

SAFETY DATA SHEET

1. Identification

Product identifier Thiosulfate N/10

Product code R-0007

Recommended useUse as directed by manufacturer for purposes directly related to water testing.

Recommended restrictions None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Taylor Technologies, Inc.

Address 31 Loveton Circle

Sparks, MD 21152

United States

Telephone (410) 472-4340 Monday–Friday, 8:00 a.m.–4:30 p.m.

Website www.taylortechnologies.com

E-mail Not available
Emergency phone number (800) 837-8548

2. Hazard(s) identification

Physical hazards
This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Health hazards
This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Environmental hazards
Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.

Label elements None required
Signal word None required
Hazard statement None required

Precautionary statement

PreventionNone requiredResponseNone requiredStorageNone requiredDisposalNone required

Hazard(s) not otherwise classified None
Supplemental information None

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Deionized water	Dihydrogen oxide	7732-18-5	95–99
Sodium thiosulfate pentahydrate	Thiosulfuric acid, disodium salt, pentahydrate; Sodium thiosulfate	10102-17-7	0.1–5
Other components below reportable levels			0.01–0.1

4. First-aid measures

Inhalation Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention

immediately.

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Skin contact Immediately wash skin with soap and water. If symptoms persist or in all cases of concern, seek

medical advice.

Eye contact Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if

present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek

medical advice.

Ingestion Treat symptomatically. Never give anything by mouth to a person who is unconscious or is

having convulsions. Do NOT induce vomiting unless directed by physician. If symptoms persist

or in all cases of concern, seek medical advice.

Most important symptoms/effects, acute and delayed

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause

gastrointestinal irritation, nausea, vomiting, and diarrhea.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Firefighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective

equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions

Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if it can be done without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted

Hazardous combustion products

Carbon oxides. Hydrogen sulfide. Sulfur oxides. Other irritating fumes and smoke.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for reuse. For waste disposal, refer to section 13 of the SDS. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental precautions Avoid discharge into drains, watercourses, or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (refer to section 10 of the SDS). Protect against physical damage. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

No occupational exposure limits noted for the ingredient(s)

Biological limit values

No biological exposure limits noted for the ingredient(s)

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency

eyewash fountain and quick-drench shower in the immediate work area.

Skin protection

Hand protection Wear appropriate chemical-resistant gloves. Advice should be sought from glove suppliers.

Other Wear appropriate chemical-resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA

approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits.

Advice should be sought from respiratory protection suppliers.

Thermal hazards When necessary, wear appropriate thermal protective clothing.

General hygieneAlways observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective

equipment to remove contamination. Avoid breathing mist or vapor.

9. Physical and chemical properties

Appearance

Physical state Liquid Form Liquid

Color Clear colorless or nearly colorless

Odor Odorless
Odor threshold Not available

pH 9.6

Melting point/freezing pointNot available **Initial boiling point and boiling**212°F (110°C)

range

Flash point Not applicable (does not burn)

Evaporation rate Not available Flammability (solid, gas) Not applicable

Upper/lower flammability or

explosive limits

Flammability limit, Not applicable

lower (%)

Flammability limit, Not applicable

upper (%)

Explosive limit, Not applicable

lower (%)

Explosive limit, Not applicable

upper (%)

Vapor pressure 17 mm Hg

Vapor density 0.6

Relative density 1.00 g/cm³

Solubility(ies)

Solubility (water) Soluble in all proportions

Partition coefficient Not available

(n-octanol/water)

Auto-ignition temperature Not applicable **Decomposition temperature** Not available Viscosity Not available

Other information

Explosive properties Not applicable Oxidizing properties Not applicable

Percent volatile 97% Specific gravity 1.00

10. Stability and reactivity

Reactivity This product is stable and nonreactive under normal conditions of use, storage, and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use

Conditions to avoid Contact with incompatible materials. Do not use in areas without adequate ventilation.

Incompatible materials Oxidizing agents. Strong acids.

Hazardous decomposition

products

None known. For hazardous combustion products, refer to section 5 of the SDS.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system Skin contact May cause slight or mild transient irritation

Eye contact May cause temporary irritation

Ingestion May cause discomfort

Most important symptoms/effects, acute

and delayed

Acute toxicity

Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause

Test Results

gastrointestinal irritation, nausea, vomiting, and diarrhea.

This product is not classified as an acute toxicity hazard. See below for individual ingredient

acute toxicity data.

Product Species Sodium thiosulfate pentahydrate (CAS 10102-17-7)

Acute

Dermal

Rabbit Not available LD₅₀

Inhalation

 LC_{50} Rat Not available

Oral

Rat >5000 mg/kg LD_{50}

Deionized water (CAS 7732-18-5)

Acute

Dermal

Rabbit Not available LD50

Inhalation

 LC_{50} Rat Not available

Oral

 LD_{50} Rat >89840 mg/kg **Skin corrosion/irritation** May cause slight or mild transient irritation

Serious eye damage/eye

irritation

May cause temporary irritation

Respiratory sensitization Not expected to be a respiratory sensitizer

Skin sensitization Not expected to be a skin sensitizer

Germ cell mutagenicity Not expected to be mutagenic

Carcinogenicity This product is not considered to be a carcinogen by IARC, NTP, OSHA, or U.S. ACGIH.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity,

single exposure

Not classified as a specific target organ toxicity – single exposure

Specific target organ toxicity,

repeated exposure

Not classified as a specific target organ toxicity – repeated exposure

Aspiration toxicity Not expected to be an aspiration hazard

Chronic effects Frequent or prolonged contact may dry the skin, leading to discomfort and dermatitis.

12. Ecological information

Ecotoxicity This product is not classified as environmentally hazardous; however, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

Bioaccumulative potential

Mobility in soil

Not available

Not available

Other adverse effects No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulationsDispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion with the user, the producer, and the waste

disposal company.

Waste from residues/unused

products

Empty containers or liners may retain some product residues. This material and its container

must be disposed of in a safe manner (refer to Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste-handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container

is emptied.

14. Transportation information

DOT

Not regulated as dangerous goods

IATA

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This mixture is not intended to be transported in bulk.

15. Regulatory information

U.S. federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

Material name: Thiosulfate N/10; R-0007

CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

SARA 304 Emergency Release Notification

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate hazard – no

Delayed hazard – no Fire hazard – no Pressure hazard – no Reactivity hazard – no

SARA 302 Extremely Hazardous Substance

Not regulated

SARA 311/312 Hazardous Chemical

Not regulated

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAP)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

U.S. state regulations

California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not regulated

Massachusetts Right-to-Know Act

Not regulated

New Jersey Worker and Community Right-to-Know Act

Not listed

Pennsylvania Worker and Community Right-to-Know Act

Not listed

Rhode Island Right-to-Know Act

Not regulated

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International inventories

Country(ies) or region	Inventory name	On inventory
		(yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	yes
Canada	Domestic Substances List (DSL)	yes
Canada	Non-Domestic Substances List (NDSL)	no
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	yes
Europe	European List of Notified Chemical Substances (ELINCS)	no
Japan	Existing and New Chemical Substances (ENCS)	yes
Korea	Existing Chemicals List (ECL)	yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA)	yes

^{*}A "yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(ies).

16. Other information, including date of preparation or last revision

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists

AICS: Australian Inventory of Chemical Substances

CAA: Clean Air Act

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

CFR: Code of Federal Regulations CSA: Canadian Standards Association DEA: Drug Enforcement Agency DOT: Department of Transportation DSL: Domestic Substances List EC: effective concentration ECL: Existing Chemicals List

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

ENCS: Existing and New Chemical Substances

EPA: Environmental Protection Agency

HAP: hazardous air pollutants

HMIS: Hazardous Materials Identification System

HNOC: hazards not otherwise classified

HPA: Hazardous Products Act

HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk

ICAO: International Civil Aviation Organization

IECSC: Inventory of Existing Chemical Substances Produced or Imported in China

IMDG: International Maritime Dangerous Goods

IUCLID: International Uniform Chemical Information Database

LC: lethal concentration

LD: lethal dose

MARPOL: marine pollution

MSHA: Mine Safety and Health Administration NDSL: Non-Domestic Substances List NFPA: National Fire Protection Association

NIOSH: National Institute of Occupational Safety and Health

NOEC: no observable effect concentration NTP: National Toxicology Program

NZIoC: New Zealand Inventory of Chemicals

OECD: Organisation for Economic Co-operation and Development

OEL: occupational exposure limits

OSHA: Occupational Safety and Health Administration

PEL: permissible exposure limits

A "no" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

PICCS: Philippine Inventory of Chemicals and Chemical Substances

PPE: personal protective equipment

RCRA: Resource Conservation and Recovery

Act RQ: reportable quantity

RTECS: Registry of Toxic Effects of Chemical Substances

RTK: right to know

SARA: Superfund Amendments and Reauthorization Act

SDS: Safety Data Sheet

SDWA: Safe Drinking Water Act STEL: short-term exposure limit TLV: threshold limit values

TSCA: Toxic Substances Control Act

TWA: time-weighted average VOC: volatile organic compounds WEL: workplace exposure limit

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