

This safety data sheet was created pursuant to the requirements of: United States of America

Revision date 19-Nov-2021

Revision Number 1

1. Identification

Product identifier

Product Name Enviva® TARGET

Other means of identification

Product Code(s) A66217

Other information Biosafety Level 1 (BSL1) microorganism

Recommended use of the chemical and restrictions on use

Recommended Use Animal feed.

Restrictions on use

Details of the supplier of the safety data sheet

Supplier Address

Danisco US Inc.
Genencor, a Danisco Division
Winton Place
Rochester, New York 14623
USA
+1 (585) 256-5200
+1 (800) 847-5311

E-mail address

sds.genencor@iff.com

Emergency telephone number

CHEMTREC: +1-800-424-9300
(outside the U.S. & Canada +1-703-741-5970)

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Label elements

Signal word: None

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Other information

Micro-organisms may have the potential to provoke respiratory inflammation and sensitizing reactions.

3. Composition/information on ingredients**Mixture**

Chemical nature Preparation.

Chemical name	CAS No	Weight-%
<i>Limosilactobacillus reuteri</i>	NB10166	10-15

4. First-aid measures**Description of first aid measures**

General advice	When in doubt or if symptoms are observed, get medical advice.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
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 soap and water. IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
Ingestion	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause respiratory tract irritation; Inflammation. May cause sensitization in susceptible persons.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Extinguish with alcohol-resistant foam, fire extinguishing powder or water spray.
Unsuitable extinguishing media	None.
Specific hazards arising from the chemical	None known.
Explosion data	
Sensitivity to mechanical impact	None.

Sensitivity to static discharge None.

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Methods and material for containment and cleaning up

Methods for containment Cover with absorbent or contain. Collect and dispose.

Methods for cleaning up Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Avoid breathing dust or spray mist. Avoid generation of dust and aerosols. Avoid contact with eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep out of the reach of children. Keep/store only in original container. Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits Based on data available for ingredients

Appropriate engineering controls

Engineering controls During production, transfer via enclosed lines. Formulate in enclosed or ventilated mixing vessels. Carefully handle the substance to minimize inhalation exposure to dust and aerosols.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Remove contact lenses, if worn.

Hand protection Wear protective gloves.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection	Ensure adequate ventilation. If exposure limits are likely to be exceeded or if irritation or other symptoms are experienced, NIOSH/MSHA or EN 136 approved respiratory protection should be worn.
General hygiene considerations	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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Powder
Physical state	Solid
Color	Off-white to White
Odor	Typical odor of fermented product
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No data available
Molecular weight	No data available
VOC Content (%)	No information available
K_{st} (bar.m/s)	No information available
Liquid Density	No data available
Bulk Density	620 - 940 kg/L

10. Stability and reactivity

Reactivity	Not expected.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.

Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	None known.

11. Toxicological information

Information on likely routes of exposure

Product Information

Acute toxicity

Inhalation	See section 2 for classified hazards based on component information.
Eye contact	See section 2 for classified hazards based on component information.
Skin contact	See section 2 for classified hazards based on component information.
Ingestion	See section 2 for classified hazards based on component information.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory or skin sensitization	No data available.
Germ cell mutagenicity	No data available.
Carcinogenicity	No data available.
Reproductive toxicity	No data available.
STOT - single exposure	No data available.
STOT - repeated exposure	No data available.
Aspiration hazard	Not expected.
Other adverse effects	None known.

Numerical measures of toxicity

<u>Component Information</u>	Classification based on data available for ingredients
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The following values are calculated based on chapter 3.1 of the GHS document
Based on data available for ingredients

12. Ecological information

<u>Ecotoxicity</u>	Classification based on data available for ingredients
Persistence and degradability	Based on data available for ingredients.
Bioaccumulative potential	Based on data available for ingredients.
Mobility	Soluble in water
Other adverse effects	None known.

13. Disposal considerations

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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

14. Transport information

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

TSCA

Chemical name	CAS No	US TSCA Inventory listing	US TSCA active/inactive designation
<i>Limosilactobacillus reuteri</i>	NB10166	-	Unknown *

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Based on data available for ingredients

16. Other information

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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Revision Note	***Indicates updated section.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet