

SAFETY DATA SHEET
In accordance with ISO 11014: 2009

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name SATAKE Reagent L, SATAKE Reagent S

Manufacturer/Responsible party/supplier

Manufacturer SATAKE CORPORATION

Address 2-30 Saijo Nishihonmachi, Higashi-Hiroshima-shi,
Hiroshima-ken, Japan, 739-8602

e-mail address ballast@satake-japan.co.jp

Responsible party SATAKE USA INC.

Address 10900 Cash Road, Stafford, Texas, 77477, U.S.A.

Telephone number +1-281-276-3600

Emergency Telephone number +1-281-276-3600 (Business hours;8:00-17:00)

Supplier MOL Techno-Trade, Ltd

Address 9F, JR Kobe Station NK BLDG, 2-1-18, Nakamachi-Dori,
Chuo-Ku, Kobe, Hyogo, Japan 650-0027

Telephone number +81-78-367-5588

Recommended use and restriction on use

Stain not for drug or household use

Section 2: HAZARDS IDENTIFICATION

Important hazards**GHS classification****Physical Hazards**

Classification not possible

Health Hazards

Eye damage/irritation: Category2

Environmental Hazards

Classification not possible

Label Elements**Pictogram**

Signal word**Hazard Statements****Precautionary Statements**

[Prevention]

[Emergency response]

Warning

Causes serious eye irritation

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

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.

Other hazards

No information

Important symptoms and an outline of an anticipated emergency

Causes serious eye irritation

Section 3: COMPOSITION/ INFORMATION ON INGREDIENTS

Substance/Mixture

Mixture

Compositions

Chemical name/ Generic name	CAS number	Concentration (wt %)
Dimethyl sulfoxide	67-68-5	98.96
Fluorescein diacetate	596-09-8	0.04

Section 4: FIRST-AID MEASURES

First aid procedures

IF INHALED

If you feel unwell, get medical advice/ attention immediately and at rest.

If symptoms continue, call a doctor/physician.

IF ON SKIN

Rinse with plenty of water and soap.

If symptoms continue, call a doctor/physician.

IF IN EYES

Immediately rinse cautiously with water for 15 - 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms continue, call a doctor/physician.

IF SWALLOWED

Rinse mouth. Immediately get medical advice/attention. Do not induce vomiting. If unconscious, do not give anything by mouth.

Anticipated acute effects, anticipated delayed effects and most important symptoms/effects

No information

Protection of first-aiders

Wear appropriate eyes and skin protective equipment.

Note to an attending physician

No information

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water mist, dry chemical powder, fire foam, carbon dioxide or dry sands.

Unsuitable extinguishing media

Applying direct water may be dangerous because fire may expand to surroundings.

Specific hazards arising from the chemical

In case of fire, toxic decomposition products may be generated.

Cut off any ignition sources and extinguish with an appropriate agent.

Cool the surrounding tank and the buildings with direct water jet to avoid risk of fire spreading.

Take action from windward.

Keep out except responsible personnel.

Move container to a safe area if it can be done without risk.

Protective equipment and precautions for firefighters

Wear suitable self-contained breathing apparatus and heat resistant protective clothing for eyes and skin.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

Keep out except responsible personnel.

Wear suitable protective equipment described in Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Environmental precautions

Avoid release into the environment because product may cause local effects.

Methods and materials for containment and cleaning up

Stop leak if you can do it without risk.

In case of small amounts, wipe off spilled material with waste or wiping cloth and collect it in an adequate waste container.

If case of large amounts, prevent leakage and enclose by embankment.

Do not eat or drink near handling and storage locations.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Prevent to flowing into drains, sewers, basements or closed areas.

Secondary disaster prevention measures

Wash residue away with plenty of water.

Section 7: HANDLING AND STORAGE

Handling

Technical measures	Install appropriate equipment and wear suitable protective apparatus described in Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION.
Precautions such as local/total ventilation	Handle the product in a well-ventilated area. In case of mist/vapours generation, use local ventilation.
Precautions for safe handling	Wash hands thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.
Prevention of contact	Incompatible materials

Storage

Technical measures	Install appropriate equipment and wear suitable protective apparatus described in Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION.
Incompatible materials and mixtures	Strong oxidizing agents
Conditions for safe storage	Store away from sunlight in cold (0 °C or less). Keep container tightly closed.
Packing material	Use a sealed container without damage or leakage.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Occupational Exposure Limits

ACGIH TLV	Not applicable
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Engineering controls

If use indoors, seal generation source or install local exhaust ventilation systems.
Install safety shower, hand-washed equipment or eye washer near the handling place. Show clearly the place.

Personal protective equipment

Respiratory protection	Wear organic gas protective mask.
Hand protection	Wear impermeability protective gloves.
Eye protection	Wear safety glasses with a side plate or goggles if in eyes.

Skin and body protection

Wear long-sleeved work clothes, and protective boots.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, form and colour)	Colourless transparent liquid (Dimethyl sulfoxide)
Odour	Odourless (Dimethyl sulfoxide)
Odour threshold	No information
pH	No information
Melting point/ freezing point	18°C (Dimethyl sulfoxide)
Boiling point, initial boiling point and boiling range	189°C (Dimethyl sulfoxide)
Flashpoint	95°C (Dimethyl sulfoxide)
Evaporation rate	No information
Flammability	No information
Upper/lower explosive limits	42.0 vol% • 2.6 vol% (Dimethyl sulfoxide)
Vapour pressure	No information
Vapour density	No information
Specific gravity	1.099-1.103 g/mL (Dimethyl sulfoxide)
Solubility	Water: soluble (Dimethyl sulfoxide, 20°C)
<i>n</i> -octanol/water partition coefficient	No information
Auto-ignition temperature	215°C (Dimethyl sulfoxide)
Decomposition temperature	No information
Viscosity	No information
Other information	No information

Section 10: STABILITY AND REACTIVITY

Chemical stability	May change by light. Fire or explosion if react with strong oxidizing agents.
Hazardous reactions	No hazardous reaction expected under normal handling.
Conditions to avoid	Moisture, high temperature, direct sunlight, heat, flame, sparks, static electricity, spark
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	In case of fire, toxic decomposition products (carbon monoxide, carbon dioxide, sulfur oxides) may be generated.

Section 11: TOXICOLOGICAL INFORMATION

Toxicological information for product (Dimethyl sulfoxide)

Acute toxicity (oral):	Rat LD ₅₀ =14,500 mg/kg
Skin irritation/corrosion:	Rabbit test: mild irritation (500 mg/24h)
Eye damage/irritation:	Rabbit test: mild irritation (500 mg/24h)

Section 12: ECOLOGICAL INFORMATION

Ecological information for product (Dimethyl sulfoxide)

Ecotoxicity	Algae (<i>Skeletonema costatum</i>) 96h EC ₅₀ =2,350-25,500 mg / L Crustaceans (<i>Daphnia magna</i>) 24h EC ₅₀ =7,000 mg/L Fish (<i>Pimephales promelas</i>) 96h LC ₅₀ =34,000 mg/L
Persistence and degradability	No information
Bioaccumulative potential	No information
Mobility in soil	No information
Hazardous to the ozone layer	Not applicable

Section 13: DISPOSAL CONSIDERATIONS

Remaining product

Dispose of waste in accordance with applicable local, regional and international regulations and standards.

When disposing, consult to a certificated waste trader or local offices if they deal with the waste.

Contaminated containers and packaging

Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of empty containers.

Section 14: TRANSPORT INFORMATION

International regulation

UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	Not applicable
Subsidiary risk	Not applicable
Packing group	Not applicable
Marine pollutant	Not applicable
IBC Code	Not applicable

When transporting, confirm no damage to containers. Avoid handling violently or leaking wet. Load to prevent fall or falling down containers and take preventive measures of collapse.

Section 15: REGULATORY INFORMATION

US Federal regulation

TSCA inventory:	Registered
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EU regulation

The product and its ingredients are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

Regulation (EC) 1272/2008 (Annex VI, Table-3.1, Table 3.2): Not Listed

Section 16: OTHER INFORMATION

Update history:

Date of issue: 15th May, 2023

[Disclaimer]

This SDS has been prepared on the basis of laws, regulations and information available at this time. It is user's responsibility to modify or update any contents in this SDS regarding information on hazardous properties and/or instruction for safe handling of the product when they become available. Precautionary measures in this SDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions or situations.