# Muc-Off Drivetrain Cleaner

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 09/03/2015 Revision date: 10/07/2024 Version: 7.0

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Product name | : | Muc-Off Drivetrain Cleaner |
| Product code | : | 255, 295-CRC, 295-CT, 304, 319-CT, 332, 807, 808, 21560 |
| Product group | : | End product |
| UFI | : | QJY1-S0KD-Y00C-P7XA |

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

#### 1.2.1. Relevant identified uses

No additional information available

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Muc-Off Ltd
UK - Muc-Off Ltd, Unit 23 Branksome Business Park, Bourne Valley Road, Poole, Dorset, BH12 1DW
EU - Muc-Off Ltd, Unit 3D North Point House, North Point Business Park, New Mallow Road, Cork, Ireland, T23 AT2P
Tel: +44(0)1202 307790 Email: info@muc-off.com

### 1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number | Comment |
|---|---|---|---|---|
| United Kingdom | NHS 111/NHS 24/NHS Direct | Edinburgh | 111<br>0845 4647 | or call a doctor |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

| | |
|---|---|
| Skin corrosion/irritation, Category 2 | H315 |
| Serious eye damage/eye irritation, Category 2 | H319 |
| Aspiration hazard, Category 1 | H304 |

Full text of H- and EUH-statements: see section 16

**Adverse physicochemical, human health and environmental effects**

Causes skin irritation. Causes serious eye irritation. May be fatal if swallowed and enters airways.

### 2.2. Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS07 GHS08

Signal word (CLP) : Danger

Contains : HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

| | | |
|---|---|---|
| Hazard statements (CLP) | : | H304 - May be fatal if swallowed and enters airways.<br>H315 - Causes skin irritation.<br>H319 - Causes serious eye irritation. |
| Precautionary statements (CLP) | : | P101 - If medical advice is needed, have product container or label at hand.<br>P102 - Keep out of reach of children.<br>P264 - Wash hands thoroughly after handling.<br>P280 - Wear protective gloves/protective clothing/eye protection/face protection.<br>P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.<br>P302+P352 - IF ON SKIN: Wash with plenty of water.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P331 - Do NOT induce vomiting.<br>P332+P313 - If skin irritation occurs: Get medical advice/attention.<br>P337+P313 - If eye irritation persists: Get medical advice/attention.<br>P362+P364 - Take off contaminated clothing and wash it before reuse.<br>P501 - Dispose of contents/container to an approved waste disposal plant. |

### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS | EC-No.: 926-141-6<br>REACH-no: 01-2119456620-43 | ≥ 70 | Asp. Tox. 1, H304 |
| BUTYL GLYCOL EU<br>substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit | CAS-No.: 111-76-2<br>EC-No.: 203-905-0<br>EC Index-No.: 603-014-00-0<br>REACH-no: 01-2119475108-36 | 5 - 14.9 | Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Inhalation), H331<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319 |
| AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD, N,N-BIS(HYDROXYETHYL) | CAS-No.: 68155-07-7<br>EC-No.: 931-329-6<br>REACH-no: 01-2119490100-53 | 1 - 2.4 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Aquatic Chronic 2, H411 |

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

| | | |
|---|---|---|
| First-aid measures general | : | Call a physician immediately. |
| First-aid measures after inhalation | : | Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : | Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. |

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : Risk of lung oedema.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| BUTYL GLYCOL EU (111-76-2) | |
|---|---|
| **EU - Indicative Occupational Exposure Limit (IOEL)** | |
| Local name | 2-Butoxyethanol |
| IOEL TWA [ppm] | 20 ppm |
| IOEL STEL | 246 mg/m³ |
| IOEL STEL [ppm] | 50 ppm |
| Remark | Skin |
| Regulatory reference | COMMISSION DIRECTIVE 2000/39/EC |
| **United Kingdom - Occupational Exposure Limits** | |
| Local name | 2-Butoxyethanol |
| WEL TWA (OEL TWA) [1] | 123 mg/m³ |
| WEL TWA (OEL TWA) [2] | 25 ppm |
| WEL STEL (OEL STEL) | 246 mg/m³ |
| WEL STEL (OEL STEL) [ppm] | 50 ppm |
| Remark | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity) |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |
| **United Kingdom - Biological limit values** | |
| Local name | 2-Butoxyethanol |
| BMGV | 240 mmol/mol Creatinine Parameter: butoxyacetic acid - Medium: urine - Sampling time: Post shift |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

**Personal protective equipment symbol(s):**



#### 8.2.2.1. Eye and face protection

**Eye protection:**
Safety glasses

#### 8.2.2.2. Skin protection

**Skin and body protection:**
Wear suitable protective clothing

**Hand protection:**
Protective gloves

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**
In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**
Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | Yellow. |
| Odour | : | Sweet-smelling. |
| Odour threshold | : | Not available |
| Melting point | : | No data available. |
| Freezing point | : | Not available |
| Boiling point | : | > 35 °C |
| Flammability | : | Non flammable. |
| Explosive limits | : | Not available |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | 60 – 93 °C |
| Auto-ignition temperature | : | Not applicable. |
| Decomposition temperature | : | Not available |
| pH | : | Not applicable |
| Viscosity, kinematic | : | < 20 mm²/s |
| Solubility | : | Not available |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |
| Vapour pressure at 50°C | : | Not available |
| Density | : | Not available |
| Relative density | : | 0.835 |
| Relative vapour density at 20°C | : | No data available. |
| Particle characteristics | : | Not applicable |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS | |
|---|---|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal | > 2000 mg/kg |

| AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD, N,N-BIS(HYDROXYETHYL) (68155-07-7) | |
|---|---|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg Source: ECHA Chem |

| BUTYL GLYCOL EU (111-76-2) | |
|---|---|
| LD50 oral rat | 1746 mg/kg |
| LD50 oral | 1230 mg/kg |
| LD50 dermal rat | > 2000 mg/kg Source: ECHA |

Skin corrosion/irritation : Causes skin irritation.
pH: Not applicable

Serious eye damage/irritation : Causes serious eye irritation.
pH: Not applicable

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

| BUTYL GLYCOL EU (111-76-2) | |
|---|---|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

| BUTYL GLYCOL EU (111-76-2) | |
|---|---|
| NOAEL (dermal, rat/rabbit, 90 days) | > 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study), Remarks on results: other: |

Aspiration hazard : May be fatal if swallowed and enters airways.

| Muc-Off Drivetrain Cleaner | |
|---|---|
| Viscosity, kinematic | < 20 mm²/s |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

| HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS | |
|---|---|
| LC50 - Fish [1] | > 10 mg/l |
| EC50 - Other aquatic organisms [1] | > 10 mg/l |

| AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD, N,N-BIS(HYDROXYETHYL) (68155-07-7) | |
|---|---|
| LC50 - Fish [1] | 2.4 mg/l |
| EC50 - Crustacea [1] | 3.2 mg/l Source: ECHA Chem |

| BUTYL GLYCOL EU (111-76-2) | |
|---|---|
| LC50 - Fish [1] | 1474 mg/l |
| EC50 - Crustacea [1] | ≈ 1800 mg/l Test organisms (species): Daphnia magna |
| EC50 - Other aquatic organisms [1] | 1550 mg/l |
| EC50 72h - Algae [1] | 911 mg/l Source: ECHA |
| NOEC (chronic) | 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC chronic fish | ≥ 100 mg/l Test organisms (species): Oryzias latipes Duration: '14 d' |

### 12.2. Persistence and degradability

| Muc-Off Drivetrain Cleaner | |
|---|---|
| Persistence and degradability | Readily biodegradable. |

### 12.3. Bioaccumulative potential

| AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD, N,N-BIS(HYDROXYETHYL) (68155-07-7) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | ≤ 4.84 Source: ECHA Chem |

| BUTYL GLYCOL EU (111-76-2) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 0.81 Source: ECHA |

### 12.4. Mobility in soil

| AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD, N,N-BIS(HYDROXYETHYL) (68155-07-7) | |
|---|---|
| Mobility in soil | 3.662 Source: EPISUITE |

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with ADR / IMDG

| ADR | IMDG |
|---|---|
| NOT SUBJECT | |
| **14.1. UN number or ID number** | |
| UN - | Not applicable |
| **14.2. UN proper shipping name** | |
| Not applicable | Not applicable |
| **14.3. Transport hazard class(es)** | |
| Not applicable | Not applicable |
| **14.4. Packing group** | |
| Not applicable | Not applicable |
| **14.5. Environmental hazards** | |
| Dangerous for the environment: No | Not applicable |
| No supplementary information available | |

### 14.6. Special precautions for user

**Overland transport**
No data available

**Transport by sea**
Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

**REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

**REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

**REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

**PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

**POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

**Ozone Regulation (1005/2009)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

**Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

**Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| Abbreviations and acronyms: | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |

| Abbreviations and acronyms: | |
|---|---|
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disrupting properties |

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhal.), Category 3 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |

| Full text of H- and EUH-statements: | |
|---|---|
| H331 | Toxic if inhaled. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.