

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifier

Product Name GENENCARE™ OSMS BA
Product Code A56000
Synonyms Betaine
1-Carboxy-N,N,N-trimethylmethan-aminium hydroxide inner salt.
Trimethylglycine.
Pure substance/mixture Substance

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

Recommended Use Personal care

1.3. Details of the supplier of the safety data sheet

Company/undertaking identification Supplier identification:

DuPont Korea
Gangnam-gu, Seoul, Korea
430 (Yeoksam)
Tel : +82-2-2222-5200
Fax : +82-2-2222-5470

Finnfeeds Finland Oy
Sokeritehtaantie 20
FI-02460 Kantvik
Finland

E-mail address

SDS.Genencor@DuPont.com

1.4. Emergency telephone number

+82-2-2222-5600
DuPont Korea Emergency Number

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS - Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

2.2. Label elements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

2.3. Other hazards

May form combustible dust concentrations in air

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Substance

Chemical Name	%	CAS No	Korean Chemical Inventory:
Betaine Anhydrous	min 99 d.s.	107-43-7	2013-3-5614

4. FIRST AID MEASURES

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Format GHS - Korea
Page 1 / 6

4.1. Description of first aid measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention
Skin Contact:	IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/ attention
Ingestion	Rinse mouth with water. If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

4.2. Most important symptoms and effects, both acute and delayed

None known

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguish with alcohol-resistant foam, fire extinguishing powder or water spray

5.2. Special hazards arising from the substance or mixture

May form combustible dust concentrations in air. Decomposes on heating. Decomposition products: Trimethylamine, Carbon dioxide (CO₂), Esters.

5.3. Advice for firefighters

Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid generation of dust and aerosols. Avoid breathing dust or spray mist. Use personal protection recommended in Section 8.

6.2. Environmental precautions

Contain spill.

6.3. Methods and material for containment and cleaning up

Cover with absorbent or contain. Collect and dispose. Use appropriate personal protective equipment (PPE). Contain and/or absorb spill with inert material, then place in suitable container. Prevent runoff from entering drains, sewers or waterways.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid formation of dust and aerosols. Avoid breathing dust or spray mist Avoid prolonged contact with eyes, skin and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits Based on data available for ingredients

8.2. Exposure controls

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection.

Engineering Measures

Transfer via enclosed lines. Formulate in enclosed or ventilated mixing vessels. Carefully handle the substance to minimize releases. Avoid generation of dust and aerosols.

Personal protective equipment

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear protective gloves and protective clothing

Hand protection

Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State

Crystalline Powder

Color

White Light brown

Odor

slight odor

Odor Threshold

No data available

pH

5-7

Melting point / freezing point

No data available

Boiling point / boiling range

No data available

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper Flammability Limit

No data available

Upper explosive limits

No data available

Lower Flammability Limit

No data available

Lower explosive limits

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Relative density

No data available

Specific Gravity

No data available

Water Solubility

Soluble

Partition Coefficient

No data available

(n-octanol/water)

Autoignition Temperature

No data available

Decomposition Temperature

No data available

Viscosity

No data available

Oxidizing Properties

No data available

10. STABILITY AND REACTIVITY

10.1. Reactivity

The substance or mixture is not classified as oxidizing.

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None under normal processing

10.4. Conditions to avoid

Very hygroscopic; protect from moisture

Keep away from heat, flames and sparks May form combustible dust concentrations in air

10.5. Incompatible materials

None in particular

10.6. Hazardous decomposition products

Decomposes on heating. Decomposition products: Trimethylamine.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Product Information

Ingestion Toxicity Not expected
Inhalation No data available
Skin Contact: Not expected to cause irritation
Eye Contact Not expected to cause eye irritation

Sensitization Not expected.
Mutagenic effects No data available
Carcinogenicity No data available
Developmental toxicity No data available
Reproductive effects No data available

Component Information

Betaine Anhydrous

Oral LD50/oral/rat 11179 mg/kg
Eye irritation Non-irritant
Sensitization Not a sensitizer in guinea pig sensitization studies
Mutagenic effects Negative in Ames assay with and without metabolic activation up to 5000 µg/plate Negative in chromosomal aberration using human lymphocytes No increases in micronuclei were noted in the bone marrow of mice dosed up to 2 gm/kg by the oral route.

Classification based on data available for ingredients

The following values are calculated based on chapter 3.1 of the GHS document (ATE)

Not applicable.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Classification based on data available for ingredients

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia
Betaine Anhydrous	EC50/72h/algae 1199 mg/l	-	EC50/48hr/daphnia

	(Desmodemus subspicatus)		4335 mg/L.
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12.2. Persistence and degradability

Based on data available for ingredients

Chemical Name	Biodegradation
Betaine Anhydrous 107-43-7	Readily biodegradable (88% after 28 days)

12.3. Bioaccumulative potential

No information available

12.4. Mobility in soil

Soluble

Other Adverse Effects

None known

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods

Dispose of wastes in an approved waste disposal facility. Dispose of contents/containers in accordance with local regulations.

Contaminated Packaging

Dispose of empty containers and wastes safely. Dispose of waste product or used containers according to local regulations.

14. TRANSPORT INFORMATION

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
14.4. Packing group	Not regulated
14.5. Environmental hazards	Not regulated
14.6. Special precautions for user	Not regulated

15. REGULATORY INFORMATION

Not regulated

16. OTHER INFORMATION

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SDS sections updated 15.



First you add knowledge...

GENENCARE™ OSMS BA

Product Code A56000

Disclaimer

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End of Safety Data Sheet