



Mullein+ AF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 5/8/2026

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Mullein+ AF
Product code : RD8096

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Bio-Botanica, Inc.
75 Commerce Drive
Hauppauge, NY, 11788
US
T (631) 231-5522 - F (631) 231 - 7332
sds@bio-botanica.com - www.bio-botanica.com

1.4. Emergency telephone number

Emergency number : +1-800-424-9300 / +1 703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Glycerin	CAS-No.: 56-81-5	55 – 65	Not classified
Water	CAS-No.: 7732-18-5	10 – 20	Not classified

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Name	Product identifier	%	GHS US classification
Mullein Leaf Extract	CAS-No.: 90064-13-4	≤ 8	Not classified
Nettle Leaf Extract	CAS-No.: 84012-40-8	≤ 5	Not classified
Plantain Leaf Extract	CAS-No.: 84929-43-1	≤ 5	Not classified
Elecampane Root Extract	CAS-No.: 84012-20-4	≤ 5	Not classified
Horehound Herb Extract	CAS-No.: 84696-20-8	≤ 5	Not classified
Marshmallow Root Extract	CAS-No.: 73049-65-7	≤ 1	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

No additional information available

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

No additional information available

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

No additional information available

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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerin (56-81-5)

USA - OSHA - Occupational Exposure Limits

Local name	Glycerin (mist)
OSHA PEL TWA	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Mobile liquid.
Colour	: Brown to Dark Brown
Odour	: Herbal, characteristic
Odour threshold	: No data available
pH	: 5 – 6
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available

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Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Glycerin (56-81-5)	
LD50 oral rat	27200 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Female, Experimental value, Oral, 10 day(s))
LD50 dermal	56750 mg/kg (4 day(s), Guinea pig, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	> 2.75 mg/l (4 h, Rat, Male, Experimental value, Converted value, Inhalation (vapours))
ATE US (oral)	27200 mg/kg bodyweight
ATE US (dermal)	56750 mg/kg bodyweight

Skin corrosion/irritation	: Not classified pH: 5 – 6
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Glycerin (56-81-5)	
pH	5.5 – 8

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Serious eye damage/irritation : Not classified
pH: 5 – 6

Glycerin (56-81-5)	
pH	5.5 – 8

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Glycerin (56-81-5)	
Viscosity, kinematic	No data available in the literature

SECTION 12: Ecological information

12.1. Toxicity

Glycerin (56-81-5)	
LC50 - Fish [1]	54000 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Lethal)
EC50 - Daphnia [1]	> 10000 mg/l (24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

12.2. Persistence and degradability

Mullein+ AF	
Persistence and degradability	Not rapidly degradable
Glycerin (56-81-5)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.87 g O ₂ /g substance
Chemical oxygen demand (COD)	1.16 g O ₂ /g substance
ThOD	1.217 g O ₂ /g substance
Water (7732-18-5)	
Persistence and degradability	Not rapidly degradable
Mullein Leaf Extract (90064-13-4)	
Persistence and degradability	Not rapidly degradable
Nettle Leaf Extract (84012-40-8)	
Persistence and degradability	Not rapidly degradable
Plantain Leaf Extract (84929-43-1)	
Persistence and degradability	Not rapidly degradable

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Elecampane Root Extract (84012-20-4)

Persistence and degradability	Not rapidly degradable
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Horehound Herb Extract (84696-20-8)

Persistence and degradability	Not rapidly degradable
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Marshmallow Root Extract (73049-65-7)

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

Glycerin (56-81-5)

Partition coefficient n-octanol/water (Log Pow)	-1.75 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
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Bioaccumulative potential	Not bioaccumulative.
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12.4. Mobility in soil

Glycerin (56-81-5)

Surface tension	63.4 mN/m (20 °C, 1000 g/l)
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Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
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Ecology - soil	Highly mobile in soil.
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12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

No additional information available

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

UN-No.(DOT)	: Not regulated
UN-No. (TDG)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: Not regulated
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TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

Not regulated

TDG

Not applicable

IMDG

Not applicable

IATA

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Mullein Leaf Extract	CAS-No. 90064-13-4	≤ 8%
Nettle Leaf Extract	CAS-No. 84012-40-8	≤ 5%
Plantain Leaf Extract	CAS-No. 84929-43-1	≤ 5%
Elecampane Root Extract	CAS-No. 84012-20-4	≤ 5%
Horehound Herb Extract	CAS-No. 84696-20-8	≤ 5%
Marshmallow Root Extract	CAS-No. 73049-65-7	≤ 1%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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15.2. International regulations

CANADA

Glycerin (56-81-5)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

Nettle Leaf Extract (84012-40-8)

Listed on the Canadian DSL (Domestic Substances List)

Plantain Leaf Extract (84929-43-1)

Listed on the Canadian DSL (Domestic Substances List)

Elecampane Root Extract (84012-20-4)

Listed on the Canadian DSL (Domestic Substances List)

Horehound Herb Extract (84696-20-8)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Marshmallow Root Extract (73049-65-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Glycerin(56-81-5)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Bio Botanica, Inc. cannot anticipate all conditions under this information and its product or in combination of products of other manufacturers. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product. Bio Botanica will not assume liability for loss, injury, damage, or expense due to improper use. The information stated in this document was written based on the best knowledge and experience currently available. The above data relates only to this product and not its use in combination with any other material or process. This document has been created as a guidance for safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups. To the best of Bio Botanica's knowledge this Safety Data Sheet is considered accurate as of the date of this document.

It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, considering the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.