

Sodium selenite pentahydrate

00163-100G

Version 1.4 Issuing date 12/19/2016 Revision Date 08/25/2022 Print Date 06/26/2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : Sodium selenite pentahydrate

Number : 00000020657

Recommended use of the chemical and restrictions on

use

Laboratory chemicals

Manufacturer or supplier's

details

Honeywell International Inc. 1953 South Harvey Street Muskegon, MI 49442

USA

For further information,

please contact:

1-800-368-0050 +1-231-726-3171

(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701 or +1-303-389-1414

Transportation (CHEMTREC): 1-800-424-9300 or +1-703-

527-3887

In Japan: +(81)-345209637

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification of the : Acute toxicity, Category 2, Oral substance or mixture : Acute toxicity, Category 2, Inhalation

Skin irritation, Category 2 Eye irritation, Category 2A Skin sensitizer, Category 1

Short-term (acute) aquatic hazard, Category 2 Long-term (chronic) aquatic hazard, Category 2

GHS Label elements, including precautionary statements

Symbol(s) :







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Signal word : Danger

Hazard statements : Fatal if swallowed or if inhaled.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention**:

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the

workplace.

Avoid release to the environment.

Wear protective gloves/ eye protection/ face protection.

Wear respiratory protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER/

doctor

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

Immediately call a POISON CENTER/ doctor.

Rinse mouth.

If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

Collect spillage.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal

plant.

Other hazards which do not : Contact with acids liberates toxic gas.



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result in classification

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : Na2SeO3 · 5H2O

Chemical nature : Substance

Chemical name CAS-No. Concentration

Sodium selenite pentahydrate 26970-82-1 100.00 %

Sodium selenite pentahydrate

4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Immediately take off contaminated clothing and rinse body

with plenty of water.

First aider needs to protect himself. Call a physician immediately.

Inhalation : If breathed in, move person into fresh air.

Call a physician immediately.

Skin contact : Then wash with lots of water and soap.

Call a physician immediately.

Eye contact : Protect unharmed eye.

Rinse immediately with plenty of water, also under the eyelids,

for at least 5 minutes.

Call a physician immediately.

Ingestion : Immediate medical attention is required.

A person suspected to have swallowed the substance who is conscious should be given water to drink. Take to a doctor

immediately together with this card

DO NOT induce vomiting unless directed to do so by a

physician or poison control center.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES



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Suitable extinguishing media

: Water spray jet

Foam

Carbon dioxide (CO2)

Dry powder

Specific hazards during

firefighting

: In case of fire hazardous decomposition products may be

produced such as:

Toxic metal oxide fumes

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus and protective suit.

No unprotected exposed skin areas.

Further information : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Immediately evacuate personnel to safe areas.

Wear personal protective equipment. Unprotected persons

must be kept away.

Keep people away from and upwind of spill/leak.

Avoid dust formation. Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Environmental precautions

: Do not flush into surface water.

Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

: Use mechanical handling equipment.

Sweep up and shovel into suitable containers for disposal.

Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

Precautions for safe handling : Wear personal protective equipment.

Avoid formation of respirable particles.

Protect from contamination.

Avoid exposure - obtain special instructions before use.

Use only in well-ventilated areas.

Advice on protection against : The product itself does not burn.



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fire and explosion Normal measures for preventive fire protection.

Storage

Conditions for safe storage,

including any incompatibilities

: Store in original container.

Keep containers tightly closed in a dry, cool and well-

ventilated place.

Protect from physical damage.

Store in a place accessible by authorized persons only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS- No.	Value	Control parameters	Update	Basis
Sodium selenite pentahydrate Sodium selenite pentahydrate	26970- 82-1	TWA : Time weighted average	0.1 mg/m3	04 2007	Japan Society for Occupational Health:Japan Society for Occupational Health allowable concentration recommendatio n value
Further information	: Expres	sed as : as Se			

Appropriate engineering controls

Local exhaust

Individual protection measures, such as personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory

equipment.

Hand protection : Wear nitrile rubber gloves to avoid contact with the skin.

Gloves must be inspected prior to use.

Replace when worn.



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Eye protection : Safety goggles

Skin and body protection : Wear suitable protective equipment.

Complete suit protecting against chemicals

Lab coat

Hygiene measures : Separate rooms are required for washing, showering and

changing clothes.

Keep working clothes separately. When using, do not eat, drink or smoke.

Contaminated work clothing should not be allowed out of the

workplace.

Protective measures : Ensure that eyewash stations and safety showers are close to

the workstation location.

Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.

Do not breathe dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : crystalline

Colour : colourless

Odour : odourless

Odour Threshold : Note: No data available

pH : 9 at 50.00 g/l, 20 °C

Melting point/range : Note: Not applicable, Decomposition

Boiling point/boiling range : Note: Not applicable

Evaporation rate : Note: No data available

Flammability : The product is not flammable.

Lower explosion limit : Note: Not applicable



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Upper explosion limit : Note: Not applicable

Vapour pressure : Note: negligible

Vapour density : Note: No data available

Density : Note: No data available

Water solubility : 898 g/l at 25 °C

Note: anhydrous substance

Partition coefficient: n-

octanol/water

: Note: No data available

Auto-ignition temperature : Note: not auto-flammable

Decomposition temperature : 40 °C

Note: Loss of water of crystallization on heating.

> 320 °C

Note: Decomposes on heating., Hazardous decomposition

products formed under fire conditions.

Viscosity, dynamic : Note: Not applicable

Viscosity, kinematic : Note: Not applicable

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : 263.01 g/mol

Bulk density : Note: No data available

10. STABILITY AND REACTIVITY

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous : Contact with acids liberates toxic gas.



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reactions

Conditions to avoid : Protect from contamination.

Protect from heat/overheating.

Protect from atmospheric moisture and water.

Incompatible materials to

avoid

: Acids

Strong oxidizing agents

Hazardous decomposition

products

: In case of fire hazardous decomposition products may be

produced such as:

Toxic metal oxide fumes

11. TOXICOLOGICAL INFORMATION

exposure

Acute oral toxicity

Information on likely routes of : Inhalation, Eye contact, Skin contact, Ingestion

: LD50: 7 mg/kg Species: Rat

Test substance: anhydrous substance

: LC50: > 0.052 - 0.51 mg/l , dust/mist Acute inhalation toxicity

Exposure time: 4 h

Species: Rat, male and female Method: OECD Test Guideline 403

Acute dermal toxicity : Note: No data available

: Result: Skin irritation Skin corrosion/irritation

> Method: OECD Test Guideline 439 Test substance:anhydrous substance

Serious eye damage/eye

irritation

: Note: Conclusive and supporting classification (Ref: REACH

Dossier - ECHA disseminated data)

Respiratory or skin Species: Mouse

sensitisation Result: Causes sensitisation.

Method: OECD Test Guideline 429

Repeated dose toxicity : Species: Mouse

Application Route: Oral



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Exposure time: 90 d

NOAEL (No observed adverse effect level): 0.9 mg/kg

Test substance: anhydrous substance

Carcinogenicity : Note: No data available

Aspiration toxicity : Not applicable

12. ECOLOGICAL INFORMATION

Aquatic and ecotoxicity

Toxicity to fish : LC50: 2.06 mg/l

Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)

Note: as Se

: NOEC: 0.01 mg/l Exposure time: 258 d

Species: Lepomis macrochirus (Bluegill sunfish)

Note: as Se

Toxicity to daphnia and other

aquatic invertebrates

: semi-static test LC50: 0.55 mg/l

Exposure time: 48 h

Species: Daphnia magna (Water flea)

Note: as Se

Toxicity to algae : NOEC: 0.197 mg/l

Exposure time: 96 h

Species: Chlamydomonas reinhardtii

Note: as Se

: EC50: 0.245 mg/l Exposure time: 96 h

Species: Chlamydomonas reinhardtii

Note: as Se

Toxicity to daphnia and other

aquatic invertebrates

NOEC: 0.07 mg/l Exposure time: 28 d



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(Chronic toxicity) Species: Daphnia magna (Water flea)

Note: as Se

Persistence and degradability

Other adverse effects

Additional ecological : The methods for determining biodegradability are not

information applicable to inorganic substances.

13. DISPOSAL CONSIDERATIONS

Disposal methods : In accordance with local and national regulations.

14. TRANSPORT INFORMATION

ADR

UN/ID No. : UN 2630
Description of the goods : SELENITES

(SODIUM SELENITE)

Class : 6.1
Packing group : I
Classification Code : T5
Hazard Identification Number : 66
Labels : 6.1

IATA

UN/ID No. : UN 2630 Description of the goods : Selenites

(Sodium selenite)

Class : 6.1
Packing group : I
Labels : 6.1
Packing instruction (cargo : 673

aircraft)

Packing instruction : 666



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(passenger aircraft)

IMDG

UN/ID No. : UN 2630
Description of the goods : SELENITES

(SODIUM SELENITE)

Class : 6.1
Packing group : I
Labels : 6.1
EmS Number 1 : F-A
EmS Number 2 : S-A

Marine pollutant : yes

15. REGULATORY INFORMATION

National regulatory information

Vessel Safety Law : Toxic

JP VSL

: Toxic and infectious substances (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached

Table 1)

Aviation Law : Toxic and infectious substances (Article 194 of The

JP AVL Enforcement Rules of Aviation Law and its Attached Table 1)

Fire Service Law : Not relevant

Japan. ISHL Hazardous : Listed

Substances Labeling Sodium selenite pentahydrate 26970-82-1

Requirements (ISHL Art. 57, Enforcement Order Art. 18, Enforcement Rule Art. 30 & 31, as amended through 6

April 2018)

Japan. SDS and Risk : Listed

Assessment Requirements (ISHL Art. 57-2 and 57-3, Enforcement Order Art. 18-2,

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Enforcement Rule Art. 34-2 and 34-2-2), as amended

Poisonous and Deleterious

Substances Control Law

: Poisonous substance not for pharmaceutical use

Listed

: Class 1

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Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion

of Improvements to the Management Thereof

Listed Sodium selenite pentahydrate 26970-82-1

Other international regulations

Notification status

US. Toxic Substances

Control Act

: On TSCA Inventory

Australia. Industrial Chemicals Act (AIIC), as

amended

: Not in compliance with the inventory

Canada, Canadian

Environmental Protection Act

(CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List

: On the inventory, or in compliance with the inventory

Korea. Existing Chemicals

Inventory (KECI)

: On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)

: Not in compliance with the inventory

China. Inventory of Existing

Chemical Substances

(IECSC)

: On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as

: Not in compliance with the inventory



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published by ERMA New Zealand

Inventory (TCSI)

Taiwan Chemical Substance : On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3*	3
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 09/18/2017 Revision Date: 08/25/2022

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Issuing date 12/19/2016

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group