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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: June 22, 2018

Section1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name:	3-Deoxyglucosone Detection Reagents
Product Code:	D536
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
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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)
Serious eye damage/eye irritation, Category 2
Skin corrosion/irritation, Category 2
Specific target organ toxicity – single exposure, Category 3

2.2 Label elements

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

Pictogram:

Signal word: Warning

Hazard statement(s):

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statement(s):

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.
P271	Use only outdoors or in a well-ventilated area.
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.

P304 + P340	IF INHALED: 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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/ international regulations.

2.3 Other hazards

None known.

Section3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product name: 3-Deoxyglucosone Detection Reagents

DAN

Concentration: ≦100 %

Formula: $C_{10}H_{10}N_2$

Molecular weight: 158.20

3-DG/DAN adduct

Concentration: ≦100 %

Hazardous Component	DAN	H302, H315, H319, H335

Section4. 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 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.

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.

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.

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 light.
Store in a deep freeze at -20℃, dark and dry place.

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 handing.

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.

Section9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	
DAN	White to pale yellowish brown powder
3-DG/DAN adduct	Yellow powder or solid
b) Odor:	
DAN	Odorless
3-DG/DAN adduct	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

Section10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity:	Stable
Chemical stability:	Stable at a deep freeze at -20℃, dark and dry place.
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

Section11. 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 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

Section12. 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

Section13. 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.

Section14. 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: -

14.3 Environmental hazards

ADR/RID: No
IMDG: No
IATA: No

Section15. 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

Section16. 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.