
| 14.4 Packing group                | : Not dangerous goods |
| 14.5 Environmental hazards        | : Not dangerous goods |
| 14.6 Special precautions for user | : Not dangerous goods |

**Sea transport (IMDG/IMO)**

|                                                                               |                       |
|-------------------------------------------------------------------------------|-----------------------|
| 14.1 UN number                                                                | : Not dangerous goods |
| 14.2 UN proper shipping name                                                  | : Not dangerous goods |
| 14.3 Transport hazard class(es)                                               | : Not dangerous goods |
| 14.4 Packing group                                                            | : Not dangerous goods |
| 14.5 Environmental hazards                                                    | : Not dangerous goods |
| 14.6 Special precautions for user                                             | : Not dangerous goods |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | : Not dangerous goods |

**Section: 15. REGULATORY INFORMATION**

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

**National Regulations**

**Take note of Dir 94/33/EC on the protection of young people at work.**

|                   |                                                                                                                                                                            |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other regulations | : The Chemicals (Hazard Information and Packaging for Supply) Regulations.<br>The Control of Substances Hazardous to Health Regulations.<br>Health and Safety at Work Act. |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**15.2 Chemical Safety Assessment**

This product contains substances for which Chemical Safety Assessments are still required.

**Section: 16. OTHER INFORMATION**

**Full text of R-Phrases**

|           |                                                               |
|-----------|---------------------------------------------------------------|
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed. |
| R21/22    | Harmful in contact with skin and if swallowed.                |
| R34       | Causes burns.                                                 |
| R37       | Irritating to respiratory system.                             |

**Full text of H-Statements**

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|      |                                          |
|------|------------------------------------------|
| H302 | Harmful if swallowed.                    |
| H312 | Harmful in contact with skin.            |
| H314 | Causes severe skin burns and eye damage. |
| H332 | Harmful if inhaled.                      |
| H335 | May cause respiratory irritation.        |

**Full text of other abbreviations**

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**ANNEX: EXPOSURE SCENARIOS****DPD+ Substances:**

The following substances are the lead substances that contribute to the mixture Exposure Scenario according to the DPD+ Rule:

| Route               | Substance                   | CAS-No.   | EINECS-No. |
|---------------------|-----------------------------|-----------|------------|
| Ingestion           | ethanedioic acid, dihydrate | 6153-56-6 | 205-634-3  |
| Inhalation          | monoethanolamine            | 141-43-5  | 205-483-3  |
| Dermal              | ethanedioic acid, dihydrate | 6153-56-6 | 205-634-3  |
| Eyes                | monoethanolamine            | 141-43-5  | 205-483-3  |
| aquatic environment | No lead substance           |           |            |

**Physical properties DPD+ Substances:**

| Substance        | Vapour pressure | Water solubility | Pow   | Molar Mass |
|------------------|-----------------|------------------|-------|------------|
| monoethanolamine | 0.488 hPa       | > 1,000 g/l      | 0.117 |            |

To calculate if your downstream Operating Conditions and Risk management Measures are safe, please calculate your risk factor at the website below:

[www.ecetoc.org/tra](http://www.ecetoc.org/tra)

Short title of Exposure Scenario : Prespotter/Stain remover. Manual process

**Use descriptors**

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|                                  |   |                                                                                                               |
|----------------------------------|---|---------------------------------------------------------------------------------------------------------------|
| Main User Groups                 | : | Professional uses: Public domain (administration, education, entertainment, services, craftsmen)              |
| Sectors of end-use               | : | <b>SU22:</b> Professional uses: Public domain (administration, education, entertainment, services, craftsmen) |
| Process categories               | : | <b>PROC10:</b> Roller application or brushing<br><b>PROC11:</b> Non industrial spraying                       |
| Product categories               | : | <b>PC35:</b> Washing and cleaning products (including solvent based products)                                 |
| Environmental Release Categories | : | <b>ERC8a:</b> Wide dispersive indoor use of processing aids in open systems                                   |