SECTION 1: Identification

1.1 Product identifier

Trade name **Protein Spotter**

Other means of identification

Product code(s): 1831 Formula code: 02-960326

1.2 Relevant identified uses

Relevant identified uses General use

1.3 Details of the supplier of the safety data sheet

Master Blend Indiana LLC• 4345 W 96th St. • Indianapolis, IN 46268 • United States •
Telephone: 800.525.9644• e-mail: info@masterblend.net • Website: masterblend.net

1.4 Emergency telephone number

Chem-Tel **1.800.255.3924** (USA & Canada) **1.813.248.0585** (International)

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

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

Annex	-	Hazard class and category	-	Hazard statement code(s)
A.2	skin corrosion/irritation	Cat. 2	(Skin Irrit. 2)	H315
A.3	serious eye damage/eye irritation	Cat. 2	(Eye Irrit. 2)	H319

Remarks
For full text of H-phrases: 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

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements

Precautionary statements - prevention

Wash thoroughly after handling.
Wear protective gloves/eye protection/face protection.

Precautionary statements - response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

3.2.1

Name of substance	Identifier	Wt%
Deionized Water	CAS No 7732-18-5	75 - < 90
Dipropylene Glycol Monomethyl Ether	CAS No 34590-94-8	5 - < 15
2-butoxyethanol	CAS No 111-76-2	5 - < 15
2-aminoethanol	CAS No 141-43-5	1 - < 5
Ammonium lauryl sulfate	CAS No 2235-54-3	< 1
Ethoxylated Alcohols	CAS No 68439-46-3	< 1

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of firs- 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. In case of respiratory tract irritation, consult a physician. 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. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

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

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

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

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate 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 it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices 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 precautions: 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 to 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

Managing of associated risks

Incompatible substances or mixtures

Observe compatible storage of chemicals.

Control of the effects

Protect against external exposure, such as

frost

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
US	2-butoxyethanol	111-76-2	PEL	50	240			29 CFR OSHA
US	dipropylene glycol methyl ether	34590-94-8	PEL	100	600			29 CFR OSHA
US	ethanolamine	141-43-5	PEL	3	6			29 CFR OSHA

notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average.

Relevant DNELs/DMELs/PNECs and other threshold levels

No data available.

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.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

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	different
Odor	mild sweet

Other physical and chemical parameters

pH (value)	10
Melting point/freezing point	not determined
Initial boiling point and boiling range	167 °C at 101 kPa
Flash point	>96.1 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	
• lower explosion limit (LEL)	1.1 vol%
• upper explosion limit (UEL)	14 vol%
Vapor pressure	1 hPa at 20 °C
Density	not determined
Relative density	not determined
Solubility(ies)	not determined
Auto-ignition temperature	207 °C
Viscosity	not determined

Explosive properties	none
Oxidizing properties	none

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.

Physical stresses which might result in a hazardous situation and have to be avoided
strong shocks

10.5 Incompatible materials
There is no additional information.

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.

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 of components of the mixture

Name of substance	CAS No	Exposure route	ATE
2-butoxyethanol	111-76-2	oral	1,414
2-butoxyethanol	111-76-2	dermal	1,100
2-butoxyethanol	111-76-2	inhalation: vapor	11
2-aminoethanol	141-43-5	oral	1,515
2-aminoethanol	141-43-5	dermal	1,100
2-aminoethanol	141-43-5	inhalation: vapor	11
Ammonium lauryl sulfate	2235-54-3	oral	500
Ethoxylated Alcohols	68439-46-3	oral	1,400

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Shall not be classified as a respiratory or skin sensitizer.

Summary of evaluation of the CMR properties
Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Carcinogenicity

- National Toxicology Program (United States): none of the ingredients are listed
- IARC Monographs

Name of substance	Name acc. to inventory	CAS No	wt%	Classification	Number
2-butoxyethanol	2-Butoxyethanol	111-76-2	5	3	Volume 88

legend
3 Not classifiable as to carcinogenicity in humans.

Specific target organ toxicity (STOT)
Shall not be classified as a specific target organ toxicant.

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Dipropylene Glycol Monomethyl Ether	34590-94-8	LC50	>1,000 mg/l	fish	96 hours
Dipropylene Glycol Monomethyl Ether	34590-94-8	ErC50	>969 mg/l	algae	72 hours
Dipropylene Glycol Monomethyl Ether	34590-94-8	EC50	>969 mg/l	algae	72 hours
2-butoxyethanol	111-76-2	LC50	1,474 mg/l	fish	96 hours
2-butoxyethanol	111-76-2	EC50	1,550 mg/l	aquatic invertebrates	48 hours
2-butoxyethanol	111-76-2	ErC50	1,840 mg/l	algae	72 hours
2-aminoethanol	141-43-5	LC50	>300 mg/l	fish	96 hours
2-aminoethanol	141-43-5	EC50	65 mg/l	aquatic invertebrates	48 hours
2-aminoethanol	141-43-5	ErC50	2.8 mg/l	algae	72 hours

Aquatic toxicity (chronic)

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Dipropylene Glycol Monomethyl Ether	34590-94-8	LC50	>1,000 mg/l	aquatic invertebrates	24 h
2-butoxyethanol	111-76-2	EC50	297 mg/l	aquatic invertebrates	21 d
2-aminoethanol	141-43-5	LC50	525 mg/l	fish	10 d
2-aminoethanol	141-43-5	EC50	120 mg/l	aquatic invertebrates	24 h

12.2 Persistence and degradability

Data are not available.

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
Dipropylene Glycol Monomethyl Ether	34590-94-8	oxygen depletion	75 %	10 d
Dipropylene Glycol Monomethyl Ether	34590-94-8	DOC removal	96 %	28 d
Dipropylene Glycol Monomethyl Ether	34590-94-8	carbon dioxide generation	76 %	28 d
2-butoxyethanol	111-76-2	carbon dioxide generation	18.3 %	3 d
2-aminoethanol	141-43-5	DOC removal	>90 %	21 d

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Dipropylene Glycol Monomethyl Ether	34590-94-8		0.0043	
2-butoxyethanol	111-76-2		0.81	
2-aminoethanol	141-43-5	0.75	-2.3	

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

Data are not available.

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 relevant
14.3	Transport hazard class(es)	
	Class	-
14.4	Packing group	not relevant
14.5	Environmental hazards	none (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.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

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 protective equipment	-	

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	2	Material that, under emergency conditions, can cause temporary incapacitation or residual injury.
Instability	0	Material that is normally stable, even under fire conditions.
Special hazard		

Relevant European Union (EU) safety, health and environmental provisions

Classification according to GHS (1272/2008/EC, CLP)

Hazard class	Category	Hazard class and category
skin corrosion/irritation	2	(Skin Irrit. 2)
serious eye damage/eye irritation	2	(Eye Irrit. 2)

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

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR OSHA	29 CFR §1910.1001 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
ATE	Acute Toxicity Estimate
BCF	BioConcentration Factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	chemical oxygen demand
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HMIS	Hazardous Materials Identification System
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
log KOW	n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant)
NFPA® 704	National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States)
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
PEL	permissible exposure limit
PNEC	Predicted No-Effect Concentration

Abbr.	Descriptions of used abbreviations
ppm	parts per million
STEL	short-term exposure limit
TWA	time-weighted average
vPvB	very Persistent and very Bioaccumulative

Key literature references and sources for data

- OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200
- 49 CFR § 172.101 Hazardous Materials Table (DOT)

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
H315	causes skin irritation
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.