

# Safety Data Sheet

## SECTION I - IDENTIFICATION

**PRODUCT NAME:** MS-550 Super Pen 4  
**PRODUCT CODE:** 1-550  
**PRODUCT USE:** Penetrating Lubricant  
**COMPANY NAME:** Maintenance Solutions  
**COMPANY ADDRESS:** P.O. Box 12202, Scottsdale, AZ 85267  
**COMPANY PHONE:** 800-747-9593  
**EMERGENCY PHONE:** 800-255-3924

## SECTION II – HAZARDS IDENTIFICATION

**CLASSIFICATION:** Dissolved Gas

Skin Irritant: Category 2

Eye Irritant: Category 2b

Carcinogenicity: Category 2

**HAZARD STATEMENT(S): WARNING:** Contains gas under pressure; May explode if heated. Causes skin and eye irritation. Suspected of causing cancer.

This product contains the following percentage of chemicals of unknown toxicity: 0%

**PRECAUTIONARY STATEMENTS:** Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store in a well-ventilated place. Wash hands thoroughly after handling. Wear protective gloves, safety glasses, and organic respirator. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash 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 attention. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, eye protection, and protective clothing. If exposed or concerned: Get medical advice or attention. Store locked up. Dispose of contents and container in accordance with local, state, and national regulations.



**SYMBOL:**

**HAZARDS NOT OTHERWISE CLASSIFIED:** N/A

## SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Carbon Dioxide	124-38-9	3-7%
Mineral Seal Oil	64741-44-2	7-13%
Tetrachloroethylene	127-18-4	60-100%
Sorbitan Monooleate	1338-43-8	1-5%

## SECTION IV - FIRST AID MEASURES

**EYES:** 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 attention.

**INGESTION:** Rinse mouth with water. Do not induce vomiting unless directed by medical authority. Seek medical attention.

**INHALATION:** If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

**SKIN:** If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention.

**ACUTE HEALTH HAZARDS:** Eyes: redness, tearing, blurred vision

Skin: defatting and dermatitis

Oral: abdominal irritation, nausea, vomiting, and diarrhea

**CHRONIC HEALTH HAZARDS:** Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.

**NOTE TO PHYSICIAN:** Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

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## SECTION V – FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use appropriate media for surrounding fire.

**UNSUITABLE EXTINGUISHING MEDIA:** N/A

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires. Use water spray only to cool exposed containers.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Contents under pressure. Exposure to temperatures above 120°F may cause bursting.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, chlorine, hydrogen chloride and phosgene.

## SECTION VI – ACCIDENTAL RELEASE MEASURES

**PERSONAL PROTECTIVE EQUIPMENT:** Refer to section VIII for proper Personal Protective Equipment.

**SPILL:** Use absorbent on spill, sweep to clean. Dispose in accordance with local, state and federal laws. Small releases may be wiped up with wiping material.

**WASTE DISPOSAL:** Dispose of in accordance with federal, state, and local regulations.

**RCRA STATUS:** Waste solvent likely considered hazardous, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

## SECTION VII – HANDLING AND STORAGE

**HANDLING AND STORAGE:** Protect from sunlight. Store in a well ventilated place. Do not expose to temperatures exceeding 50°C/122°F. Pressurized container: Do not pierce or burn, even after use. Store locked up.

**OTHER PRECAUTIONS:** Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warning and precautions listed for the product. Keep out of the reach of children

**INCOMPATIBILITY:** Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.

## SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Carbon Dioxide	5000 ppm	5000 ppm
Mineral Seal Oil	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Tetrachloroethylene	25 ppm	100 ppm
Sorbitan Monooleate	Not Established	Not Established

**ENGINEERING CONTROLS / VENTILATION:** Material is heavier than air. Material may concentrate in low lying areas. Normal, forced ventilation required to meet TLV requirements. Local exhaust ventilation is generally preferred.

**RESPIRATORY PROTECTION:** Wear NIOSH/MSHA approved organic vapor respiratory protection if used in confined, poorly ventilated areas.

**PERSONAL PROTECTIVE EQUIPMENT:** Safety glasses, Gloves, and Synthetic apron.

**ADDITIONAL MEASURES:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Clear, Colorless Spray

**ODOR:** Chlorinated-mint solvent odor

**ODOR THRESHOLD:** N/D

**BOILING POINT:** >188°F (87°C)

**FREEZING POINT:** N/D

**FLAMMABILITY:** Not considered a flammable aerosol or an extremely flammable aerosol by OSHA (29CFR 1910.1200)

**FLASH POINT:** N/D

**AUTOIGNITION TEMPERATURE:** N/D

**LOWER FLAMMABILITY LIMIT:** N/D

**UPPER FLAMMABILITY LIMIT:** N/D

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**VAPOR PRESSURE (mm Hg):** 59  
**VAPOR DENSITY (AIR=1):** > 2  
**EVAPORATION RATE:** > 3 (Fast)  
**SPECIFIC GRAVITY (H2O=1):** 1.52  
**pH:** N/A  
**SOLIDS (%):** 0%  
**SOLUBILITY IN WATER:** 0%  
**PARTITION COEFFICIENT: n-OCTANOL/WATER (K<sub>ow</sub>):** N/D  
**VOLATILITY INCLUDING WATER (%):** 100%  
**VOLATILE ORGANIC COMPOUNDS (VOC):** 0%  
**DIELECTRIC STRENGTH (Volts):** N/D  
**DECOMPOSITION TEMPERATURE:** >400°C  
**VISCOSITY:** N/D

## SECTION X – STABILITY AND REACTIVITY DATA

**REACTIVITY:** Chemically active metals and bases.  
**CHEMICAL STABILITY:** Stable  
**CONDITIONS TO AVOID:** Temperatures greater than 122°F may cause bursting.  
**INCOMPATIBILITY:** Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.  
**HAZARDOUS DECOMPOSITION OR BY-PRODUCT:** Oxides of carbon, chlorine, hydrogen chloride and phosgene.  
**POSSIBLE HAZARDOUS REACTIONS:** None Known

## SECTION XI – TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION: Tetrachloroethylene (127-18-4)** LD<sub>50</sub> (Oral, Rat) 2629 mg/kg; LD<sub>50</sub> (Dermal, Rabbit) > 3228 mg/kg; LD<sub>50</sub> (IPR, Mouse) 4700 mg/kg; LC<sub>50</sub> (Inhalation, Mouse, 4hr) 5200 ppm; LC<sub>50</sub> (Inhalation, Rat, 8hr) 34200 mg/m<sup>3</sup>  
**ROUTES OF ENTRY:** Eyes, Ingestion, Inhalation, Skin  
**EYES:** Causes severe irritation, redness, tearing, pain, visual disturbance, may cause eye damage.  
**INGESTION:** Causes gastrointestinal irritation, headaches, nausea, diarrhea, vomiting, abdominal cramps.  
**INHALATION:** Irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system, prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects, and death.  
**SKIN:** Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.  
**MEDICAL CONDITION AGGRAVATED:** Excessive exposure will aggravate pre-existing disorders of eyes, skin, respiratory, liver, kidney, cardiovascular system, pulmonary illnesses, or central nervous system.  
**ACUTE HEALTH HAZARDS:** Eyes: redness, tearing, blurred vision  
Skin: defatting and dermatitis  
Oral: abdominal irritation, nausea, vomiting, and diarrhea  
**CHRONIC HEALTH HAZARDS:** Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.  
**CARCINOGENICITY:** OSHA: Yes ACGIH: A2 - Suspected NTP: 2 - Anticipated  
**IARC:** 2A - Probable **OTHER:** CA Prop 65

## SECTION XII – ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION: Tetrachloroethylene (127-18-4)** LC<sub>50</sub> (Fathead Minnow, 96hr) 18.4 mg/L; (Daphnia, 48hr) 18 mg/L; (Rainbow Trout, 96hr) 5 mg/L; (Bluegill Sunfish, 96hr) 13 mg/L  
**BIODEGRADABILITY:** Component or components of this product are not biodegradable.  
**BIOACCUMULATION:** This product is not expected to bioaccumulate.  
**SOIL MOBILITY:** This product is mobile in soil.  
**OTHER ECOLOGICAL HAZARDS:** This material is toxic to aquatic life.

## SECTION XIII – DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** Dispose of in accordance with federal, state, and local regulations.  
**RCRA STATUS:** Waste solvent likely considered hazardous, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

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## SECTION XIV - TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.  
**HAZARD CLASS/DIVISION:** 2.2 (6.1)  
**UN/NA NUMBER:** UN1956  
**PACKAGING GROUP:** N/A

### AIR SHIPMENT

**PROPER SHIPPING NAME:** Forbidden by USDOT Regulations  
**HAZARD CLASS/DIVISION:** N/A  
**UN/NA NUMBER:** N/A

### SHIPPING BY WATER:

**VESSEL (IMO/IMDG)**  
**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.  
**HAZARD CLASS/DIVISION:** 2.2 (6.1)  
**UN/NA NUMBER:** UN1956  
**ENVIRONMENTAL HAZARDS WATER:** Marine Pollutant

## SECTION XV - REGULATORY INFORMATION

**TSCA STATUS:** All Chemicals are listed or exempt.

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Tetrachloroethylene (127-18-4)  
Reportable Quantity = 100 lbs

**SARA 311/312 HAZARD CATEGORIES:** Acute Health, Chronic Health.

**SARA 313 REPORTABLE INGREDIENTS:** Tetrachloroethylene (127-18-4)

**STATE REGULATIONS:** Tetrachloroethylene (127-18-4) is known to the state of California to cause cancer.

**INTERNATIONAL REGULATIONS:** Tetrachloroethylene (127-18-4) WHMIS (Canada) Class D-1B: Material causing immediate and serious toxic effects (TOXIC). Class D-2A: Material causing other toxic effects (VERY TOXIC).

<b>NFPA HEALTH:</b>	2	<b>HMIS HEALTH:</b>	2
<b>NFPA FLAMMABILITY:</b>	1	<b>HMIS FLAMMABILITY:</b>	1
<b>NFPA REACTIVITY:</b>	0	<b>HMIS REACTIVITY:</b>	0
<b>NFPA OTHER:</b>	None	<b>HMIS PROTECTION:</b>	G

## SECTION XVI - ADDITIONAL INFORMATION

**PREPARATION BY:** Jonathon Jarvis

**DATE PREPARED:** 12/13/2013

**REVISION DATE:** 03/27/2015

N/A = Not Applicable; N/D = Not Determined

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