

Safety data sheet
According to 1907/2006/EC, Article 31 REACH

Printing date 17.01.2017

Version: 1

Revision: 28.11.2016

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

1.1 Product identifier

· **Trade name:** **TUFF GREEN Evo (Listed NSF A1 n° 154869)**

· **Article number:** 84430001

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

· **Sector of Use**

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category PC35** Washing and cleaning products (including solvent based products)

· **Process category**

PROC11 Non industrial spraying

PROC7 Industrial spraying

· **Application of the substance / the mixture** Alkaline cleaner/ detergent

1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

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· **Further information obtainable from:**

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· **1.4 Emergency telephone number:**

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

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UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Eye Irrit. 2 H319 Causes serious eye irritation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

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Hazard pictograms



GHS07

Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| | | | |
|--|----------------------------|---|--------|
| CAS: 5131-66-8 EINECS: 225-878-4 Reg.nr.: 01-2119475527-28 | 3-butoxypropan-2-ol | Skin Irrit. 2, H315; Eye Irrit. 2, H319 | 2.5-5% |
| CAS: 68515-73-1 NLP: 500-220-1 Reg.nr.: 01-2119488530-36 | alkyl C8-C10 polyglucoside | Eye Dam. 1, H318 | 1-2.5% |

Ingredients according to Detergents Regulation 648/2004/EC

For the wording of the listed hazard phrases refer to section 16.

Nonionic surfactants, Anionic surfactants

< 5%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

6.2 Environmental precautions: Dilute with plenty of water.

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- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, universal binders).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

1310-73-2 sodium hydroxide (0.1-1%)

WEL (Great Britain) Short-term value: 2 mg/m³

· **DNELs**

5131-66-8 3-butoxypropan-2-ol

| | | |
|------------|---|-----------------------------------|
| Oral | DNEL Long term-systemic | 8.75 mg/kg human/day (consumer) |
| Dermal | DNEL Acute-systemic | 44 mg/kg human/day (consumer) |
| | | 16 mg/kg human/day (worker) |
| Inhalative | DNEL Long term-systemic | 16 mg/kg human/day (consumer) |
| | | 44 mg/kg human/day (worker) |
| | DNEL Long term-systemic mg/m ³ | 33.8 mg/m ³ (consumer) |
| | DNEL Acute-systemic mg/m ³ | 270.5 mg/m ³ (worker) |

68515-73-1 alkyl C8-C10 polyglucocide

| | | |
|------------|---|-----------------------------------|
| Oral | DNEL Long term-systemic | 35.7 mg/kg human/day (consumer) |
| Dermal | DNEL Long term-systemic | 357000 mg/kg human/day (consumer) |
| | | 595000 mg/kg human/day (worker) |
| Inhalative | DNEL Long term-systemic mg/m ³ | 124 mg/m ³ (consumer) |
| | | 420 mg/m ³ (worker) |

· **PNECs**

5131-66-8 3-butoxypropan-2-ol

| | |
|----------------------------------|-------------|
| PNEC Freshwater mg/L | 0.525 mg/L |
| PNEC Marinewater mg/L | 0.0525 mg/L |
| PNEC Freshwater sediment | 2.36 mg/Kg |
| PNEC Marine water sediment | 0.236 mg/Kg |
| PNEC Intermittent release | 5.25 (mg/l) |
| PNEC Soil | 0.16 mg/Kg |
| PNEC Sewage treatment Plant mg/L | 10 mg/L |

68515-73-1 alkyl C8-C10 polyglucocide

| | |
|----------------------------|------------------|
| PNEC Freshwater mg/L | 0.1000 mg/L (-) |
| PNEC Marinewater mg/L | 0.01000 mg/L (-) |
| PNEC Freshwater sediment | 0.487 mg/Kg (-) |
| PNEC Marine water sediment | 0.048 mg/Kg (-) |

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| | |
|----------------------------------|------------------|
| PNEC Intermittent release | 0.270 (-) (mg/L) |
| PNEC Soil | 0.654 mg/Kg (-) |
| PNEC Sewage treatment Plant mg/L | 560 mg/L (-) |

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**

Rubber gloves



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Rubber gloves

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Not suitable are gloves made of the following materials:** Strong material gloves

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Colour: Colourless

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value at 20 °C:** 11.4

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 110 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

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| | |
|--|--|
| Upper: | Not determined. |
| · Vapour pressure at 20 °C: | 23 hPa |
| · Density at 20 °C: | 1.008 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Fully miscible. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| EU-VOC | 0.00 % |
| Swiss VOC: | 4.00 % |
| Solids content: | 1.5 % |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

5131-66-8 3-butoxypropan-2-ol

| | | |
|--------|-----------------------|--|
| Oral | LD50 | 3300 mg/kg (Rat) |
| Dermal | LD50 | >2000 mg/kg (Rat) |
| | LC50 / 96 h (static) | 560-1000 mg/ltr (fish) (Poecilia reticulata) |
| | EC 50 / 48 h (static) | >1000 mg/ltr (Daphnia magna (water flea)) |
| | EC 50 / 96 h (static) | >1000 mg/ltr (Selenastrum capricornutum (Algae)) |

68515-73-1 alkyl C8-C10 polyglucocide

| | | |
|--------|------|--------------------|
| Dermal | LD50 | > 2000 mg/kg (Rat) |
|--------|------|--------------------|

- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation
Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- 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.

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

5131-66-8 3-butoxypropan-2-ol

OECD test 301 E 90 (biodegradation in % after 28 days)

· 12.2 Persistence and degradability

No further relevant information available.

· Other information:

The product is biodegradable.

· 12.3 Bioaccumulative potential

No further relevant information available.

· 12.4 Mobility in soil

No further relevant information available.

· Additional ecological information:

· General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up

to at least 90 %.

· 12.5 Results of PBT and vPvB assessment

· PBT:

Not applicable.

· vPvB:

Not applicable.

· 12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· Uncleaned packaging:

· Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number

ADR, ADN, IMDG, IATA

Void

· 14.2 UN proper shipping name

ADR, ADN, IMDG, IATA

Void

· 14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class

Void

· 14.4 Packing group

ADR, IMDG, IATA

Void

· 14.5 Environmental hazards:

Not applicable.

· 14.6 Special precautions for user

Not applicable.

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

Not applicable.

· UN "Model Regulation":

Void

SECTION 15: Regulatory information

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

Reg. (EC) n. 1272/2008 - CLP;

Reg. (EC) n. 1907/2006 - Reach;

Reg. (EC) n. 2015/830 annex II of REACH;

Reg. (EC) n. 648/04 (Detergents);

Reg. (EC) n. 528/12 (Biocides BPR);

Reg. (EC) n. 1223/2009 (Cosmetics);

Dir. 06/08 ADR - RID - IMDG - IATA;

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Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);
 Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations:**
- **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.

- **Department issuing SDS:**

Customer Service
 NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
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- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

- *** Data compared to the previous version altered.**