

SAFETY DATA SHEET

1. Product and Company Information

Product Name : Musaibo Kun N 100
Company : Taiyo Nippon Sanso Corporation
Street Address : 1-3-26 Koyama Shinagawa-ku
City, State, Zip, : Tokyo, 142-8558, JAPAN
Country
Technical Phone : +81(3)5439-5898
FAX : +81(3)5439-5883

2. Hazards Identification

Classification of the substance or mixture : Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Label elements : Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Pictogram : No data available

Signal word : No data available

Hazard statement(s) : No data available

Precautionary statement(s) : No data available

Other hazards : None.

3. Substances

Chemical Name	:	L-Glutamic Acid Potassium	Creatine Phosphate Disodium	HEPES	Sodium Azide
Content (%)	:	3.7	2.1	1.4	0.05
Chemical Formula		C5H8KNO4	C4H8N3Na2O5P	C8H18N2O4S	NaN3
Molecular Weight		185.22	255.08	238.30	65.01
Official Gazette Number		-	-	-	1-482
Poisonous and Deleterious Substances Control Law		Not applicable	Not applicable	Not applicable	Not applicable ※1
PRTR Law		Not applicable	Not applicable	Not applicable	Not applicable
CAS No.		540778-10-7	19333-65-4	7365-45-9	26628-22-8

※1 Classified as a toxic designated substance under the Poisonous and Deleterious Substances Control Law, but exempted as the content is less than 0.1%.

4. First Aid Measures

General advice : Show this material safety data sheet to the doctor in attendance.
If inhaled : After inhalation: fresh air.
In case of skin contact : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In case of eye contact : After eye contact: rinse out with plenty of water. Remove contact lenses.
If swallowed : After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.
Most important symptoms and effects, both acute and : The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

delayed

Indication of any immediate medical attention and special treatment needed : No data available

5. Fire Fighting Measures

- Extinguishing media** : Water, carbon dioxide, powder fire extinguishing agent, etc.
- Suitable extinguishing media** : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media** : For this substance/mixture no limitations of extinguishing agents are given.
- Special hazards arising from the substance or mixture** : Not combustible.
- Advice for firefighters** : In the event of fire, wear self-contained breathing apparatus.
- Further information** : Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures** : Advice for non-emergency personnel: Do not breathe gas. Avoid substance contact.
Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.
- Environmental precautions** : Do not let product enter drains.
- Methods and materials for containment and cleaning up** : Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions
(see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
- Reference to other sections** : For disposal see section 13.

7. Handling and Storage

- Precautions for safe handling** : To avoid contact with eyes and skin.
- Storage conditions** : Store at $-80 \pm 2^\circ\text{C}$.
- Specific end use(s)** : Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure Controls/Personal Protection

Control parameters : Ingredients with workplace control parameters

- Exposure controls** :
- Personal protective equipment**
- Eye/face protection** : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses
 - Skin protection** : Chemical-resistant gloves
 - Body Protection** : Rubber or impervious shoes, rubber or impervious protective clothing

- Respiratory protection** : Required when vapours/mists are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
 Recommended Filter type: Filter type ABEK
 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.
 These measures have to be properly documented.
- Control of environmental exposure** : Do not let product enter drains.

9. Information on Basic Physical and Chemical Properties

- Appearance** : liquid
- Odor** : Pale yellow
- Odor Threshold** : No data available
- pH** : No data available
- Melting point /freezing point** : No data available
- Initial boiling point and boiling range** : No data available
- Flash point** : No data available
- Evaporation rate** : No data available
- Flammability (solid, gas)** : No data available
- Upper/lower flammability or explosive limits** : No data available
- Vapor pressure** : No data available
- Vapor density** : No data available
- Relative density** : No data available
- Water solubility** : No data available
- Partition coefficient: n-octanol/water** : No data available
- Autoignition temperature** : No data available
- Decomposition temperature** : No data available
- Viscosity** : Viscosity, kinematic: No data available
 Viscosity, dynamic: No data available
- Explosive properties** : No data available
- Oxidizing properties** : No data available
- Other safety information** : No data available

10. Stability and Reactivity

- Reactivity** : No data available
- Chemical stability** : The product is chemically stable under standard ambient conditions.
- Possibility of hazardous reactions** : No data available
- Conditions to avoid** : no information available
- Incompatible materials** : No data available
- Hazardous decomposition** : Carbon dioxide, carbon monoxide, nitrogen oxides, phosphoric acid

products**11. Toxicological Information****Information on toxicological effects****Acute toxicity**

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Environmental Haz Acute Aquatic Toxicity

No data available

Environmental Haz Chronic Aquatic Toxicity

No data available

Additional Information

Not available

12. Ecological Information**Toxicity** : No data available**Persistence** : No data available**and degradability****Bioaccumulative potential** : No data available**Mobility in soil** : No data available**Results of PBT and vPvB assessment** : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.**Other adverse effects** : No data available**13. Waste Treatment Methods****Residual Waste:**

Dispose of after inactivation treatment, such as autoclaving.

Contaminated Containers and Packaging:

When discarding empty containers, dispose of after inactivation treatment, such as autoclaving

14. Transport Information**UN number** : ADR/RID: - IMDG: - IATA: -**UN proper shipping name** : ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods**Transport hazard class(es)** : ADR/RID: - IMDG: - IATA: -**Packaging group** : ADR/RID: - IMDG: - IATA: -

Date Updated:2023-11-21

TNI00917E-2 Musaibo Kun

Environmental hazards : ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user : No data available

15. Regulatory Information

Safety, health and Environmental regulations/legislation specific for the substance or mixture : This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations : Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment : For this product a chemical safety assessment was not carried out

16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Taiyo Nippon Sanso Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.