

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: TRANSENE COMPANY, INC.
ADDRESS: DANVERS INDUSTRIAL PARK
10 ELECTRONICS AVENUE DANVERS, MA 01923,
TEL: (978) 777-7860 FAX: (978)-739-5640
WWW.TRANSENE.COM
EMERGENCY NO. 1-800-424-9300 CHEMTREC

MATERIAL NAME: **Ti-Tungsten TiW-30**

REVISED: June 2022

CHEMICAL FAMILY: Hydrogen dioxide solution
Product Number: 060-TiW

SECTION 2. HEALTH HAZARD INFORMATION

Hazard Statements

H272 Oxidizing liquids : Category 2
H290 Corrosive to Metals: Category 1
H302 Acute toxicity Oral : Category 4
H312 Acute Toxicity Dermal: Category 4
H332 Acute toxicity Inhalation : Category 4
H314 Skin corrosion / Skin irritation : Category 1B
H318 Serious eye damage / Eye irritation : Category 1

Pictograms or Hazard symbols



Signal Word: **Danger**

May intensify fire. Oxidizer.

May be corrosive to metals

Harmful if swallowed, in contact with skin, or inhaled.

Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary Statements

P210 Keep away from heat, flames, and hot surfaces. No smoking.
P220 Store away from combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P234 Keep only in original container.
P260 Do not breathe fume/gas/mist/vapors.
P261 Avoid breathing fumes/mist/vapors.
P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, clothing, and eye and face protection.
P301 + P312 If swallowed, call a physician if you feel unwell.
P301 + P330 + P331 If swallowed, rinse mouth. Do not induce vomiting.

P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.
P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.
P303 + P361 + P353 If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 If inhaled, remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes.
P312 Call a physician if you feel unwell.
P330 Rinse mouth.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire use water spray. Do not use organic media to extinguish.
P390 Absorb spillage to prevent material damage.
P405 Store locked up.
P406 Store in corrosive resistant container.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS

Material		Wt %
Hydrogen Peroxide	CAS# 7722-84-1	29-32
Triphenyl-2H-tetrazolium chloride	CAS# 298-96-4	< 0.1
Surfactant	Proprietary	< 0.1
Water	CAS# 7732-18-5	68-71
Total		100

SECTION 4. FIRST AID MEASURES

EFFECTS OF OVEREXPOSURE

FIRST AID:

Eye Contact: Corrosive to naked eye; in case of contact flush eyes well for 15 minutes, lifting the lower and upper eyelids occasionally. Ulceration of the cornea and blindness may result. Effects may be delayed Seek medical attention.

Skin Contact: Obtain medical attention: Corrosive to exposed skin. Flush skin well with water for 15 minutes, wash with soap and water. Remove affected clothing, get medical attention. Effects may be delayed.

Inhalation: If mist or fumes are inhaled, remove to fresh air. If not breathing give artificial respiration. Seek medical attention. Effects may be delayed. May cause chemical burns to the respiratory tract.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal burns and perforation of the digestive tract. Get medical attention immediately. If swallowed, there is a danger of sudden liberation of gas.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point and Method	Autoignition Temp.	Flammability Limits In Air	<u>LOWER</u>	<u>UPPER</u>
non-flammable	NA		NA	NA

Extinguishing media: Water spray. Do not use organic media.

Special fire fighting procedures: Wear chemically retardant gear and NIOSH approved self-contained breathing apparatus. Thermal decomposition produces irritating and toxic fumes. Contact with combustibles may cause extremely violent combustion. It may form powerful explosive mixtures with many organic materials, especially water-miscible solvents.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILLS, LEAKS: Ventilate area of leak or spill. Clean up personnel should wear protective clothing and NIOSH approved respirator. Dike and cover the contaminated areas with absorbent, non-combustible material such as earth, sand, or vermiculite.

SECTION 7. HANDLING AND STORAGE

Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Do not breathe dust, mist, or vapor. Do not expose eyes, skin, or clothing. Keep container closed tightly. Avoid contact with combustibles. Do not use with metal tools or items. Use with adequate ventilation or respiratory protection. Do not store near combustibles or in direct sunlight. Store in a cold, dry, well-ventilated area away from incompatible substances. Separate from metals, alkali, and organics. Must be stored with vented closures.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Respiratory protection: Wear NIOSH/MESA approved full or half face piece (with goggles) respiratory protective equipment to avoid exposure to vapors above 0.1ppm. A respiratory protection program complying with requirements of 29CFR 1910.134 is recommended.

Ventilation: Where adequate ventilation is not available, use NIOSH approved vapor respirator with dust, fume and mist filters. Local ventilation through fume hoods or laminar flow stations is also preferred. Keep fumes away from strong bases.

Protective gloves: Skin contact should be minimized through use of rubber gloves.

Other protective equipment: Steel tipped shoes/eye wash station/chemical safety chemical retardant clothing.

Eye protection: Safety goggles / face shield. Do not wear contact lenses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form :	Liquid
Appearance :	Colorless
Odor :	Odorless
pH :	3.4-3.5
Melting point:	-25 °C
Boiling point/Boiling range :	106 °C (water)
Flash point :	Non-flammable.
Ignition point :	Will not ignite.
Danger of explosion:	Product is not explosive
Decomposition temperature:	Not available
Vapor density (Air = 1) :	0.62 estimated
Volatiles, %:	100
Vapor pressure at 15° C, mm Hg:	51 mm Hg at 25 °C
Specific gravity :	1.11 g/cc
Solubility in / Miscibility:	Completely miscible in water
Evap. Rate (vs. butyl acetate):	< 1

SECTION 10. STABILITY AND REACTIVITY

Stability Stable X Conditions to avoid: Excess heat , light, confined spaces, combustibles
Unstable

Incompatible with:

Heavy metals and ions such as copper, chromium, iron, silver, and monel. Graphite gaskets, packaging, and lubricants. Organics, dust, and rust. Nitric acid and other oxidants. Water-reactive materials. Alkalis containing heavy metals.

Hazardous decomposition products: Oxygen

Hazardous May occur Conditions to avoid: Excess heat, damp.
polymerization: Will not occur X

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE:

LC₅₀ (Inhalation, rat): 2 g/m³/4H at 90% concentration

LD₅₀ (dermal, rat): 4060 mg/kg at 90% concentration

LD₅₀ (oral, mouse): 2 g/kg at 90% concentration

LD₅₀ (oral, rat): 1518 mg/kg at 8-20% concentration

SUBACUTE TO CHRONIC TOXICITY:

None

SECTION 12. ECOLOGICAL INFORMATION

Bioaccumulation : There is no evidence of bioaccumulation.

Ecotoxicity : Biologic effects:

40 ppm (no time period specified) for fingerling trout/toxic/salt water

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose of in accordance with all federal state and local regulations. Send waste to an approved waste disposal facility. RCRA waste code D001.

SECTION 14. TRANSPORTATION INFORMATION

Class 5.1, 8

PG II

UN2014

Shipping Name: Hydrogen Peroxide, Aqueous Solutions

SECTION 15. REGULATORY

Symbol: C, Corrosive; O, Oxidizer

R-Phrase:

R8: Contact with combustible material may cause fire.

R21/22: Harmful in contact with skin and if swallowed.

R35: Causes severe burns.

R41: Risk of serious damage to eyes.

S-Phrases:

S17: Keep away from combustible material.

S23-36/37/39-45 Do not breathe vapor. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

CDTA: No

SARA 311/213:

Acute: Yes

Chronic: No

Fire: Yes

Pressure: No

Reactivity: Yes (mixture/liquid)

SECTION 16. OTHER INFORMATION

NFPA Codes:

Health: 3

Flammability: 0

Reactivity: 1

R8: Contact with combustible material may cause fire.

R35: Causes severe burns.

All ingredients of this product are listed on the US TSCA inventory under their parent anhydrous compounds.