

SECTION 1: Identification

Product identifier	
Product name	Phosphonate 30 – Reagent A
Product number	R-8014A
Recommended use and restrictions	To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.
Manufacturer	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Local: (410) 472-4340 – 8am – 5pm EST Toll-free: (800) 837-8548 – 8am – 5pm EST
Emergency phone number	
CHEMTREC, United States	1-800-424-9300 – 24-hour service
CHEMTREC, International	+1 703-741-5970 – 24-hour service

SECTION 2: Hazard(s) Identification

Physical hazards	Oxidizing solids	Category 3
Health hazards	Acute toxicity, oral	Category 4
	Eye damage/irritation	Category 2A
	Skin corrosion/irritation	Category 2
	Skin sensitization	Category 1
	Respiratory sensitization	Category 1
	Specific target organ toxicity, single exposure	Category 3
Environmental hazards	Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.	

Label elements

Hazard pictograms



Signal word	Danger
Hazard statements	May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation. Causes skin irritation. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
Precautionary statements	
Prevention	Keep away from heat. Keep away from clothing and other combustible materials. Take precaution to avoid mixing with combustibles. Wash skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Wear protective gloves/eye protection/face protection if contact is likely to occur. Avoid breathing dust/fumes/gas/mists/vapors/spray. In case of inadequate ventilation wear respiratory protection. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace.
Response	IN CASE OF FIRE: Use water to extinguish. IF SWALLOWED: Call a physician or poison control center if you feel unwell. Rinse mouth. 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. IF ON SKIN: Wash with plenty of water. IF SKIN IRRITATION OR RASH OCCURS: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. IF EXPERIENCING RESPIRATORY SYMPTOMS: Call a physician or poison control center.
Storage	Store in a well-ventilated place. Store locked up. Keep tightly capped. Store out of direct sunlight between 36°F–85°F.

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

Hazards not otherwise classified Not applicable

SECTION 3: Composition/Information on Ingredients

Chemical name	Common name and synonyms	CAS number	% w/w
Potassium persulfate	Potassium peroxydisulfate	7727-21-1	100

SECTION 4: First-Aid Measures

If inhaled

Remove individual to fresh air. Seek medical advice/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 advice/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/attention.

If swallowed

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/attention.

Most important symptoms and effects, both acute and delayed

Direct skin or eye contact may cause serious irritation. Symptoms may include redness or itching. Tearing of the eyes or blurred vision may occur. Allergic skin reaction or rash may occur. Inhalation may cause allergy or asthma symptoms, breathing difficulties, or respiratory irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Refer to section 11 of the SDS for delayed and immediate effects and chronic effects from short- and long-term exposure.

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	Water, water fog, foam, dry chemical powder, carbon dioxide (CO ₂).
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	May intensify fire. Increases the burning rate of combustible materials.
Explosion hazard	Not explosive
Reactivity	Hazardous reactions will not occur under normal conditions.
Hazardous combustion products	Sulfur oxides. During fire, gases hazardous to health may be formed.

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

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools.

Large spills: Dike the spilled material where this is possible. Wet down with water. Transfer dampened material into waste container. Use care to minimize dust generation and accumulation. Following product recovery, flush area with water. Small spills: sweep up spillage and collect in suitable container for disposal. Never return spills to original containers for reuse. Wipe surface clean to remove residual contamination. In the event of large 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

Precautions for safe handling

Keep away from heat. Routine housekeeping should be performed to minimize dust accumulation. Keep away from combustible materials. Do not breathe dust. 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 a well-ventilated place. Store locked up. Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure Controls/Personal Protection

Occupational exposure limits

Contains no ingredients with occupational exposure limit values.

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 safety glasses with side shields (or goggles) if contact is likely to occur. Face shield is recommended.
Skin protection	Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.
Body protection	Wear appropriate protective clothing if contact is likely to occur
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	Crystalline powder
Color	White
Odor	Odorless
Odor threshold	No data available
pH	No data available
Evaporation rate	No data available
Melting point	212 °F (100 °C) (decomposes)
Freezing point	No data available
Initial boiling point (boiling range)	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available

Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	2.58
Solubility	47 g/L
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	Not explosive
Oxidizing properties	Oxidizing solid

SECTION 10: Stability and Reactivity

Reactivity	Substance will accelerate burning when involved in a fire.
Chemical stability	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat. Avoid contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials	Combustible material. Strong acids. Reducing agents.
Hazardous decomposition products	Oxygen

SECTION 11: Toxicological Information

Information on likely routes of exposure	
Inhalation	Avoid inhalation of this product. Use in a well-ventilated area.
Skin contact	Protect exposed skin from contact. Use caution to avoid dust.
Eye contact	Avoid close eye contact; Use caution to avoid dust. Wear eye protection.
Ingestion	Avoid accidental ingestion by observing good hygiene practices. Wash hands thoroughly after handling this product.
Symptoms related to the physical, chemical, and toxicological characteristics	Inhalation may cause allergy or asthma symptoms, breathing difficulties, or respiratory irritation. Causes serious eye irritation. Allergic skin reaction or rash may occur. Refer to section 4 of the SDS for most important symptoms and effects.

Delayed and immediate effects and chronic effects from short- and long-term exposure

Acute toxicity This product is classified as an acute toxicity hazard.

Component(s)	Species	Acute toxicity data
Potassium persulfate (CAS 7727-21-1)		
LD50 (Oral)	Rat	802 mg/kg (Source: vendor)
LD50 (Dermal)	Not applicable	No data available
LC50 (Inhalation)	Not applicable	No data available
Skin corrosion/irritation	Causes skin irritation	
Serious eye damage/eye irritation	Causes serious eye irritation	
Respiratory sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled	
Skin sensitization	May cause allergic skin reaction	
Germ cell mutagenicity	No data available	
Carcinogenicity		
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)		
Not regulated		
US National Toxicology Program (NTP) Report on Carcinogens		

Not listed

Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	May cause respiratory irritation
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

SECTION 12: Ecological Information

Ecotoxicity	This product is not classified as environmentally hazardous.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	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	1492
UN Proper shipping name	Potassium persulfate
Reportable Quantity	
Class (Subsidiary risk)	5.1
Label(s)	5.1
Packing group	III
Special provisions	A1, A29, IB8, IP3, T1, TP33
Packaging exceptions	152
Packaging, non-bulk	213

IATA

UN number	1492
UN Proper shipping name	Potassium persulfate
Class (Subsidiary risk)	5.1
Packing group	III
Special provisions	A803

IMDG

UN number	1492
UN Proper shipping name	Potassium persulfate
Class (Subsidiary risk)	5.1
Packing group	III
Environmental hazards	
Marine pollutant	No
Special provisions	None
EmS	F-A, S-Q

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 hazard pictograms





SECTION 15: Regulatory Information

US federal regulations

CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

SARA 304 Emergency Release Notification

Not regulated

SARA 311/312 Hazardous Chemical

<u>Chemical name</u>	<u>CAS number</u>
Potassium persulfate	7727-21-1

SARA 313 (TRI reporting)

Not regulated

TSCA Section 8(b) Chemical Inventory

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

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

Not regulated

Other federal regulations

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

Not regulated

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

Not regulated

Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Massachusetts Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Potassium persulfate	7727-21-1

New Jersey Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Potassium persulfate	7727-21-1

Pennsylvania Worker and Community Right-to-Know Act

<u>Chemical name</u>	<u>CAS number</u>
Potassium persulfate	7727-21-1

Rhode Island Right-to-Know Act

Not regulated

SECTION 16: Other Information

NFPA Rating

Health hazard	2
Fire hazard	1

Reactivity	3
Specific	OX

Disclaimer

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This document embodies significant change(s) that may impact classification, safe handling, or health information for the associated product(s). The information contained herein should be reviewed in its entirety before handling material.