

SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

CTION 1: Identification		
Product identifier		
Product name	DPD Reagent #2	
Product number	R-0002; R-0002-PL	
Recommended use and restrictions	To be used in accordance with manufactor manufactor	urer instructions or under the direct guidance of the
Manufacturer	Taylor Technologies, Inc. 31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340 Emergency phone: (800) 837-8548	
CTION 2: Hazard(s) identifie	cation	
Physical hazards	Not applicable	
Health hazards	Eye damage/irritation	Category 1
	Skin corrosion/irritation	Category 1B
Environmental hazards	Not currently regulated by OSHA For ad	ditional information, refer to section 12 of the SDS.
Label elements		
Label elements	Danger	
Label elements Hazard pictograms		
Label elements Hazard pictograms Signal word	Danger	
Label elements Hazard pictograms Signal word Hazard statements	Danger Causes severe skin burns and eye dama Do not breathe dusts or mists. Wash skin	
Label elements Hazard pictograms Signal word Hazard statements Precautionary statements	Danger Causes severe skin burns and eye dama Do not breathe dusts or mists. Wash skin gloves/protective clothing/eye protection/ IF SWALLOWED: Rinse mouth. Do NOT immediately all contaminated clothing. Ri before reuse. IF INHALED: Remove pers Immediately call a physician or poison co	ge thoroughly after handling. Wear protective face protection if contact is likely to occur. induce vomiting. IF ON SKIN (OR HAIR): Take off nse skin with water. Wash contaminated clothing ion to fresh air and keep comfortable for breathing. introl center. IF IN EYES: Rinse cautiously with wa ses, if present and easy to do. Continue rinsing.
Label elements Hazard pictograms Signal word Hazard statements Precautionary statements Prevention	Danger Causes severe skin burns and eye dama Do not breathe dusts or mists. Wash skin gloves/protective clothing/eye protection/ IF SWALLOWED: Rinse mouth. Do NOT immediately all contaminated clothing. Ri before reuse. IF INHALED: Remove pers Immediately call a physician or poison co for several minutes. Remove contact lens Immediately call a physician or poison co	ge thoroughly after handling. Wear protective face protection if contact is likely to occur. induce vomiting. IF ON SKIN (OR HAIR): Take off nse skin with water. Wash contaminated clothing ion to fresh air and keep comfortable for breathing. introl center. IF IN EYES: Rinse cautiously with wa ses, if present and easy to do. Continue rinsing.
Label elements Hazard pictograms Signal word Hazard statements Precautionary statements Prevention Response	Danger Causes severe skin burns and eye dama Do not breathe dusts or mists. Wash skin gloves/protective clothing/eye protection/ IF SWALLOWED: Rinse mouth. Do NOT immediately all contaminated clothing. Ri before reuse. IF INHALED: Remove pers Immediately call a physician or poison co for several minutes. Remove contact lens Immediately call a physician or poison co Keep tightly capped. Store out of direct s	ge thoroughly after handling. Wear protective face protection if contact is likely to occur. induce vomiting. IF ON SKIN (OR HAIR): Take off nse skin with water. Wash contaminated clothing on to fresh air and keep comfortable for breathing. introl center. IF IN EYES: Rinse cautiously with wa ses, if present and easy to do. Continue rinsing. introl center.

Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	90–98
Confidential	Not applicable	Not applicable	5–10
Other components below reportable levels	Not applicable	Not applicable	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. Chemical burns must be treated by a physician.

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. Call a physician or poison control center immediately.

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.

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.

Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep person under observation. Symptoms may be delayed.

General information

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

SECTION 5: Firefighting meas	ures
Extinguishing media	l las sutis suiskiss pas dis sus sanists for sumaunding fins
Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.
Specific hazards arising from the s Fire hazard	substance or mixture Not flammable
Explosion hazard	Not explosive
Reactivity	Hazardous reactions will not occur under normal conditions.
Hazardous combustion products	Carbon oxides, nitrogen oxides, phosphorous oxides, sulfur oxides. Other irritating fumes and smoke.
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	

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 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.

Environmental precautions

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

Methods and material for containment and cleaning up

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, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Dilute acid with water and neutralize with dilute base. If not recoverable, dilute with water or flush to holding area and neutralize. 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.

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 dusts or mists. 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 locked up. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure controls/personal protection **Occupational exposure limits US ACGIH Threshold Limit Values** Not regulated **US NIOSH: Pocket Guide to Chemical Hazards** Not regulated US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Not regulated **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

•	normation on basic physical and	chemical properties
	Physical state	Liquid
	Form	Liquid
	Color	Clear, colorless or nearly colorless
	Odor	Odorless
	Odor threshold	Not applicable
	рН	1.3
	Evaporation rate	No data available
	Melting point	Not applicable
	Freezing point	No data available
	Boiling point	212°F (100°C)
	Flash point	Not applicable
	Specific gravity	No data available
	Auto-ignition temperature	Not applicable
	Decomposition temperature	No data available
	Flammability (solid, gas)	Not applicable
	Upper Flammability Limit	Not applicable
	Lower Flammability Limit	Not applicable
	Vapor pressure	17 mm Hg
	Relative vapor density	0.65
	Solubility	Soluble in all proportions
	Partition coefficient (n-octanol/water)	No data available
	Viscosity	No data available

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Explosive properties	Not applicable		
Oxidizing properties	No applicable		
Percent volatile	94%		
CTION 10: Stability and rea			
Reactivity	Hazardous reactions will not or		
Chemical stability		andling 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	Contact with incompatible mate	erials. Do not use in areas without adequate ventilation.	
Incompatible materials	Alkalis, metal nitrates, metals,	strong bases, strong oxidizers	
Hazardous decomposition products	No hazardous decomposition p	products under normal conditions	
CTION 11: Toxicological inf	formation		
Information on toxicological effe	cts		
Inhalation	May cause irritation to the resp	piratory system	
Skin contact	Causes severe skin burns		
Eye contact	Causes serious eye damage		
Ingestion	Causes digestive tract burns		
Most important symptoms/effects, acute and	Direct skin contact may cause of scarring.	Direct skin contact may cause corrosive skin burns, deep ulcerations, and possibly permanent	
delayed	Direct contact with concentrated solutions may be corrosive to the eyes and may damage, including blindness. Symptoms may include stinging, tearing, redness, s blurred vision.		
	choking, and wheezing. Inhalat	evere respiratory irritation. Symptoms may include coughing, tion could result in pulmonary edema (fluid accumulation). a (chest pain, shortness of breath) may be delayed.	
		o the lips, oral cavity, upper airway, esophagus, and possibly t include abdominal pain, vomiting, burns, perforations, bleedin	
Acute toxicity	This product is not classified as ingredient acute toxicity data.	s an acute toxicity hazard. See below for product and individua	
Product	Species	Acute Toxicity Estimate (ATE)	
DPD Reagent #2 (CAS Mixture)			
Acute			
Dermal			
LD ₅₀	Rat	>5000 mg/kg	
Inhalation			
LC ₅₀	Rat	Not available	
Oral			
LD ₅₀	Rat	>5000 mg/kg	
Components	Species	Acute Toxicity Data	
Confidential (CAS Not applicable))		
Dermal			
LD ₅₀	Rabbit	7940 mg/kg	
Inhalation			
LC ₅₀	Rat	Not available	
Oral		· · · · · · · · · · · · · · · · · · ·	
LD ₅₀	Rat	2400 mg/kg	
Skin corrosion/irritation	Causes severe skin burns		
Serious eye damage/eye irritation			
Respiratory sensitization	No data available		
Skin sensitization	No data available		
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No data available
No data available
valuation of Carcinogenicity
Substances (29 CFR 1910.1001-1096)
ram (NTP) Report on Carcinogens
No data available
mation
This product is not classified as environmentally hazardous.
No data available
No data available
No data available
Large or frequent spills can have a harmful or damaging effect on the environment.

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	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, N.O.S. (Phosphorous-based organic acid)
Transport hazard class(es)	
Class	8
Subsidiary risk	Not listed
Label(s)	8
Packing group	III
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.
Special provisions	B2, IB2, T11, TP2, TP27
Packaging exceptions	154
Packaging, non-bulk	202
Packaging, bulk	242
ΙΑΤΑ	
UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, N.O.S. (Phosphorous-based organic acid)
Transport hazard class(es)	
Class	8
Subsidiary risk	Not listed
Packing group	III
Environmental hazards	
Marine pollutant	Not listed
Special provisions	
ERG code	8L
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.

Other information	
Passenger and cargo aircraft	Allowed
Cargo aircraft only	Allowed
IMDG	
UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, N.O.S. (Phosphorous-based organic acid)
Transport hazard class(es)	
Class	8
Subsidiary risk	Not listed
Packing group	III
Environmental hazards	
Marine pollutant	Not listed
EmS	F-A, S-B
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/reagent is not intended to be transported in bulk.
DOT	

IATA; IMDG

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CORROSIVE
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SECTION 15: Regulatory information

US federal regulations

CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

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

Not regulated

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

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

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

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

SECTION 16: Other information

NFPA Rating	
Health hazard	1
Fire hazard	0
Reactivity	0
Specific	N/A

Disclaimer

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