

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 9/30/2019 Version: 1.0

| SECTION 1: Identification of the substan | ce/mixture and of the company | /undertaking | |
|---|--|--|--|
| 1.1. Product identifier | | | |
| | : Substance | | |
| | : Bufexamac | | |
| IUPAC name | : 2-(4-butoxyphenyl)-N-hydroxyacetamide | | |
| EC-No. | : 219-451-1 | | |
| CAS-No. | : 2438-72-4 | | |
| Product code | : 50692579 | | |
| Formula | : C12H17NO3 | | |
| Product group | : Raw material | | |
| 1.2. Relevant identified uses of the substance | or mixture and uses advised agai | nst | |
| 1.2.1. Relevant identified uses | | | |
| | Laboratory use, Industrial use, Profession | al use | |
| 0.1 | For professional use only | | |
| | For analytical purposes | | |
| | Scientific research and development Not for human consumption or veterinary | / purposes. | |
| 1.2.2. Uses advised against No additional information available | | | |
| 1.3. Details of the supplier of the safety data s | sheet | | |
| Supplier | | | |
| Scafell Organics Molekula Ltd Lingfield Way Darlington - England T +44 (0) 1949 823777 / +44 (0) 7590 545705 info@molekula.com / kbowen@molekula.com - www.m | olekula.com | | |
| 1.4. Emergency telephone number | | | |
| | 4 (0) 7590 545705 | | |
| | | | |
| SECTION 2: Hazards identification | | | |
| 2.1. Classification of the substance or mixture | 2 | | |
| Classification according to Regulation (EC) No. 127 Not classified | 2/2008 [CLP] | | |
| Adverse physicochemical, human health and envir No additional information available | onmental effects | | |
| 2.2. Label elements | | | |
| Not classified. | | | |
| 2.3. Other hazards | | | |
| This substance/mixture does not meet the PBT criteria | of REACH regulation, annex XIII | | |
| This substance/mixture does not meet the vPvB criteria | - | | |
| SECTION 3: Composition/information on | ingredients | | |
| 3.1. Substances | | | |
| Name | Product identifier | % | |
| Bufexamac | (CAS-No.) 2438-72-4 | 100 | |
| | (EC-No.) 219-451-1 | | |
| 3.2. Mixtures | | | |
| Not applicable | | | |
| | | | |
| SECTION 4: First aid measures | | | |
| 4.1. Description of first aid measures First-aid measures general | . If possible show this sheat if not availab | ale show packaging or label. Nover give enuthing by | |
| ו ווסו-מוע ווובמסעובס טבוובומו | mouth to an unconscious person. Do no | ble show packaging or label. Never give anything by t leave affected person unattended. | |
| First-aid measures after inhalation | : If breathing is difficult, remove victim to | fresh air and keep at rest in a position comfortable | |

persist : Get medical advice/attention.

for breathing. Give oxygen or artificial respiration if necessary. If breathing difficulties

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| First-aid measures after skin contact | : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. If irritation persists, consult a doctor. |
|--|--|
| First-aid measures after eye contact | : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention. |
| 4.2. Most important symptoms and effects | s, both acute and delayed |
| Symptoms/effects | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Symptoms/effects after inhalation | : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. |
| Symptoms/effects after skin contact | : Dust may cause irritation in skin folds or by contact in combination with tight clothing. |
| Symptoms/effects after eye contact | : May cause eye irritation. redness, itching, tears. |
| Symptoms/effects after ingestion | : May cause irritation to the digestive tract. Abdominal pain, nausea. |
| 4.3. Indication of any immediate medical a | attention and special treatment needed |
| Treat symptomatically. | |

| SECTION 5: Firefighting measures | | |
|--|--|--|
| 5.1. Extinguishing media | | |
| Suitable extinguishing media | : Foam. Dry powder. Carbon dioxide. Water spray. Sand. | |
| Unsuitable extinguishing media | : Do not use a heavy water stream. | |
| 5.2. Special hazards arising from the substance or mixture | | |
| Hazardous decomposition products in case of fire | : Carbon oxides (CO, CO2). Nitrogen oxides. | |
| 5.3. Advice for firefighters | | |
| Precautionary measures fire | : Keep container tightly closed and away from heat, sparks and flame. Keep away from combustible materials. | |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. | |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. | |
| Other information | : Warn all persons of toxic hazard. | |

| SECTION 6: Accidental release measures | | | |
|--|--|--|--|
| 6.1. Personal precautions, protective equipr | nent and emergency procedures | | |
| General measures | : Isolate from fire, if possible, without unnecessary risk. Avoid dust formation. No flames, no sparks. Eliminate all sources of ignition. | | |
| 6.1.1. For non-emergency personnel | | | |
| Protective equipment | : Wear recommended personal protective equipment. | | |
| Emergency procedures | : Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Do not touch or walk on the spilled product. Avoid contact with skin, eyes and clothing. | | |
| Measures in case of dust release | : Keep upwind. Avoid creating or spreading dust. Ventilate the area thoroughly, especially low lying areas (basements, workpits etc). | | |
| 6.1.2. For emergency responders | | | |
| Protective equipment | : Equip cleanup crew with proper protection. Use self-contained breathing apparatus and chemically protective clothing. | | |
| Emergency procedures | : Ventilate area. | | |
| 6.2. Environmental precautions | | | |
| Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. | | | |
| 6.3. Methods and material for containment a | | | |
| Methods for cleaning up | : On land, sweep or shovel into suitable containers. Shovel or sweep up and put in a closed container for disposal. | | |

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

| SECTION 7: Handling and storage 7.1. Precautions for safe handling | |
|---|--|
| Precautions for safe handling | : Avoid creating or spreading dust. Provide local exhaust or general room ventilation. |
| Hygiene measures | : Take off immediately all contaminated clothing and wash it before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. |
| 7.2. Conditions for safe storage, including | any incompatibilities |
| Technical measures | : Ensure adequate ventilation, especially in confined areas. |
| Storage conditions | : Keep only in the original container in a cool, well ventilated place away from : Heat sources, Direct sunlight. Keep container closed when not in use. |

| Bufexamac | ot | | | | | | |
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| Incompatible products | | : Strong oxidizing agents. | | | | | |
| ncompatible materials | | | : Sources of ignition. Direct sunlight. Heat sources. | | | | |
| leat and ignition source | S | | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. N smoking. | | | | |
| Storage area | | | : Store below 20 ° | C. Store in a dry place. | Store in a clos | ed containe | r. |
| 7.3. Specific end use For analytical purposes. | | search and d | evelopment. Not for hur | nan consumption or vet | erinary purpos | es. | |
| SECTION 8: Expos 3.1. Control paramet No additional information 3.2. Exposure contro Appropriate engineerin Handle in accordance wi | ters n available ols ng controls: | | | | | | |
| Personal protective eq | uipment: | | | | | | |
| Materials for protectiv | e clothing: | | | | | | |
| Wear suitable protective | e clothing, gl | oves and eye | e/face protection | | | | |
| Hand protection: | | | | | | | |
| The protective gloves to | be used mu | ust comply wi | th the specifications of t | he regulation 2016/425 | and the result | ant standard | I EN 374 |
| Туре | Material | | Permeation | Thickness (mm) | Penetratio | on | Standard |
| Disposable gloves | Nitrile rubb | er (NBR) | 6 (> 480 minutes) | 0.11 | EN 374 | | EN 374 |
| Eye protection: | | | | | | | |
| Emergency eye wash fo designed to protect aga | | | ble in the immediate vic | nity of any potential exp | osure. Use ey | e protection | according to EN 166 |
| Туре | Use | | | Characteristics | | Standard | |
| | | | | Characteristics | | Standard | |
| | | Fine dust, D | Just | With side shields | | Standard EN 166 | |
| Safety glasses Skin and body protect | tion: | Fine dust, D | Dust | | | | |
| Safety glasses Skin and body protect Emergency safety show | vers should b | pe available i | | With side shields | e. Keep suita | EN 166 | lly resistant protective |
| Safety glasses Skin and body protect Emergency safety show clothing readily availabl | vers should b | pe available i | | With side shields | e. Keep suita | EN 166 | lly resistant protective |
| Safety glasses Skin and body protect Emergency safety show clothing readily availabl Type | vers should b e for emerge | pe available i | | With side shields of any potential exposu | e. Keep suita | EN 166 | lly resistant protective |
| Safety glasses Skin and body protect Emergency safety show clothing readily availabl Type Long sleeved protective | vers should b e for emerge e clothing | pe available i | | With side shields of any potential exposu Standard | e. Keep suita | EN 166 | lly resistant protective |
| Safety glasses Skin and body protect Emergency safety show clothing readily availabl Type Long sleeved protective Respiratory protection | vers should b e for emerge e clothing n: | pe available in ency use | n the immediate vicinity | With side shields of any potential exposu Standard EN ISO 13982 | | EN 166 ble chemica | |
| Safety glasses | vers should b e for emerge e clothing n: | pe available in ency use | n the immediate vicinity | With side shields of any potential exposu Standard EN ISO 13982 | | EN 166 ble chemica | |

Other information:

Do not eat, drink or smoke during use.

| SECTION 9: Physical and chemical pr 9.1. Information on basic physical and che Physical state | |
|---|-----------------------|
| Appearance | : Powder. |
| Molecular mass | : 223.27 g/mol |
| Colour | : White to off-white. |
| Odour | : No data available. |
| Odour threshold | : No data available |
| рН | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |

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| Flash point | : No data available | | |
|----------------------------------|---------------------|--|--|
| Auto-ignition temperature | : No data available | | |
| Decomposition temperature | : No data available | | |
| Flammability (solid, gas) | : Non flammable. | | |
| Vapour pressure | : No data available | | |
| Relative vapour density at 20 °C | : No data available | | |
| Relative density | : No data available | | |
| Solubility | : No data available | | |
| Log Pow | : No data available | | |
| Viscosity, kinematic | : No data available | | |
| Viscosity, dynamic | : No data available | | |
| Explosive properties | : No data available | | |
| Oxidising properties | : No data available | | |
| Explosive limits | : No data available | | |
| 9.2 Other information | | | |

9.2. Other information 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 recommended handling and storage conditions (see section 7). |
| 10.3. Possibility of hazardous reactions |
| No dangerous reactions known under normal conditions of use. |
| 10.4. Conditions to avoid |
| Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| 10.5. Incompatible materials |
| Strong oxidizers. |
| 10.6. Hazardous decomposition products |
| No hazardous decomposition products known at room temperature. Thermal decomposition generates : Carbon oxides (CO, CO2). Nitrogen oxides. |

| SECTION 11: Toxicological information | tion |
|---|--|
| 11.1. Information on toxicological effect | |
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Bufexamac (2438-72-4) | |
| LD50 oral rat | 3370 mg/kg |
| LD50 dermal rat | > 5000 mg/kg |
| Skin corrosion/irritation | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Respiratory or skin sensitisation | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Germ cell mutagenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Reproductive toxicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-single exposure | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-repeated exposure | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| | |

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Potential adverse human health effects and symptoms

: Based on available data, the classification criteria are not met.

| SECTION 12: Ecological inform | ation | | |
|---|--|--|--|
| 12.1. Toxicity | | | |
| Acute aquatic toxicity | : Not classified | | |
| Chronic aquatic toxicity | : Not classified | | |
| 12.2. Persistence and degradability | | | |
| Bufexamac (2438-72-4) | | | |
| Persistence and degradability | No data available. | | |
| 12.3. Bioaccumulative potential | 12.3. Bioaccumulative potential | | |
| Bufexamac (2438-72-4) | | | |
| Bioaccumulative potential | No data available. | | |
| 12.4. Mobility in soil | | | |
| No additional information available | | | |
| 12.5. Results of PBT and vPvB ass | essment | | |
| Bufexamac (2438-72-4) | | | |
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII | | | |
| This substance/mixture does not meet th | This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | | |
| 12.6. Other adverse effects | | | |
| Additional information | : Avoid release to the environment. | | |

| SECTION 13: Disposal considerations | |
|--|---|
| 13.1. Waste treatment methods | |
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials | : Avoid release to the environment. |
| | |
| | |

| ADR | IMDG | ΙΑΤΑ | ADN | RID |
|------------------------------|---------------|---------------|---------------|---------------|
| 14.1. UN number | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| I4.2. UN proper shippin | ig name | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard | class(es) | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.5. Environmental ha | zards | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| lo supplementary information | on available | | | |

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport Not regulated

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

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

No REACH Annex XVII restrictions Bufexamac is not on the REACH Candidate List Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

| SECTION 16: Other information | | |
|-------------------------------|---|--|
| Data sources | : 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. | |
| Other information | : None. | |

SDS EU (REACH Annex II)

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.