SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended 2015/830.

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

1.1 Product identifier		
Product name:	L-Glutamic acid, sodium salt	
Product No.	M746	
Additional identification Chemical name:	L Clutamic acid, codium calt monohydrato	
Chemical formula:	L-Glutamic acid, sodium salt monohydrate C5H9NO4.H2O.Na	
INDEX No.	-	
CAS-No.	6106-04-3	
EC No.	205-538-1	
REACH Registration No.		
 1.2 Relevant identified uses of the substitution in the substitution is a substitution in the substitution in	ed.	
Avantor Performance Materials Pola Sowinskiego 11str., 44-101 Gliwice, Poland	nd S.A. Telephone: 48 32 239-20-00 Fax: 48 32 239-23-70	
Contact person: Product Information E-mail: export@avantormaterials.co		
E-mail address of person responsible for this SDS: SDS@avantormaterials.com		
1.4 Emergency telephone number: CHEMTREC: (44)-870-8200418		
SECTION 2: Hazards identification		
2.1 Classification of the substance or mi	ixture	

The product has not been classified as hazardous according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

- 2.2 Label Elements Not applicable
- **2.3 Other hazards** No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
L-Glutamic acid, sodium salt monohydrate	50 - <100%	6106-04-3	205-538-1	No data available.	No data available.	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First Aid Measures

General:	Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
4.1 Description of first aid measu	Ires
Inhalation:	Move to fresh air. Get medical attention if symptoms persist.
Skin Contact:	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before re-use.
Eye contact:	Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion:	Rinse mouth thoroughly. Call a POISON CENTRE/doctor if you feel unwell.
4.2 Most important symptoms and effects, both acute and delayed:	May cause irritation to skin, eyes and respiratory tract.
4.3 Indication of any immediate r Hazards:	nedical attention and special treatment needed No data available.
Treatment:	Treat symptomatically. Symptoms may be delayed.
SECTION 5: Firefighting Measu	Ires
General Fire Hazards:	Dust may form explosive mixture with air.
5.1 Extinguishing media Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	None known.
5.2 Special hazards arising from the substance or mixture:	During fire, gases hazardous to health may be formed.
5.3 Advice for firefighters Special fire fighting procedures:	Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.
Special protective equipment for firefighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorised personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. See Section 8 of the SDS for Personal Protective Equipment.
6.2 Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or on to the ground.
6.3 Methods and material for containment and cleaning up:	Avoid dust formation. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.
6.4 Reference to other sections:	No data available.
SECTION 7: Handling and Stora	age:
7.1 Precautions for safe handling:	Use explosion-proof [electrical/ventilating/lighting] equipment. Take action to prevent static discharges. Use personal protective equipment as

	dust. Wash thoroughly after handling.
7.2 Conditions for safe storage, including any incompatibilities:	Keep containers tightly closed. Store in cool, dry place. Store in a well- ventilated place. Keep from freezing.

required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of

7.3 Specific end use(s): No data available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Occu	pational	Exposure	Limits
0004	pational	Expoonio	

Chemical name	Туре	Exposure Limit Values	Source

8.2 Exposure controls

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Appropriate Engineering No data available. Controls:

Individual protection measures, such as personal protective equipment

General information:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Eye/face protection:	Use tight fitting goggles if dust is generated.
Skin protection Hand Protection:	Material: Wear protective gloves.
Other:	Wear suitable protective clothing.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

Environmental Controls: No data available.

SECTION 9: Physical And Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

, hhere are a	
Physical state:	solid
Form:	Crystalline powder
Colour:	White
Odour:	Odourless
Odour Threshold:	No data available.
pH:	7,0 (2,0 g/l, 20 °C)
Melting Point:	232 °C
Boiling Point:	No data available.
Flash Point:	No data available.
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability limit - upper (%)	No data available.
Flammability limit - lower (%)	No data available.
Vapour pressure:	No data available.
Vapour density (air=1):	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	739 g/l (25 °C)
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidising Properties:	No data available.

Molecular weight:

SECTION 10: Stability and Reactivity

187,13 g/mol (C5H9NO4.H2O.Na)

10.1 Reactivity:No dangerous reaction known under conditions of normal use.10.2 Chemical Stability:Material is stable under normal conditions.10.3 Possibility of Hazardous
Reactions:Hazardous polymerization does not occur.10.4 Conditions to Avoid:Contact with incompatible materials.10.5 Incompatible Materials:Strong oxidising agents.

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Products:

10.6 Hazardous Decomposition

Thermal decomposition may produce oxides of carbon and nitrogen.

SECTION 11: Toxicological Information Information on likely routes of exposure Inhalation: None known or expected under normal use. **Skin Contact:** None known or expected under normal use. Eye contact: None known or expected under normal use. Ingestion: None known or expected under normal use. 11.1 Information on toxicological effects Acute toxicity Oral Product: LD 50 (Rat): 15.800 - 17.700 mg/kg Specified substance(s) L-Glutamic acid, sodium LD 50 (Rat): 15.800 - 17.700 mg/kg salt monohydrate Dermal **Product:** No data available. Specified substance(s) L-Glutamic acid, No data available. sodium salt monohydrate Inhalation Product: No data available. Specified substance(s) L-Glutamic acid, sodium No data available. salt monohydrate **Repeated dose toxicity Product:** No data available. Specified substance(s) L-Glutamic acid, sodium No data available. salt monohydrate **Skin Corrosion/Irritation: Product:** May cause skin irritation. Specified substance(s) L-Glutamic acid, No data available. sodium salt monohydrate Serious Eye Damage/Eye Irritation: **Product:** May irritate eyes. Specified substance(s) L-Glutamic acid. No data available. sodium salt monohydrate



Product: Specified substance(s)	Not a skin sensitiser.
L-Glutamic acid, sodium salt monohydrate	No data available.
Germ Cell Mutagenicity	
In vitro Product: Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No mutagenic components identified No data available.
In vivo Product: Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No mutagenic components identified No data available.
Carcinogenicity Product: Specified substance(s) L-Glutamic acid, sodium salt monohydrate	This substance has no evidence of carcinogenic properties. No data available.
Reproductive toxicity Product: Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No components toxic to reproduction No data available.
Specific Target Organ Toxic Product: Specified substance(s) L-Glutamic acid, sodium salt monohydrate	ity - Single Exposure No data available. No data available.
Specific Target Organ Toxic Product:	ity - Repeated Exposure No data available.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
Aspiration Hazard Product: Specified substance(s) L-Glutamic acid, sodium salt monohydrate	Not classified No data available.
Other Adverse Effects:	None known.
CTION 12: Ecological Inform	nation

SECTION 12: Ecological Information

12.1 Toxicity

Acute toxicity

No data available.



Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
Aquatic Invertebrates Product:	No data available.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
Chronic toxicity	
Fish	
Product:	No data available.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
Aquatic Invertebrates Product:	No data available.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
Toxicity to aquatic plants Product:	No data available.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
12.2 Persistence and Degradabili	ty
Biodegradation Product:	There is no data on the degradability of this product.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
BOD/COD Ratio Product	No data available.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.
12.3 Bioaccumulative Potential Product:	No data available on bioaccumulation.
Specified substance(s) L-Glutamic acid, sodium salt monohydrate	No data available.

12.4 Mobility in Soil: No data available. Known or predicted distribution to environmental compartments L-Glutamic acid, sodium No data available. salt monohydrate

12.5 Results of PBT and vPvB assessment:	Not available.
L-Glutamic acid, sodium salt monohydrate	No data available.
12.6 Other Adverse Effects:	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
12.7 Additional Information:	No data available.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

General information:	No data available.
Disposal methods:	Discharge, treatment, or disposal may be subject to national, state, or local laws.

SECTION 14: Transport Information

ADR

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Hazard No. (ADR):	Not regulated.
Tunnel restriction code:	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.
RID	
14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name 14.3 Transport Hazard Class(es)	Not regulated.
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group: 14.5 Environmental Hazards: 14.6 Special precautions for user:	Not regulated. Not regulated. Not regulated.

IMDG

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
EmS No.:	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.
Not regulated.	
ΙΑΤΑ	
14.1 UN Number:	Not regulated.
14.2 Proper Shipping Name:	Not regulated.

14.2 Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006 REACH Annex XIV Substance subject to authorisation, as amended: none

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use: none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

Directive 2012/18/EU (Seveso III): on the control of major accident hazards involving dangerous substances: none

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants: none

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work: none

15.2 Chemical safety No Chemical Safety Assessment has been carried out.

assessment:



SECTION 16: Other Information		
Revision Information:	Not relevant.	
References PBT vPvB	PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.	
Key literature references and sources for data:	No data available.	
Wording of the H-statements in sections 2 and 3: none		
Training information:	No data available.	
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