



innovative solutions for groundwater treatment

MSDS: Sodium Permanganate (20%)

EMERGENCY TELEPHONE: CHEMTREC 1-800-424-9300

DATE ISSUED: 12/04

SECTION 1 - CHEMICAL PRODUCT IDENTIFICATION

PRODUCT NAME: *Sodium Permanganate Solution F2SP-20
DESCRIPTION: *20% minimum as NaMnO4

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	%	TLV	CAS No.
* Sodium Permanganate	20	.2mg Mn per cubic meter of air	*10101-50-5
*	*		

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: *

EFFECTS OF OVEREXPOSURE - ACUTE

- EYES: *Sodium Permanganate is damaging to eye tissue on contact. It may cause burns that result in damage to the eye.
- SKIN: *Momentary contact of solution at room temp may be irritating to the skin,leaving brown stains.
- INGESTION: *If swallowed,may cause burns to mucous membranes of the mouth,throat,esophagus, and stomach
- INHALATION: *May cause irritation to the respiratory tract

EFFECTS OF OVEREXPOSURE - CHRONIC

*
PRIMARY ROUTE OF ENTRY: *

SECTION 4 - FIRST AID MEASURES

- EYES: *Flush immediately with large amounts of water for at least 15 minutes. Seek medical attention immediately.
- SKIN: *Wash contaminated area with water. Seek medical attention if irritation persists.
- INGESTION: *If person is conscious, give large amounts of water or milk. Seek medical attention.
- INHALATION: *Remove person from contaminated area to fresh air. Seek medical attention.
- *PHYSICIANS NOTE: *Decomposition products are alkaline.

SECTION 5 - FIRE-FIGHTING MEASURES

- FLASHPOINT: *None
- FLAMMABILITY: *Nonflammable



*innovative solutions for
groundwater treatment*

AUTOFLAMMABILITY: *None
EXPLOSION HAZARD: *Explosive in contact with sulfuric acid or peroxides, or readily oxidizable substances
EXTINGUISHING MEDIA: Use large amounts of water. Dike to contain.
EXTINGUISHING MEDIA WHICH MUST NOT BE USED: dry chemicals, Foams

EXPLOSIVE LIMITS:
LOWER: n/a UPPER: n/a

SPECIAL EXPOSURE HAZARDS IN FIRE: Keep containers cool by spraying with water if exposed to fire.
SPECIAL PROTECTIVE EQUIPMENT FOR A FIRE: Self-contained breathing apparatus should be worn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS: *Contain spill by collecting the liquid in a pit or holding behind a dam. Dilute to approx 6% solution with water and then reduce with sodium thiosulfate, a bisulfite or ferrous salt solution.

METHODS FOR CLEANUP: *Flush with abundant water into the sewer, if permitted by federal, state, and local authorities. If not, collect and treat as above.

SECTION 7 - HANDLING AND STORAGE

HANDLING: *Wash hands thoroughly with soap and water after handling.
STORAGE: *Store in a cool, well-ventilated area. Segregate from acids, peroxides, Formaldehyde, and all combustible, organic or easily oxidized materials.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation is recommended. Eyewash and safety shower stations must be located in the immediate area.
EXPOSURE GUIDELINES: not established

PERSONAL PROTECTION EQUIPMENT:

RESPIRATORY: NIOSH-approved self-contained breathing apparatus for exposure to levels above limits.
HAND: Rubber gloves and boots.
EYE: Chemical goggles which are splash and dust proof or face shield.
SKIN: If clothing is contaminated, wash skin and launder clothing.

NOTE: BEFORE EATING, DRINKING OR SMOKING, WASH FACE AND HANDS THOROUGHLY WITH SOAP AND WATER.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, COLOR AND ODOR: *Purple Solution
PH as is: *5-7
BOILING POINT: *>101 degrees C
FLASH POINT: *
VAPOR PRESSURE: *n/a
SPECIFIC GRAVITY: *1.16
SOLUBILITY IN WATER: *Miscible in all proportions
VISCOSITY: *



**innovative solutions for
groundwater treatment**

SECTION 10 - STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: *
CHEMICAL STABILITY: *
CONDITIONS TO AVOID: *
MATERIALS TO AVOID: *
HAZARDOUS DECOMPOSITION PRODUCTS: *

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: LD₅₀ ORAL (rat) = x.x g/kg
IRRITANCY: *
SENSITIZATION: *
SUB-ACUTE, SUB-CHRONIC AND PROLONGED TOXICITY: * no information available
EMPIRICAL DATA ON EFFECTS ON HUMANS: * no information available

SECTION 12 - ECOLOGICAL INFORMATION

PERSISTENCE IN THE ENVIRONMENT:
BIOLOGICAL OXYGEN DEMAND:
CHEMICAL OXYGEN DEMAND:
AQUATIC TOXICITY
Daphnia magna
Fathead minnow
OTHER INFORMATION: * Discharge of this product must be in accordance with all federal, state, local or other applicable laws and regulations.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: *

SECTION 14 - TRANSPORTATION INFORMATION

DOT SHIPPING NAME: , NOS
UN Number: UNxxxx
DOT HAZARD CLASS: x
PACKING GROUP: I, II, III

SECTION 15 - REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components of this product are listed in the Toxic Substances

Control Act inventory.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):

Reportable Quantity - * pounds (RCRA hazardous waste).

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA Title III) - Section 311 Hazard Categories:

Acute Health:	Yes
Chronic Health:	No
Fire:	No
Sudden Release of Pressure:	No
Reactive:	No



*innovative solutions for
groundwater treatment*

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA Title III) - Section 311:
Components of this product subject to reporting: none

SECTION 16 - OTHER INFORMATION

HMIS RATINGS

HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0 PP: C

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the best opinion on the subject as of the date on this sheet. However, no warranty, guarantee or representation, expressed or implied, is made by Southern Water Consultants, Inc., as to the correctness or sufficiency of this information or to the results to be obtained from the use thereof.