


## SECTION 1: Identification

<b>Product identifier</b>	
Product name	Copper Free 0.2 - Reagent E
Product number	R-8013E
<b>Recommended use and restrictions</b>	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
<b>Manufacturer</b>	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) identification

<b>Physical hazards</b>	Substances and mixtures which, in contact with water, emit flammable gases	Category 3
<b>Health hazards</b>	Eye damage/irritation	Category 2A
	Skin corrosion/irritation	Category 2
<b>Environmental hazards</b>	No data available	
<b>Label elements</b>		
Hazard pictograms		
Signal word	Warning	
Hazard statements	In contact with water releases flammable gas. Causes serious eye irritation. Causes skin irritation.	
Precautionary statements		
Prevention	Protect from moisture. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur.	
Response	IF ON SKIN: Wash with plenty of water. IF SKIN IRRITATION OCCURS: Get medical advice/attention. Take off all contaminated clothing and wash it before reuse. 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. IN CASE OF FIRE: Use carbon dioxide, dry chemical powder, or foam to extinguish.	
Storage	Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store in a dry place.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Hazards not otherwise classified</b>	No data available	

### SECTION 3: Composition/information on ingredients

#### Mixture

Chemical name	Common name and synonyms	CAS number	%
Sodium hydrosulfite	Sodium dithionate	7775-14-6	90–95
Calcium oxide	Lime	1305-78-8	0.1–2
Sodium bisulfate monohydrate	Sodium hydrogensulfate	10034-88-5	0.1–2
Sodium carbonate	Soda ash	497-19-8	0.1–2
Other components below reportable levels			0.1–1

### SECTION 4: First-aid measures

#### If inhaled

Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

#### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical attention if irritation develops.

#### In case of 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.

#### If swallowed

Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice.

#### Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

#### Indication of any 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.

### SECTION 5: Firefighting measures

#### Extinguishing media

Suitable extinguishing media	Carbon dioxide, dry chemical powder or foam
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### Specific hazards arising from the substance or mixture

Fire hazard	Addition of small amounts of water may cause self-ignition.
Explosion hazard	Not explosive
Reactivity	No data available
Hazardous combustion products	Calcium oxides, carbon oxides, hydrogen chloride gas, potassium oxides, sodium oxides, and sulfur oxides

#### Advice for firefighters

Precautionary measures	Exercise caution when fighting any chemical fire; hazardous fumes will be present.
Firefighting equipment/instructions	Use water spray or fog for cooling exposed containers.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to section 9 of the SDS for flammability properties.

### SECTION 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 dust. 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.

#### Environmental precautions

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

**Methods and material for containment and cleaning up**

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Sweep up or vacuum up spillage and collect in suitable container for later disposal. Never return spills to original containers for reuse. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and storage****Personal precautions, protective equipment, and emergency procedures**

Do not breathe dust. Avoid dust formation. 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**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store in a dry place. Store away from incompatible materials (refer to section 10 of the SDS).

**SECTION 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)

**Exposure controls**

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. Eyewash facilities and emergency shower must be available when handling this product.

Personal protective equipment

Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.

Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.

Body protection Wear appropriate protective 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 dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

Physical state	Solid
Form	Powder
Color	Off-white
Odor	Sulfidic
Odor threshold	No data available
pH	No data available
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Relative vapor density	No data available
Solubility	Soluble in all proportions
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available

Explosive properties No data available  
Oxidizing properties No data available

## SECTION 10: Stability and reactivity

**Reactivity** No data available  
**Chemical stability** Stable under recommended handling and storage conditions (refer to section 7 of the SDS)  
**Possibility of hazardous reactions** Exposure to moisture either from humid air or from small amounts of water can result in spontaneous chemical reactions, which may generate sufficient heat to initiate thermal decomposition.  
**Conditions to avoid** Moisture. Contact with incompatible materials. Do not use in areas without adequate ventilation.  
**Incompatible materials** Acids, strong acids, strong oxidizing agents, sulfur oxides, and water

## SECTION 11: Toxicological information

### Information on toxicological effects

Inhalation May cause irritation to the respiratory system  
Skin contact Causes skin irritation  
Eye contact Causes serious eye irritation  
Ingestion May cause irritation, nausea, vomiting, and diarrhea

### Most important symptoms/effects, acute and delayed

Direct skin contact may cause irritation. Symptoms may include redness and itching.  
Direct eye contact may cause serious irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.  
Inhalation of dust 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
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Sodium bisulfate monohydrate (CAS 10034-88-5)

#### Acute

Oral

LD<sub>50</sub>

Rat

2490 mg/kg

Sodium carbonate (CAS 7775-14-6)

#### Acute

Oral

LD<sub>50</sub>

Rat

2500 mg/kg

Sodium hydrosulfite (CAS 7775-14-6)

#### Acute

Oral

LD<sub>50</sub>

Rat

>500 mg/kg

**Respiratory or skin sensitization** No data available

**Germ cell mutagenicity** No data available

**Carcinogenicity** No data available

**Reproductive toxicity** No data available

**Specific target organ toxicity (single exposure)** No data available

**Specific target organ toxicity (repeated exposure)** No data available

**Aspiration hazard** No data available

## SECTION 12: Ecological information

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.

## SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport information

### DOT

UN number	UN1384
UN proper shipping name	Sodium dithionite
Transport hazard class(es)	
Class	4.2
Subsidiary risk	Not listed
Label(s)	4.2
Packing group	II
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.
Special provisions	A19, A20, IB6, IP2, T3, TP33
Packaging exceptions	Not listed
Packaging, non-bulk	212
Packaging, bulk	241

### IATA

UN number	UN1384
UN proper shipping name	Sodium dithionite
Transport hazard class(es)	
Class	4.2
Subsidiary risk	Not listed
Packing group	II
Environmental hazards	Not listed
ERG code	4L
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	467
Cargo aircraft only	470

### IMDG

UN number	UN1384
UN proper shipping name	Sodium dithionite
Transport hazard class(es)	
Class	4.2
Subsidiary risk	Not listed
Packing group	II
Environmental hazards	
Marine pollutant	Not listed
EmS	F-A, S-J
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.

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

### DOT



### IATA; IMDG



## SECTION 15: Regulatory information

### U.S. federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**SARA 311/312 Hazardous Chemical**  
Sodium hydrosulfite (CAS 7775-14-6)

**U.S. state regulations**

**Massachusetts Right-to-Know Act**

Sodium hydrosulfite (CAS 7775-14-6)

**New Jersey Worker and Community Right-to-Know Act**

Sodium hydrosulfite (CAS 7775-14-6)

**Pennsylvania Worker and Community Right-to-Know Act**

Sodium hydrosulfite (CAS 7775-14-6)

**SECTION 16: Other information**

**NFPA Rating**

Health hazard	2
Fire hazard	0
Reactivity	2
Specific	N/A

**Disclaimer**

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