

# SAFETY DATA SHEET

#### 1. Identification

Product identifier	Thiocarbamate Reagent	
Product code	R-0643	
Recommended use	Use as directed by manufacturer for purposes directly related to water testing.	
Recommended restrictions	None known	
Manufacturer/Importer/Supplier/D	istributor 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	
Prevention	None required
Response	None required
Storage	None required
Disposal	None 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
Other components below reportable levels			0.1–5
4. First-aid measures			
Inhalation	Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention immediately.		
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. Nitrogen oxides. 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.

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 hygiene considerations	Always 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
Odor	Odorless
Odor threshold	Not available
рН	7.8
Melting point/freezing point	Not available
Initial boiling point and boiling range	212°F (110°C)
Flash point	Not applicable (does not burn)
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit, lower (%)	Not applicable
Flammability limit, upper (%)	Not applicable
Explosive limit, lower (%)	Not applicable
Explosive limit, upper (%)	Not applicable
Vapor pressure	17 mm Hg
Vapor density	0.6
Relative density	1.00 g/cm <sup>3</sup>

Solubility(ies)		
Solubility (water)	Soluble in all proportions	
Partition coefficient (n-octanol/water)	Not available	
Auto-ignition temperature	Not applicable	
Decomposition temperature	Not available	
Viscosity	Not available	
Other information		
Explosive properties	Not applicable	
Oxidizing properties	Not applicable	
Percent volatile	99%	
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
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	May cause slight or mild transient irritation	
Eye contact	May cause temporary irritation		
Ingestion	May cause discomfort		
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.		
Acute toxicity	This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.		
Components	Species	Test Results	
Deionized water (CAS 7732-18	3-5)		
Acute			
Dermal			
LD <sub>50</sub>	Rabbit	Not available	
Inhalation			
LC <sub>50</sub>	Rat	Not available	
Oral			
LD <sub>50</sub>	Rat	>89840 mg/kg	
Skin corrosion/irritation	May cause slight or mild transient	irritation	
Serious eye damage/eye irritation	May cause temporary irritation		
, , ,	May cause temporary irritation Not expected to be a respiratory s	ensitizer	
irritation	5		

#### 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 toxicity	This 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	Not available
Bioaccumulative potential	Not available
Mobility in soil	High water solubility indicates a high mobility in soil.
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 instructions	Collect 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 regulations	Dispose 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 This mixture is not intended to be transported in bulk. Annex II of MARPOL 73/78 and the IBC Code

### 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

#### 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 regulated

Pennsylvania Worker and Community Right-to-Know Act

Not regulated

#### 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)	no
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 Ric	o 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).

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).

#### 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 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 The information in the Safety Data Sheet is offered for your consideration and guidance for safe Disclaimer handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy of completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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