



## 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

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

<b>GLYCERINE</b>	<b>&gt; 1</b>
CAS number: 56-81-5	EC number: 200-289-5
	REACH registration number: 01-2119471987-18-XXXX
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
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

<b>Inhalation</b>	Remove affected person from source of contamination. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	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

## Muc-Off Bike Cleaner Concentrate

**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/m<sup>3</sup> mist

WEL = Workplace Exposure Limit

**Ingredient comments** WEL = Workplace Exposure Limits

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

## Muc-Off Bike Cleaner Concentrate

**DNEL** Industry - Dermal; Long term systemic effects: 2750 mg/kg/day  
 Industry - Inhalation; Long term systemic effects: 175 mg/m<sup>3</sup>  
 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/m<sup>3</sup>

**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/m<sup>3</sup>

**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/m<sup>3</sup>  
 Consumer - Dermal; Long term : 0.74 mg/kg/day  
 Consumer - Inhalation; Long term : 1.55 mg/m<sup>3</sup>  
 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/m<sup>3</sup>  
 Workers - Inhalation; Long term local effects: 2.5 mg/m<sup>3</sup>  
 Consumer - Inhalation; Short term local effects: 1.5 mg/m<sup>3</sup>  
 Consumer - Inhalation; Long term local effects: 1.5 mg/m<sup>3</sup>  
 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

## Muc-Off Bike Cleaner Concentrate

### 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.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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## Muc-Off Bike Cleaner Concentrate

### 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**

## Muc-Off Bike Cleaner Concentrate

### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Oral, Rat

### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> > 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** EC<sub>50</sub>, 48 hours: 7.4 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 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.

## Muc-Off Bike Cleaner Concentrate

### 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



## Muc-Off Bike Cleaner Concentrate

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

## Muc-Off Bike Cleaner Concentrate

### 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.  
 LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
 LD<sub>50</sub>: 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.  
 EC<sub>50</sub>: 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

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