



SAFETY DATA SHEET

Muc-Off Bike Cleaner Concentrate

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

1.1. Product identifier

Product name Muc-Off Bike Cleaner Concentrate
Product number 347, 348, 354

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

Identified uses Detergent. SURFACTANT

1.3. Details of the supplier of the safety data sheet

Supplier Muc- Off Ltd
 Unit 1, 1st Floor, Innovation
 Close, Concept Office Park,
 Poole, Dorset
 BH12 4QT
 +44 (0) 1202 307790
 info@muc-off.com

1.4. Emergency telephone number

Emergency telephone 44 (0) 1202 307790 (Office Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards Not Classified
Health hazards Eye Irrit. 2 - H319
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xi; R36

2.2. Label elements

Pictogram



Signal word Warning
Hazard statements H319 Causes serious eye irritation.

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Precautionary statements P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | |
|--|--|
| ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS | 5-10% |
| CAS number: 68891-38-3 | EC number: 500-234-8 |
| | REACH registration number: 01-2119488639-16 |
| Classification | Classification (67/548/EEC or 1999/45/EC) |
| Skin Irrit. 2 - H315 | Xi; R38, R41 |
| Eye Dam. 1 - H318 | |
| Aquatic Chronic 3 - H412 | |

| | |
|-----------------------|--|
| GLYCERINE | > 1 |
| CAS number: 56-81-5 | EC number: 200-289-5 |
| | REACH registration number: 01-2119471987-18-XXXX |
| Classification | Classification (67/548/EEC or 1999/45/EC) |
| Not Classified | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------|---|
| Inhalation | Remove affected person from source of contamination. Get medical attention if any discomfort continues. |
| Ingestion | Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues. |
| Skin contact | Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing. |

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

Eye contact Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NOx). Sulphurous gases (SOx).

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid contact with eyes and prolonged skin contact.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

GLYCERINE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS (CAS: 68891-38-3)

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DNEL Industry - Dermal; Long term systemic effects: 2750 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 175 mg/m³
 Consumer - Dermal; Long term systemic effects: 1650 mg/kg/day
 Consumer - Oral; Long term systemic effects: 15 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 52 mg/m³

PNEC - Fresh water; 0.24 mg/l
 - Soil; 0.946 mg/kg
 - STP; 10000 mg/l
 - Marine water; 0.024 mg/l
 - Intermittent release; 0.071 mg/l
 - Sediment (Freshwater); 5.45 mg/kg
 - Sediment (Marinewater); 0.545 mg/kg

GLYCERINE (CAS: 56-81-5)

Ingredient comments WEL = Workplace Exposure Limits

DNEL Industry - Inhalation; Long term local effects: 56 mg/m³

PNEC - Fresh water; 0.885 mg/l
 - Marine water; 0.0885 mg/l
 - Intermittent release; 8.85 mg/l
 - STP; 1000 mg/l
 - Soil; 0.141 mg/kg
 - Sediment (Freshwater); 3.3 mg/kg
 - Sediment (Marinewater); 0.33 mg/kg

SODIUM METASILICATE PENTAHYDRATE (CAS: 10213-79-3)

DNEL Workers - Dermal; Long term : 1.49 mg/kg/day
 Workers - Inhalation; Long term : 6.22 mg/m³
 Consumer - Dermal; Long term : 0.74 mg/kg/day
 Consumer - Inhalation; Long term : 1.55 mg/m³
 Consumer - Oral; Long term : 0.74 mg/kg/day

PNEC - Fresh water; 7.5 mg/l
 - Marine water; 1 mg/l
 - Water, Intermittent release; 7.5 mg/l
 - STP; 1000 mg/l

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

DNEL Workers - Inhalation; Short term local effects: 2.5 mg/m³
 Workers - Inhalation; Long term local effects: 2.5 mg/m³
 Consumer - Inhalation; Short term local effects: 1.5 mg/m³
 Consumer - Inhalation; Long term local effects: 1.5 mg/m³
 Consumer - Oral; Long term systemic effects: 25 mg/kg/day

PNEC - Fresh water; 2.2 mg/l
 - Marine water; 0.22 mg/l
 - Intermittent release; 1.2 mg/l
 - Soil; 0.72 mg/kg
 - STP; 43 mg/l

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Provide eyewash station and safety shower.

Eye/face protection

The following protection should be worn: Chemical splash goggles. EN 166

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Neoprene. EN 374

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Gas filter, type A2. EN 136/140/145/143/149

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Appearance | Coloured liquid. |
| Colour | Pink. |
| Odour | Characteristic. |
| pH | pH (concentrated solution): 11.20 - 11.40 |
| Initial boiling point and range | Data lacking. |
| Flash point | Data lacking. |
| Upper/lower flammability or explosive limits | Data lacking. |
| Vapour pressure | Data lacking. |
| Relative density | 1.085 - 1.101 |
| Solubility(ies) | Soluble in water. |
| Decomposition Temperature | Data lacking. |
| Explosive properties | Data lacking. |
| Oxidising properties | Data lacking. |

9.2. Other information

| | |
|-------------------|-----------------|
| Other information | Not determined. |
|-------------------|-----------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|------------|---|
| Reactivity | There are no known reactivity hazards associated with this product. |
|------------|---|

10.2. Chemical stability

| | |
|-----------|---|
| Stability | Stable at normal ambient temperatures and when used as recommended. |
|-----------|---|

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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NOx). Sulphurous gases (SOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No information available.

Skin corrosion/irritation

Animal data Data lacking.

Respiratory sensitisation

Respiratory sensitisation Data lacking.

Skin sensitisation

Skin sensitisation Data lacking.

Germ cell mutagenicity

Genotoxicity - in vitro Data lacking.

Carcinogenicity

Carcinogenicity Data lacking.

Reproductive toxicity

Reproductive toxicity - fertility Data lacking.

Specific target organ toxicity - single exposure

STOT - single exposure Data lacking.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Data lacking.

Aspiration hazard

Aspiration hazard Data lacking.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion

Gastrointestinal symptoms, including upset stomach. May cause stomach pain or vomiting.

Skin contact

Prolonged and frequent contact may cause redness and irritation.

Eye contact

Causes serious eye irritation.

Toxicological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

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Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rat

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Inhalation May cause respiratory system irritation.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact Causes skin irritation.

Eye contact Causes serious eye damage.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Acute toxicity - fish LC50, 96 hours: 7.1 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 7.4 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 27.7 mg/l, Algae
NOEC, 72 hours: 0.95 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

Ecological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation (%) 100: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available.

Ecological information on ingredients.

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ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.
BCF: < 3,

Partition coefficient log Pow: 0.3

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

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 (as amended).

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

15/09/2016

Revision

04

Supersedes date

09/03/2016

Version number

2.000

Muc-Off Bike Cleaner Concentrate

| | |
|----------------------------------|---|
| SDS status | Approved. |
| Signature | Muc-Off Ltd |
| Risk phrases in full | R20/22 Harmful by inhalation and if swallowed. R38 Irritating to skin. R41 Risk of serious damage to eyes. |
| Hazard statements in full | H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects. |