



Safety Data Sheet

Acc. to 29 CFR 1910.1200 App D

Auto Enzyme

Version number: GHS 1.0

Date of compilation: 2019-08-13

SECTION 1: Identification

1.1 Product identifier

Trade name **Bloomco Auto Enzyme**

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

Relevant identified uses **General use**

1.3 Details of the supplier of the safety data sheet

Bloomco, Division of Double B Automotive Warehousing Inc.

5035 North Service Road, #B1
Burlington, Ontario, Canada L7L 5V2

Telephone: (905) 332-8070 OR

1-(800) 667-9168

Website: Bloomco.ca

Email: info@bloomco.ca

1.4 Emergency telephone number

Emergency information service

CANUTEC 613-996-6666 OR *666 for cell phones

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

| Section | Hazard class | Category | Hazard class and category | Hazard statement |
|---------|-----------------------------------|----------|---------------------------|------------------|
| A.3 | serious eye damage/eye irritation | 2 | Eye Irrit. 2 | H319 |

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word **warning**

- Pictograms

GHS07



- Hazard 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.

P337+P313

If eye irritation persists: Get medical advice/attention.

H319

Causes serious eye irritation.

- Precautionary statements



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2.3 Other hazards

Hazards not otherwise classified

Harmful to aquatic life (GHS category 3: aquatic toxicity - acute).

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

| Hazardous ingredients acc. to GHS | | | | |
|-----------------------------------|----------------------|----------|--|-------|
| Name of substance | Identifier | Wt% | Classification acc. to GHS | Notes |
| enzymes | | 3 – < 12 | Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 | |
| Alcohols, C9-11 ethoxylated | CAS No 68439-46-3 | 1 – < 3 | Acute Tox. 4 / H302 Acute Tox. 4 / H312 Eye Dam. 1 / H318 | |

For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

SECTION 4: First-aid measures

4.1 Description of first-aid measures General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth. **Following inhalation**

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air. **Following skin contact**

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media Water

jet



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5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures For non-emergency personnel Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10.

Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Control of the effects

Protect against external exposure, such as Frost

7.3 Specific end use(s)

See section 16 for a general overview.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

This information is not available.

Relevant DNELs of components of the mixture

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|-----------------------------|------------|----------|-----------------------|------------------------------------|-------------------|----------------------------|
| Alcohols, C9-11 ethoxylated | 68439-46-3 | DNEL | 2,080 mg/kg | human, dermal | worker (industry) | chronic - systemic effects |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | DNEL | 294 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |

Relevant PNECs of components of the mixture

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|-----------------------------|------------|----------|-----------------|-----------------------|------------------------------|------------------------------|
| Alcohols, C9-11 ethoxylated | 68439-46-3 | PNEC | 0.1038 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | PNEC | 0.1038 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | PNEC | 1.4 mg/l | microorganisms | sewage treatment plant (STP) | short-term (single instance) |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | PNEC | 13.7 mg/kg | benthic organisms | sediment | short-term (single instance) |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | PNEC | 13.7 mg/kg | pelagic organisms | sediment | short-term (single instance) |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | PNEC | 1 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | PNEC | 0.014 mg/l | aquatic organisms | water | intermittent release |



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8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|----------------|---------------------|
| Physical state | liquid |
| Color | translucent - white |
| Odor | fresh |

Other safety parameters

| | |
|---|-----------------------|
| pH (value) | 6 – 7.5 (25 °C) |
| Melting point/freezing point | not determined |
| Initial boiling point and boiling range | 100 °C |
| Flash point | not determined |
| Evaporation rate | not determined |
| Flammability (solid, gas) | not relevant, (fluid) |
| Explosive limits | not determined |
| Vapor pressure | 31.69 hPa at 25 °C |



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| | |
|------------------|---|
| Density | not determined |
| Vapor density | this information is not available |
| Relative density | information on this property is not available |

Solubility(ies)

| | |
|--------------------|----------------------------|
| - Water solubility | miscible in any proportion |
|--------------------|----------------------------|

Partition coefficient

| | |
|-----------------------------|-----------------------------------|
| - n-octanol/water (log KOW) | this information is not available |
| Auto-ignition temperature | 311 °C |
| Viscosity | not determined |
| Explosive properties | none |
| Oxidizing properties | none |

9.2 Other information

| | |
|--|--|
| Temperature class (USA, acc. to NEC 500) | T2 (maximum permissible surface temperature on the equipment: 300°C) |
|--|--|

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.
Hazardous combustion products: see section 5.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity estimate (ATE) of components of the mixture | | | |
|--|------------|----------------|-------------|
| Name of substance | CAS No | Exposure route | ATE |
| enzymes | | oral | 569.6 mg/kg |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | oral | 1,200 mg/kg |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | dermal | 2,000 mg/kg |

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation Causes

serious eye irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life.

| Aquatic toxicity (acute) of components of the mixture | | | | | |
|---|--------|----------|-------|---------|---------------|
| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
| | | | | | |



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| | | | | | |
|-----------------------------|------------|-------|-------------------------|----------------|------|
| Alcohols, C9-11 ethoxylated | 68439-46-3 | LC50 | 8.5 mg/l | fathead minnow | 96 h |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | EC50 | 5.3 mg/l | daphnia magna | 48 h |
| Alcohols, C9-11 ethoxylated | 68439-46-3 | ErC50 | 1 – 10 ^{mg} /l | algae | 96 h |

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential
None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets. Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

| | | |
|------|---|---|
| 14.1 | UN number | not subject to transport regulations |
| 14.2 | UN proper shipping name | not assigned |
| 14.3 | Transport hazard class(es) | not assigned |
| 14.4 | Packing group | not assigned |
| 14.5 | Environmental hazards | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | Special precautions for user | There is no additional information. |
| 14.7 | Transport in bulk according to Annex II of MARPOL and the IBC Code | The cargo is not intended to be carried in bulk. |

Information for each of the UN Model Regulations



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Transport of dangerous goods by road or rail (49 CFR US DOT)

Not subject to transport regulations.

International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.



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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question National regulations (United States) Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)
none of the ingredients are listed
- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987 none of the ingredients are listed **VOC content**

Regulated Volatile Organic Compounds (VOC-EPA): 0.2726 %
Regulated Volatile Organic Compounds (VOC-Cal ARB): 0.2834 %

Industry or sector specific available guidance(s) NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category | Rating | Description |
|---------------------|--------|--|
| Chronic | / | none |
| Health | 2 | temporary or minor injury may occur |
| Flammability | 1 | material that must be preheated before ignition can occur |
| Physical hazard | 0 | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | - | |

Chronic: chronic hazard
Flammability: flammability hazard
Health: health hazard
Personal protection: personal protective equipment (PPE) for normal use
Physical hazard: reactivity

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category | Degree of hazard | Description |
|----------------|------------------|---|
| Flammability | 1 | material that must be preheated before ignition can occur |
| Health | 0 | material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material |
| Instability | 0 | material that is normally stable, even under fire conditions |
| Special hazard | | |

National inventories

| Country | Inventory | Status |
|---------|-----------|--------|
| | | |



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| | | |
|----|------------|--------------------------------|
| CA | DSL | not all ingredients are listed |
| EU | REACH Reg. | not all ingredients are listed |
| US | TSCA | not all ingredients are listed |

Legend

DSL Domestic Substances List (DSL)
 REACH Reg. REACH registered substances
 TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|---------------|--|
| 49 CFR US DOT | 49 CFR § 40 U.S. Department of Transportation |
| Acute Tox. | Acute toxicity |
| ATE | Acute Toxicity Estimate |
| Cal ARB | California Air Resources Board |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EPA | Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| Eye Dam. | Seriously damaging to the eye |
| Eye Irrit. | Irritant to the eye |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods Code |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| MARPOL | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant") |



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| | |
|----------------|---|
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |
| OSHA | Occupational Safety and Health Administration (United States) |
| PBT | Persistent, Bioaccumulative and Toxic |

Page:

| Abbr. | Descriptions of used abbreviations |
|-------------|--|
| PNEC | Predicted No-Effect Concentration |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

| Code | Text |
|------|--------------------------------|
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.