SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

a.	Product name	: UNIFILMA HVY		
	Product code	: H100140		
b.	b. Information on manufacturer/supplier/distributor			
	Company name	: Chiba Flour Milling Co., Ltd.		
	Address	: 17 Shinminato, Mihama-ku, Chiba, Japan		
	Phone number	: +81-43-241-0111		
	Emergency phone	: +81-43-241-0111		
	number			
	E-mail address:	kikaku@chiba-seifun.co.jp		
c.	Recommended use	: Additive		
	of the chemical			

SECTION 2: Hazards identification

GHS Classification (The guidance of GHS classification (Mar. 2015, Japan) for industries is used.) a.

- b. Label elements
- : Not a hazardous substance.

- : Not a hazardous substance.
- c. Other hazards : Designated flammable goods
 - (Fire and Disaster Management Act. Article 9 paragraph 4 in JAPAN)

SECTION 3: Composition/information on ingredients

Chemical substance

Chemical name or common name : Dextrin isostearate

Chemical properties (Rational formula or chemical structure):

A : Isostearoyl group or hydrogen, n: Degree of polymerization

CAS No. : 116580-54-2 Serial no. of government : 8-(4)-1906 gazette (A)

(A) Industrial Safety and Health Act

Impurities and stabilizing additives : None contributed to classification

Content or content range	: 95% or more
Impurities contained less than the lower concentration limit of mixture as per GHS classification	: Methanol < 5ppm (Detection Limit. Internal test.) Heptane < 200ppm β-Picoline < 300ppm
Impurities not contributed to classification	: Isostearic acid 5% or less

SECTION 4: First aid measures

a.	Description of first aid measures		
	Protection of first-aiders	: No special precautions are necessary for first aid responders.	
	If inhaled	: If inhaled, remove to fresh air.	
		Get medical attention if symptoms occur.	
	In case of skin contact	: Wash with water and soap as a precaution.	
		Get medical attention if symptoms occur.	
	In case of eye contact	: Flush eyes with water as a precaution.	
		Get medical attention if irritation develops and persists.	
	If swallowed	: If swallowed, DO NOT induce vomiting.	
		Get medical attention if symptoms occur.	
		Rinse mouth thoroughly with water.	
b.	Most important symptoms and e	ffects, both acute and delayed	

- Most important symptoms and effects, both acute and delayed None known.
- c. Indication of any immediate medical attention and special treatment needed Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

a.	Extinguishing media		
	Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
	Unsuitable extinguishing media	:	None known.
b.	Special hazards arising from the	ne s	ubstance or mixture
	Specific hazards during fire- fighting	:	Exposure to combustion products may be a hazard to health.
	Hazardous combustion prod- ucts	:	Carbon oxides
C.	Advice for firefighters		
	Special protective equipment for firefighters Specific extinguishing meth- ods	:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment. Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

SECTION 6: Accidental release measures

a. Personal precautions, protective equipment and emergency procedures

	Personal precautions :		Follow safe handling advice and personal protective equipment recommendations.	
b.	Environmental precautions			
	Environmental precautions :		Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.	
c. Methods and material for containment and cleaning up				
	Methods for cleaning up :	1 	Sweep up or vacuum up spillage and collect in suitable container for disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.	
d.	Reference to other sections			

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

a.	Precautions for safe handling	-	
	Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
	Local/Total ventilation	:	Use only with adequate ventilation.
	Advice on safe handling	:	Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the
			environment.
	Hygiene measures	:	Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.
b.	Storage		
	Technical measures	:	Avoid fire, sources of heat.
	Requirements for storage areas and containers Advice on common storage	:	Keep in properly labelled containers. Store in accordance with the particular national regulations. Do not store with the following product types: Strong oxidizing agents
	Recommended storage tem- perature	:	Store in a cool and dark area, away from direct sunlight, high temperature and high humidity.
	Container and packaging material	:	Recommend to keep container unopened.

SECTION 8: Exposure controls/personal protection

a. Control parameters

Contains no substances with occupational exposure limit values.

b. Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Personal protective equipment

Eye protection	:	Wear the following personal protective equipment: Safety glasses
Hand protection		
Material Remarks	:	Rubber gloves Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the product. Change gloves often!
Skin and body protection Respiratory protection	:	Skin should be washed after contact. No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

a. Information on basic physical and chemical properties

Appearance	:	solid
Colour	:	colourless, light yellow-brown
Odour	:	characteristic
Odour Threshold	:	No data available
рН	:	No data available
Melting point/freezing point	:	60 - 70 °C
Initial boiling point and boiling range	:	No data available
Flash point	:	> 200 °C
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not classified as a flammability hazard
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	No data available
Solubility(ies) Water solubility	:	insoluble
Solubility in other solvents	:	insoluble Solvent: Methanol soluble Solvent: Xylene

			soluble Solvent: Benzene soluble Solvent: Chloroform
			soluble Solvent: carbon tetrachloride
	Partition coefficient: n- octanol/water	:	No data available
	Auto-ignition temperature	:	No data available
	Decomposition temperature	:	No data available
	Viscosity		A
	Viscosity, kinematic	:	Not applicable
	Explosive properties	:	Not explosive
	Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
b.	Other information		
	Particle size	:	No data available

SECTION 10: Stability and reactivity

a.	Reactivity		
	Not classified as a reactivity hazard		
b.	Chemical stability		
	Stable under normal conditions.		
C.	Possibility of hazardous reactions		
	Hazardous reactions	:	Can react with strong oxidizing agents.
d.	Conditions to avoid		
	Conditions to avoid	:	None known.
e.	Incompatible materials		
	Materials to avoid	:	Oxidizing agents
f.	Hazardous decomposition products		
	No hazardous decomposition produ	cts	are known.

SECTION 11: Toxicological information a. Information on toxicological effects

Information on toxicological effects		
Information on likely routes of exposure	:	Skin contact Ingestion Eye contact
Acute toxicity Not classified based on available i	info	rmation.

Skin corrosion/irritation Not classified based on available information.

Serious eye damage/eye irritation Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation Not classified based on available information. Respiratory sensitisation Not classified based on available information.

Germ cell mutagenicity Since there is no in vivo test data, it can't be classified only using the negative result of in-vitro mutagenicity test (Salmonella typhimurium & Eschericia coli). X 1

Carcinogenicity Not classified based on available information.

Reproductive toxicity Not classified based on available information.

STOT - single exposure Not classified based on available information.

- STOT repeated exposure Not classified based on available information.
- Aspiration toxicity

Not classified based on available information.

※ 1 : Based on internal data of Chiba Flour Milling Co., Ltd. (Test results on safety conducted by Biotoxtech Co.,Ltd), the information on 'Dextrin isostearate'.

SECTION 12: Ecological information

- a. Hazards to aquatic environment- acute hazard: No data.
- b. Hazards to aquatic environment- chronic hazard: No data.

SECTION 13: Disposal considerations

a. Waste treatment methods

Product	 Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste ordee about the assigned by the upper proferably.
	Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Contaminated packaging	: Empty containers should be taken to an approved waste
	handling site for recycling or disposal.
	If not otherwise specified: Dispose of as unused product.

14. Transport Information

- a. UN number
 - Not regulated as a dangerous good
- b. UN proper shipping name

Not regulated as a dangerous good

c. Transport hazard class(es) Not regulated as a dangerous good d. Packing group

Not regulated as a dangerous good

- e. Environmental hazards Not regulated as a dangerous good
- f. Special precautions for user Not applicable
- g. Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

Fire and Disaster Management Act. Article 9 paragraph 4 in JAPAN: Designated combustible material (Combustible solids: 3,000 kg)

SECTION 16: Other Information

Reference: Internal data of Chiba Flour Milling Co., Ltd.

INCI name: Dextrin Isostearate

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.