

Material Safety Data Sheet

MALTODEXTRIN MD-18

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Maltodextrin MD-18
Product Code:	-
Synonyms:	Maltodextrin; CAS 9050-36-6; EINECS 232-940-4
Use of the Substance / Preparation:	Food and nutritional ingredient / additive
Contact Manufacturer:	Interstarch Ukraine, LLC 29-a, Elektrikiv str., Kyiv, 04176, Ukraine +380 44 3517380 th@interstarch.com.ua

2. HAZARDS IDENTIFICATION

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health. This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC. This substance does not required Labelling according to Regulation (EC) No 1272/2008/EC.

Appearance	Homogeneous powder
Physical State	White to off-white powder
Taste and odour	Slightly sweet, typical to this product, without any foreign taste and odor

Potential Health Effects

Acute Effects

Eyes	Contact with eyes may cause irritation, inflammation.
Skin	Health injuries are not known or expected under normal use. Though prolonged exposure should be avoided, and good personal hygiene is essential.
Inhalation	No hazard expected in normal industrial use. May cause respiratory tract irritation.
Ingestion	No hazard expected in normal industrial use. May cause irritation of the digestive tract.

Chronic Effects	No information available.
Aggravated Medical Conditions	No information available.
Potential Environmental Effects	See Section 12 for additional ecological information.
Toxicological information	See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Family	Carbohydrate
Molecular Formula	$H(C_6H_{10}O_5)_n-OH$
Molecular Weight (AGU)	162,14 g/mol

Non-hazardous Components

Chemical Name	CAS-No	Weight %
Maltodextrin	9050-36-6	94,0 % solids
Water	7732-18-5	6,0 % moisture

4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water, lifting eyelids occasionally.
Skin Contact	Rinse with water.
Inhalation	If person breathes large quantities, remove the person from the source of exposure. If breathing stops, apply artificial respiration immediately.
Ingestion	Rinse mouth with plenty of water. For larger quantities, drink large amounts of water.
Notes of any immediate medical attention	No information available.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Fine dust dispersed in the air may ignite if a source of fire (heat, sparks, flame) takes place.
Suitable Extinguishing Media	Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Unsuitable Extinguishing Media	None known.
Hazardous Combustion Products	Carbon monoxide (CO), Carbon dioxide (CO ₂).

Explosion Data

Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	In certain conditions maltodextrin / air mixtures are explosive. Avoid any ignition sources.
Specific Hazards Arising from the Chemical	None known.
Protective Equipment and Precautions for Firefighters	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	None under normal conditions. Wear appropriate protective clothing to protect against skin contact, eye contact, and respiratory contact.
Environmental Precautions	Biodegradable, increases BOD & COD
Methods for Clean-up	Use a dry cleaning method e.g. vacuum cleaner, or alternatively brush up spillages and collect in suitable containers. Dust deposits should not be allowed to accumulate on horizontal surfaces, as these may form an explosive mixture if they are suddenly released into the atmosphere.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Use care to minimise dust generation; avoid dispersing the powder in the air. Avoid static electricity: all handling equipment must be properly grounded.
Storage	Store in a clean, dry, well-ventilated area, away from strong odours and chemicals. Prevent heat contact, open flame in the storage area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits	For Particulates Not Otherwise Specified
ACGIH TLV:	TWA: 10 mg / m ³ Inhalable dust TWA: 5 mg / m ³ Respirable dust TWA: 15 mg / m ³ Total dust
OSHA PEL:	TWA: 15 mg / m ³ Total dust TWA: 5 mg / m ³ Respirable dust
Engineering Measures	Use adequate ventilation to keep airborne concentrations low.
Personal Protective Equipment	
Eye / face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by face protection regulations in European Standard EN166.
Skin and Body Protection	Protective clothing not normally required.
Respiratory Protection	Dust mask is recommended. A respiratory protection program that meets European Standard EN 149 requirements must be followed whenever workplace conditions warrant respirator use.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White homogeneous powder.
Physical State	solid, powder
Odour	Characteristic, without extraneous odour
Thermal decomposition / Melting	240°C / 464°F
Flammability Limits in Air	No information available
Explosion Limits	
	Lower: Not determined.
	Upper: Not determined.
pH	4,0 - 7,0
Water Solubility	Good soluble in water
Vapor Density	No information available
Vapor Pressure	No information available
Evaporation Rate	No information available
Bulk density	450 - 550 g/dm ³

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Avoid making dust
Incompatible Materials	Avoid strong acids and alkali; oxidizing and reducing agents
Hazardous Decomposition Products	Burning can produce CO and CO ₂ .
Possibility of Hazardous Reactions	Potential dust explosion hazard
St-Class	1
Minimum Ignition energy (MIE)	> 30 mJ at normal moisture level
Minimum ignition temperature (MIT)	380 °C
Maximum explosion pressure (P_{max})	7,8 bar
Dust deflagration value (K_{st})	160 bar m/sec
Layer ignition temperature	Melts

11. TOXICOLOGICAL INFORMATION

Acute Toxicity Maltodextrin is a foodstuff and has no toxicological risk

Product Information

LD50 Oral	No information available
LD50 Dermal	No information available
LC50 Inhalation	No information available

Toxicology data for the components

Chronic Effects No information available

Carcinogenicity Not classifiable as Carcinogen

There are no known carcinogenic chemicals in this product.

Irritation No information available.

Corrosivity No information available.

Sensitization No sensitizing effects known.

Neurological Effects No information available.

Mutagenic Effects No information available.

Reproductive Effects No information available.

Developmental Effects No information available.

Target Organ Effects No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment. Contains no substances known to be not degradable in waste water treatment plants.

Persistence / Degradability	Readily biodegradable
BOD and COD	No further relevant information available
Bioaccumulation/ Accumulation	No data on Aquatic or Vegetable toxicity
Mobility	Soluble in water

13. DISPOSAL CONSIDERATIONS

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

Waste Disposal Methods	Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.
Contaminated Packaging	Empty remaining contents. Clean container with water.

14. TRANSPORT INFORMATION

No dangerous good in terms of Ordinance on Hazardous Substances for land, inland transportation, sea- and air transportation. When handling chemicals usual precautions have to be observed.

15. REGULATORY INFORMATION

Ukraine	Product is regulated as standart foodstuff in accordans with UA regulations TY Y 10.6-00383372-015:2018 "Maltodextrin. Technical requirements"
USA FDA	This product is exempt by the FDA. Food additives Generally Recognized as Safe (GRAS): Maltodextrin (9050-36-6)
Europe	The substance does not fulfil classification criteria of the Regulation (EC)1272/2008. The substance is not classified as dangerous under anticipated conditions of normal use.

16. OTHER INFORMATION

The information above is based on the present state of our knowledge. With regard to safety requirements, it should describe our product and will not provide any assurance of properties.

The consignee of our product has to observe existing laws and regulations in his own responsibility.