

## Safety Data Sheet (SDS)

This product is a chemical substance and is intended to be used by persons having chemical knowledge and skill, at their own discretion and risk.

Revision Date: Sep. 26, 2019

### Section1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifier

Product Name: Glutamine Assay Kit-WST  
Product Code: G268  
CAS Number: -  
EC Number: -

#### 1.2 Details of the supplier of the safety data sheet

Company: Dojindo Laboratories  
Address: Tabaru 2025-5 Mashiki-machi, Kamimashiki-gun, Kumamoto 861-2202, Japan  
Telephone: +81-96-286-1515  
Fax: +81-96-286-1525  
Emergency phone number : +81-96-286-1515

#### 1.3 Product use

For research use only.

### Section2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008.[EU-GHS/CLP]  
Acute toxicity, Category 4 (Oral)  
Flammable liquid, Category 3  
Respiratory sensitisation, Category 1, 1A, 1B  
Skin corrosion/irritation, Category 1A  
Skin corrosion/irritation, Category 1B  
Skin corrosion/irritation, Category 1C

#### 2.2 Label elements

Labeling according Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Pictogram:



Signal word: Danger

Hazard statement(s):

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces.– No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.

P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/ vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/ vapours/spray.
P264	Wash /hands/face/forearms/clothing thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P285	In case of inadequate ventilation wear respiratory protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P304 + P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use extinguisher for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/ international regulations.

### 2.3 Other hazards

None known.

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## Section3. COMPOSITION/INFORMATION ON INGREDIENTS

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3.1	Product name:	Glutamine Assay Kit-WST	
	Hazardous Component	Dye Mixture	H314
		Deamidation Enzyme	H302, H334
		Deamidation Buffer	H226, H314

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## Section4. FIRST AID MEASURES

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### 4.1 Description of first aid measures

If inhaled:	If breathed in, move into fresh air. Seek medical advice if discomfort occurs. If not breathing, give artificial respiration. Call a physician.
If swallowed:	Do not induce vomiting. Wash out mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.
In case of skin contact:	Wash off with plenty of water. Remove contaminated clothing and launder before reuse.
In case of eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No information available.

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### Section5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Use extinguishing media appropriate for the surrounding fire.

#### 5.2 Special hazards arising from the substance or mixture

May emit toxic fumes under fire conditions.

#### 5.3 Special protective equipment for firefighters

Wear self-contained breathing apparatus and full protective clothing if necessary.

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### Section6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Avoid formation of dust. Avoid breathing dust, vapors, mist or gas. Avoid contact with skin and clothing.

#### 6.2 Environmental precautions

Prevent further leakage. Prevent contamination of drains with product.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and collect product in suitable container for disposal.

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### Section7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust. Avoid breathing dust, vapors, mist or gas. Wear appropriate protective personal equipment. Use only with adequate ventilation.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Protect from moisture.  
Store in a cool (0-5°C), dark and dry place. Do not freeze.

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### Section8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

##### Engineering measures

Ensure adequate ventilation, especially in confined areas.

##### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Wash hands, forearms and face after handling.

##### Personal protective equipment

##### Eye/face protection:

Wear safety glasses with side-shields conforming to European Standard EN166.

##### Hand protection:

Wear protective gloves conforming to EU Directive 89/686/EEC and European Standard EN374. Gloves must be inspected prior to use. Avoid skin contact with product when remove gloves. Dispose of contaminated gloves safely after use.

##### Skin and body protection:

Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.

##### Respiratory protection:

Wear suitable respiratory equipment in case of inadequate ventilation.

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### Section9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	
Dye Mixture	Lyophilized form
Glutamine Standard	White solid
Enzyme	White solid
Assay Buffer	Colorless liquid
Reconstitution Buffer	Colorless liquid
Lysis Buffer	Colorless liquid
Glutaminase	White suspension
Reaction Buffer	Colorless liquid
b) Odor:	
Dye Mixture	Odorless
Glutamine Standard	Odorless
Enzyme	Odorless
Assay Buffer	Odorless
Reconstitution Buffer	Odorless
Lysis Buffer	Odorless
Glutaminase	Odorless
Reaction Buffer	Pungent
c) Odor Threshold:	No data available
d) pH:	
Assay Buffer	8.3 - 8.7 (25°C)
Reaction Buffer	4.7 - 5.0 (25°C)
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	No data available
o) Partition coefficient: n-octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

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## **Section 10. STABILITY AND REACTIVITY**

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### **Stability and reactivity**

Reactivity:	Stable
Chemical stability:	Stable at a cool (0-5°C), dark and dry place. Do not freeze.
Possibility of hazardous reactions:	No data available
Conditions to avoid:	Heat, sunlight, high temperature
Incompatible materials:	Strong oxidizing agents, strong acids and bases
Hazardous decomposition products:	No data available

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## **Section 11. TOXICOLOGICAL INFORMATION**

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### **11.1 Information on toxicological effects**

a) Acute toxicity:	No data available
b) Skin corrosion / irritation:	No data available
c) Serious eye damage/eye irritation:	No data available
d) Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as a possible, probable or confirmed human carcinogen by IARC.
e) Reproductive toxicity:	No data available
f) STOT - SE:	No data available
g) STOT - RE:	No data available
h) Aspiration hazard:	No data available

**11.2 Potential health effects**

Ingestion: May be harmful if swallowed.  
 Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.  
 Skin: May be harmful if absorbed through skin. Causes skin irritation.  
 Eyes: Causes serious eye irritation.

**11.3 Additional Information**

No additional information is available

**Section 12. ECOLOGICAL INFORMATION****12.1 Ecotoxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

No data available

**Section 13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Product**

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with local regulations.

**Contaminated packaging**

Dispose of as unused product. Do not reuse empty containers.

**Section 14. TRANSPORT INFORMATION****14.1 UN number, Transport hazard class(es) and Packaging group**

	UN number	Transport hazard class(es)	Packaging group
ADR/RID:	-	-	-
IMDG:	-	-	-
IATA:	-	-	-

**14.2 UN proper shipping name**

ADR/RID:	-
IMDG:	-
IATA:	Not dangerous goods

**14.3 Environmental hazards**

ADR/RID:	No
IMDG:	No
IATA:	No

**Section 15. REGULATORY INFORMATION**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 [REACH], as amended by Commission Regulation (EU) No 453/2010.

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

No information available

**15.2 Chemical Safety Assessment**

No information available

**Section 16. OTHER INFORMATION****Key to abbreviations and acronyms**

STOT-SE:	Specific Target Organ Toxicity - Single Exposure
STOT-RE:	Specific Target Organ Toxicity - Repeated Exposure
PBT:	Persistent Bioaccumulative and Toxic
vPvB:	very Persistent very Bioaccumulative and toxic
ADR:	European Agreement concerning the international carriage of Dangerous goods by Road
CAS:	Chemical Abstracts Service
IARC:	International Agency for Research on Cancer

IATA:	International Air Transport Association
IMDG:	International Maritime code for Dangerous Goods
REACH:	Registration, Evaluation, Authorization and restriction of Chemicals
RID:	Regulations concerning the International transport of Dangerous goods by rail

This product is a chemical substance and is intended to be used by persons having chemical knowledge and skill at their own discretion and risk. This SDS was prepared with our best knowledge based on the information obtained. However, it does not provide any warranty on the data and the assessment of hazards and toxicity information be covered. For use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, region and country where the product be used.

In case you use the information on SDS for important decision, we strongly recommend you to confirm the source of information and the data with your own investigation. Please be noted that the physicochemical data and contents indicated in this SDS are not guaranteed values, only a guide.

The cautions stated are for normal handling only. Additional care may be required for any special handling. The data and/or information used on this SDS may be updated by new knowledge and/or amendments of the conventional theory. Therefore, please check the most updated version of SDS which is available at [www.dojindo.com](http://www.dojindo.com).