

Revision date: 06/01/2015

SECTION 1: Identification**1.1 Product identifier**Trade name **Enzyme PreSpray****Other means of identification**

Product code(s): 1104 Formula code: 05-090801

1.2 Relevant identified uses

Relevant identified uses General use

1.3 Details of the supplier of the safety data sheetMasterBlend • 5285 Fox Street • CO 80216 Denver • United States •
Telephone: 303.373.0702 • Telefax 303.373.4968 • 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

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.

Precautionary statements**Precautionary statements - prevention**Wash thoroughly after handling.
Wear protective gloves/eye protection/face protection.**Precautionary statements - response**IF ON SKIN: Wash with plenty of water.
Specific treatment (see on this label).
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.**2.3 Other hazards**

There is no additional information.

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SECTION 3: Composition/information on ingredients**3.1 Substances**

not relevant (mixture)

3.2 Mixtures**3.2.1**

Name of substance	Identifier	Wt%
Sodium sulphate	CAS No 7757-82-6	50 - < 75
Triphosphoric acid, sodium salt	CAS No 7758-29-4	25 - < 50
Aqueous detergent	CAS No Trade Secret	5 - < 15
Dipropylene Glycol Monomethyl Ether	CAS No 34590-94-8	1 - < 5
Diphosphoric acid, sodium salt	CAS No 7722-88-5	1 - < 5
Sodium 2-Mercaptobenzothiazole	CAS No 2492-26-4	< 1
Fragrance	CAS No Trade Secret	< 1

For full text of abbreviations: see SECTION 16.

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. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Brush off loose particles from skin. - Rinse skin with water/shower.

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.

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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, foam, alcohol resistant foam, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion productsnitrogen oxides (NO_x), 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. - Take up mechanically.

Advices on how to clean up a spill

Take up mechanically.

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.

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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. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

Warning

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

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****• Explosive atmospheres**

Removal of dust deposits.

Incompatible substances or mixtures

Observe compatible storage of chemicals.

Consideration of other advice**Ventilation requirements**

Use local and general ventilation.

Packaging compatibilities

Only packagings which are approved (e.g. acc. to DOT) may be used.

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/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
US	particulates not otherwise regulated (PNOR)		PEL	1,766	15			29 CFR OSHA
US	particulates not otherwise regulated (PNOR)		PEL	529.5	5			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.

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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 protective 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

Particulate filter device (EN 143).

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	solid (powder)
Color	different
Odor	Orange Citrus Aroma

Other physical and chemical parameters

pH (value)	9.3
Melting point/freezing point	not determined
Initial boiling point and boiling range	189.6 °C
Flash point	not applicable
Evaporation rate	not determined
Flammability (solid, gas)	
Explosion limits of dust clouds	not determined
Vapor pressure	0.28 mmHg at 20 °C
Density	not determined
Relative density	not determined
Solubility(ies)	not determined
Auto-ignition temperature	not determined
Viscosity	not relevant (solid matter)
Explosive properties	none
Oxidizing properties	none

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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.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

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 estimate (ATE)

inhalation: dust/mist 4.356

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
sodium sulphate	7757-82-6	inhalation: dust/mist	>2.4
triphosphoric acid, sodium salt	7758-29-4	inhalation: dust/mist	>0.39
diphosphoric acid, sodium salt	7722-88-5	oral	<2,000

Skin corrosion/irritation

Causes skin irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

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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 none of the ingredients are listed

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
sodium sulphate	7757-82-6	LC50	7,960 mg/l	fish	96 hours
triphosphoric acid, sodium salt	7758-29-4	EC50	>100 mg/l	aquatic invertebrates	48 hours
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

Aquatic toxicity (chronic)**Aquatic toxicity (chronic) of components of the mixture**

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium sulphate	7757-82-6	LC50	>8,080 mg/l	fish	24 h
sodium sulphate	7757-82-6	EC50	1,698 mg/l	aquatic invertebrates	7 d
triphosphoric acid, sodium salt	7758-29-4	LC50	>1,850 mg/l	fish	24 h
triphosphoric acid, sodium salt	7758-29-4	ErC50	160 mg/l	algae	4 d
triphosphoric acid, sodium salt	7758-29-4	EC50	69.2 mg/l	algae	4 d
Dipropylene Glycol Monomethyl Ether	34590-94-8	LC50	>1,000 mg/l	aquatic invertebrates	24 h
Sodium 2-Mercaptobenzothiazole	2492-26-4	EC50	857 mg/l	microorganisms	3 h

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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

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
sodium sulphate	7757-82-6	0.5	-4.38	
Dipropylene Glycol Monomethyl Ether	34590-94-8		0.0043	
Sodium 2-Mercaptobenzothiazole	2492-26-4		2.42	

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.

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SECTION 14: Transport information

- 14.1** UN number
- 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	2	Material that must be moderately heated or exposed to relatively high ambient temperatures 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	2	Material that must be moderately heated or exposed to relatively high ambient temperatures 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**

skin corrosion/irritation

hazardous to the aquatic environment - chronic hazard

Category Hazard class and category

2 (Skin Irrit. 2)

3 (Aquatic Chronic 3)

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
DOT	Department of Transportation (USA)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HMIS	Hazardous Materials Identification System
IARC Mono-graphs	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
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

Disclaimer

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