

DOJINDO Laboratories

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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: Jan. 15, 2015

Section 1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product identifier**
Product Name: Cytotoxicity LDH Assay Kit-WST
Product Code: CK12
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.

Section 2. 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)
Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 1
Chronic aquatic toxicity, Category 2

- 2.2 Label elements**
Labeling according Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Pictogram:



Signal word: Danger

Hazard statement(s):
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s):
P264 Wash /hands/face/forearms/clothing thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/ face protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
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.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/ international regulations.

- 2.3 Other hazards**
None known.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Product name:** Cytotoxicity LDH Assay Kit-WST

Section 4. FIRST AID MEASURES

- 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 laundry 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.

Section 5. 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.

Section 6. 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.

Section 7. 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 light.
Store in a cool (0-5°C), dark and dry place.

Section 8. 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.
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.
Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.
Wear suitable respiratory equipment in case of inadequate ventilation.

Skin and body protection:

Respiratory protection:

Section 9. PHYSICAL AND CHEMICAL PROPERTIES
Information on basic physical and chemical properties

a) Appearance:
Dye Mixture: White to slightly yellow solid
Assay Buffer: Red liquid
Lysis Buffer: Colorless liquid
Stop Solution: Colorless liquid

b) Odor:
Dye Mixture: Odorless
Assay Buffer: Odorless
Lysis Buffer: Odorless
Stop Solution: Odorless

c) Odor Threshold:
No data available

d) pH:
No data available

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

Section 10. STABILITY AND REACTIVITY
Stability and reactivity

Reactivity:
Chemical stability: Stable
Possibility of hazardous reactions: Stable at a cool (0-5°C), dark and dry place.
Conditions to avoid: No data available
Heat, sunlight, high temperature
Incompatible materials: Strong oxidizing agents, strong acids and bases
Hazardous decomposition products: When decomposed, it may emit toxic fumes of carbonmonoxide and carbon dioxide.

Section 11. TOXICOLOGICAL INFORMATION
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 data available
e) Reproductive toxicity: No data available
f) STOT - SE: No data available
g) STOT - RE: No data available
h) Aspiration hazard: No data available

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.

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

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

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
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, Authori z ation and restriction of Chemicals
RID: Regulations concerning the International transport of Dangerous goods by rail

Section 12. Ecological Information	Data not available
Section 13. Disposal Considerations	
Solve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.	
Section 14. Transport Information	
UN No.:	Not regulated
Class:	Not regulated
PG:	Not regulated
Description:	-
Section 15. Regulatory Information	
PRTR Law:	Not applicable
Industrial Safety and Health Law:	Not applicable
Posituous and Deleterious Substance Control Law:	Not applicable
Fire Service Act:	Not applicable
Law Concerning the Examination and Regulation of Manufacture, etc of Chemical Substances:	Not applicable
Aviation Law:	Not applicable
Ship Safety Law:	Not applicable
Section 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.	
Dojindo Laboratories shall not be held liable for any damage resulting from handling or from contact with the above material.	
MSDS Creation Date:	2013/03/13
Revision #:	2014/11/10
Section 1. Chemical Identification	
Trade Name:	Cytotoxicity LDH Assay Kit-WST
Parts Name:	(Lysis Buffer) (Stop Solution)
Product Code:	CK12
Manufacturer:	Dojindo Laboratories
Address:	Tabaru 2025-5 Washiki-machi, Kamimashiki-gun, Kumamoto 861-2202, Japan
Telephone:	+81-96-286-1515
Section 2. Hazard Statement	
Health Hazards (Acute and Chronic):	May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation.
Material is irritating to mucous membranes and upper respiratory tract.	
Hazard Class:	Applicable
Signs and Symptoms of Exposure:	Not available
Medical Conditions Generally Aggravated by Exposure:	Not available
Physical and Chemical Hazard:	
Health Hazard:	Not categorial
Acute toxic(oral):	Not categorial
Acute toxic(skin):	Not categorial
Acute toxic(inhale):	Not categorial
Skin corrosion/Skin irritation:	Not categorial
Serious eye damage/Eye irritation:	Hazard Category 2A
Respiratory sensitizer:	Not categorial
Skin sensitizer:	Not categorial
Germ cell Mutagen:	Not categorial
Carcinogen:	Not categorial
Germ toxic:	Not categorial
Target internal organs/general toxic: (individual single exposure):	Not categorial
Target internal organs/general toxic: (repeated exposure):	Not categorial
Respiratory hazard:	Not categorial

Ecology Hazard:	Hazard Category 2
Aquatic ecology acute hazard:	Hazard Category 2
Aquatic ecology chronic hazard:	
Symbol:	 Ecology
Signal Word:	Exclamation mark
Hazard Statement:	Warning
Precautionary Statement:	Causes serious eye irritation. Harmful to aquatic life.
Precaution:	
Do not eat, drink or smoke when using this product. No smoking. Do not eat or drink during work. Wear protective safety gloves, clothing, safety glasses and safety goggles.	
First-aid: If swallowed: Immediately call a Poison Center or doctor/physician. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses. If present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention, if on skin: Wash with plenty of soap and water. After contact with skin, take off immediately all contaminated clothing and wash immediately with plenty of water. Wash hands after handling. If skin irritation occurs, get medical advice/attention. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.	
Storage:	Keep tightly closed. Store in a cool (0-5°C), dark and dry place.
Disposal:	Contaminated packaging. Must be emptied of all residues and, following appropriate cleaning, Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3. Composition / Information on Ingredients	
Chemical Name:	
Ingredient/Content:	Lysis Buffer:TritonX-100 (≤15 w/v%) Stop Solution:TritonX-100 (≤10 w/v%)
Molecular Formula:	-
Molecular Weight:	-
CAS Registry #:	9002-93-1 (TritonX-100)
EINECS/ELINCS:	-
Hazardous ingredient:	TritonX-100

Section 4. First Aid Procedures	
In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. In case of contact, immediately wash skin with soap and copious amounts of water. Assure adequate flushing of the eyes by separating the eyelids with fingers. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If ingested, wash out mouth with water. Call a physician. Discard contaminated clothing and shoes.	

Section 5. Fire and Explosion Hazard Data	
Flash Point (Method Used):	Not available
Flammable Limits:	Not available
Extinguishing Media:	Carbon dioxide, dry chemical powder, foam, water.
Special Fire Fighting Procedures:	
Wear protective clothing, respirator, chemical safety goggles, rubber boots and heavy rubber gloves.	
Unusual Fire and Explosion Hazards:	
Fire may produce irritating or poisonous gases.	

Section 6. Accidental Release Measures	
Steps to be Taken in Case Material is Released or Spilled:	
Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Evacuate area. Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. Avoid raising dust.	

Section 7. Handling and Storage	
Wear appropriate NIOSH / MSHA-approved respirator, chemical-safety goggles, chemical-resistant gloves, other protective clothing. Mechanical exhaust required. Use only in a chemical fume hood. Safety shower and eye bath. Face shield.	
Do not breathe dust. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Irritant.	
Harmful liquid. Avoid all contact. Avoid prolonged or repeat.	
Other Precautions: Keep tightly closed. Protect from light. Store in a cool(0-5°C) dark and dry place.	

Section 8. Exposure Controls / Personal Protection	
Respiratory Protection (Specify Type):	Necessary