

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

SECTION 1. IDENTIFICATION

Product name : TAPIOCA PURE

Manufacturer or supplier's details

Company name of supplier : Nouryon Surface Chemistry LLC

Address : 100 Matsonford Road, Building 1, Suite 500
Radnor PA 19087
US

Telephone : (800) 906-9977

Telefax : (312) 544-7188

E-mail address :
Emergency telephone : CANUTEC: +1 613-996-6666 CHEMTREC: +1 800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Cosmetic additive

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust

GHS label elements

Signal Word : Warning

Hazard Statements : If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Other hazards

Dust can form an explosive mixture in air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Substance name : TAPIOCA PURE

CAS-No. : 9005-25-8

SAFETY DATA SHEET

TAPIOCA PURE

Version 1.9 Revision Date: 11/28/2022 US / Z8 Date of last issue: 08/22/2022
Date of first issue: 03/05/2014

Components

Chemical name	CAS-No.	Concentration (% w/w)
Starch	9005-25-8	>= 70 - < 90

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : Remove to fresh air.
Keep patient warm and at rest.
Rinse nose and mouth with water.
- In case of skin contact : Remove contaminated clothing and shoes.
Rinse with water.
- In case of eye contact : Rinse with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.
No information available.
- Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire fighting : Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
- Hazardous combustion products : No hazardous combustion products are known
- Further information : Standard procedure for chemical fires.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid dust formation.
Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Sweep up and shovel.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
No sparking tools should be used.
- Advice on safe handling : For personal protection see section 8.
Avoid creating dust.
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
No special handling advice required.
- Conditions for safe storage : Store in original container.
Keep in a dry place.
Store between 40-77°F (5-25°C).
Keep container tightly closed.
- Materials to avoid : No special restrictions on storage with other products.
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Starch	9005-25-8	TWA	10 mg/m3	ACGIH
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total)	15 mg/m3	OSHA Z-1

SAFETY DATA SHEET

TAPIOCA PURE

Version
1.9

Revision Date:
11/28/2022

US / Z8

Date of last issue: 08/22/2022
Date of first issue: 03/05/2014

		dust)		
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	15 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0

Further occupational exposure limits

Description	Value type (Form of exposure)	Control parameters	Basis
TAPIOCA PURE	TWA (total dust)	50 Million particles per cubic foot	OSHA Z-3
	TWA (total dust)	15 mg/m3	OSHA Z-3
	TWA (respirable fraction)	5 mg/m3	OSHA Z-3
	TWA (respirable fraction)	15 Million particles per cubic foot	OSHA Z-3
	PEL (Total dust)	10 mg/m3	CAL PEL
	PEL (respirable dust fraction)	5 mg/m3	CAL PEL

Engineering measures : Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
In the case of dust, vapor or aerosol formation use respirator with an approved filter.
Half mask with a particle filter P2 (EN 143)

Hand protection
Material : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

SAFETY DATA SHEET

TAPIOCA PURE

Version 1.9	Revision Date: 11/28/2022	US / Z8	Date of last issue: 08/22/2022 Date of first issue: 03/05/2014
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Appearance	: powder
Color	: white
Odor	: mild
Odor Threshold	: No data available
pH	: 5 - 7 Concentration: 1 %
Melting point/freezing point	: No data available
Boiling point/boiling range	: Not applicable
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: May form combustible dust concentrations in air during processing, handling or other means.
Flammability (liquids)	: Not applicable
Self-ignition	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: 60,000 mg/m3
Vapor pressure	: Not applicable
Relative vapor density	: Not applicable
Relative density	: No data available
Density	: 1.5 g/cm3 (77 °F / 25 °C)
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-	: No data available

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

octanol/water

Autoignition temperature : > 212 °F / > 100 °C

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Dust deflagration index (Kst) : 140 m.b_/s

Dust explosion class : St1

Minimum ignition energy : 100 - 300 mJ

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under normal conditions.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Dust may form explosive mixture in air.

Conditions to avoid : None known.

Incompatible materials : None known.

Hazardous decomposition products : No hazardous decomposition products are known.

Thermal decomposition : No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

None known.

Acute toxicity

Not classified based on available information.

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: Information taken from reference works and the literature.

Components:

Starch:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: Information taken from reference works and the literature.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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.

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks : No further data available.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Fish):
Exposure time: 96 h
Remarks: No data available

Components:

Starch:

Toxicity to fish : LC50 (Fish): Exposure time: 96 h
Remarks: No data available

Persistence and degradability

Product:

Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301D
GLP: yes

Biochemical Oxygen Demand (BOD) : Remarks: No data available

Components:

Starch:

Biodegradability : Result: No data available

Biochemical Oxygen Demand (BOD) : Remarks: No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

Components:

Starch:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Mobility in soil

Product:

Mobility : Remarks: No data available

Components:

Starch:

Mobility : Remarks: No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone - CAA Section 602 Class I
Substances
Remarks: This product neither contains, nor was
manufactured with a Class I or Class II ODS as defined by the
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +
B).

Additional ecological
information : None known.

Components:

Starch:

Results of PBT and vPvB
assessment : This substance is not considered to be a PBT (Persistent,
Bioaccumulation, Toxic) This substance is not considered to
be vPvB (very Persistent nor very Bioaccumulating)

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Waste must be disposed of in accordance with federal, state
and local environmental control regulations.

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste
handling site for recycling or disposal.

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

Reportable Quantity : This product does not contain an environmentally hazardous substance per 49 CFR 172.101, Appendix A.

Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Combustible dust

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

TCSI	: On the inventory, or in compliance with the inventory
TSCA	: All substances listed as active on the TSCA inventory
AIIC	: On the inventory, or in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
TECI	: On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SAFETY DATA SHEET

TAPIOCA PURE

Version
1.9

Revision Date:
11/28/2022

US / Z8

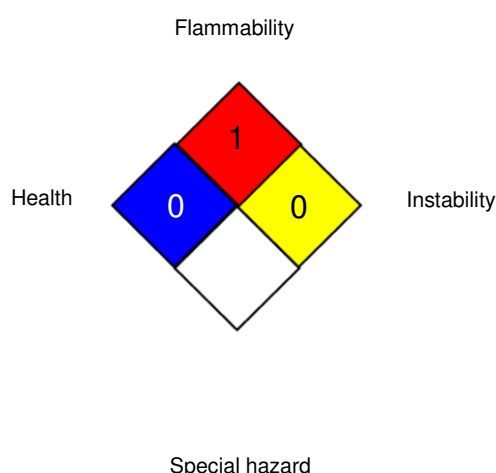
Date of last issue: 08/22/2022

Date of first issue: 03/05/2014

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	/	0
FLAMMABILITY		2
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
CAL PEL	: California permissible exposure limits for chemical contaminants (Title 8, Article 107)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA P0	: USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	: USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	: 8-hour, time-weighted average
CAL PEL / PEL	: Permissible exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA P0 / TWA	: 8-hour time weighted average
OSHA Z-1 / TWA	: 8-hour time weighted average
OSHA Z-3 / TWA	: 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely

SAFETY DATA SHEET

TAPIOCA PURE

Version	Revision Date:	US / Z8	Date of last issue: 08/22/2022
1.9	11/28/2022		Date of first issue: 03/05/2014

Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

see user defined free text

Revision Date : 11/28/2022

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

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.

US / Z8