

**Safety Data Sheet**  
Defense

**SECTION I - IDENTIFICATION**

**PRODUCT NAME:** Defense  
**PRODUCT CODE:** 5540  
**PRODUCT USE:** Metal protectant  
**COMPANY NAME:** QuestVapco Corporation  
**COMPANY ADDRESS:** PO Box 624 Brenham, TX 77834  
**COMPANY PHONE:** 1-800-231-0454  
**EMERGENCY PHONE:** 800-255-3924

**SECTION II – HAZARDS IDENTIFICATION**

**CLASSIFICATION:** Flammable Aerosol: Category 1  
Liquefied Gas  
Skin Irritant: Category 2  
Eye Irritant: Category 2b  
Specific Target Organ Toxicity (Single Exposure): Category 3  
Aspiration Hazard: Category 1

**HAZARD STATEMENT(S): DANGER:** Extremely Flammable Aerosol Contains gas under pressure: May explode if heated. Causes skin and eye irritation. May cause drowsiness and dizziness. May be fatal if swallowed and enters airways.

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. Do not spray on an open flame or other ignition source. 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. 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. Avoid breathing fumes, mist, vapors, and spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting. 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
Heptane	142-82-5	10-30%
Mineral Spirits	Mixture	30-60%
Propane/n-Butane	68476-86-8	10-30%

**SECTION IV - FIRST AID MEASURES**

**EYES:** Immediately flush with water for 15 - 20 minutes while holding eyelids open. Seek medical attention if irritation persists.

**INGESTION:** If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice or attention.

**INHALATION:** Move to fresh air. If breathing is difficult or unconscious, administer oxygen. If not breathing administer artificial respiration. Seek medical attention if irritation persists.

**SKIN:** Immediately wash with soap and water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation develops.

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

Skin: defatting and dermatitis

Inhalation: Anesthetic, irritation, Central Nervous System depression

Oral: abdominal irritation, nausea, vomiting, diarrhea, aspiration risk

**CHRONIC HEALTH HAZARDS:** None known

**NOTE TO PHYSICIAN:** If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

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**SECTION V – FIRE-FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Dry chemical, carbon dioxide, and alcohol foam.

**UNSUITABLE EXTINGUISHING MEDIA:** Water spray/stream.

**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:** Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

**HAZARDOUS COMBUSTION PRODUCTS:** N/A

**SECTION VI – ACCIDENTAL RELEASE MEASURES**

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

**SPILL:** Remove any source of ignition. Use non-sparking tools and equipment. 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 local, State and Federal regulations. Do not dump in sewers. Use sand or other non-combustible absorbent material to clean up spill and place in container for later disposal. Containers may contain hazardous residue.

**RCRA STATUS:** Liquid could be classified as D001 under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

**SECTION VII – HANDLING AND STORAGE**

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

**OTHER PRECAUTIONS:** Flammable vapors may collect in low lying areas.

**INCOMPATIBILITY:** Certain plastics

**SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION**

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Heptane	500 ppm	400 ppm
Mineral Spirits	500 ppm	100 ppm
Propane/n-Butane	1000 ppm	1000 ppm

**ENGINEERING CONTROLS / VENTILATION:** Use only outdoors or in a well-ventilated area.

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

**PERSONAL PROTECTIVE EQUIPMENT:** Safety glasses and chemical resistant gloves

**ADDITIONAL MEASURES:** Wash hands thoroughly after handling.

**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** Hazy, Dark Brown Spray

**ODOR:** Hydrocarbon odor

**ODOR THRESHOLD:** N/D

**BOILING POINT:** N/D

**FREEZING POINT:** N/D

**FLAMMABILITY:** Extremely Flammable Aerosol

**FLASH POINT:** N/D

**AUTOIGNITION TEMPERATURE:** N/D

**LOWER FLAMMABILITY LIMIT:** N/D

**UPPER FLAMMABILITY LIMIT:** N/D

**VAPOR PRESSURE (mm Hg):** 124

**VAPOR DENSITY (AIR=1):** > 2

**EVAPORATION RATE:** 5

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**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** 0.805  
**pH:** N/A  
**SOLIDS (%):** N/D  
**SOLUBILITY IN WATER:** 0%  
**PARTITION COEFFICIENT: n-OCTANOL/WATER (K<sub>ow</sub>):** N/D  
**VOLATILITY INCLUDING WATER (%):** 77%  
**VOLATILE ORGANIC COMPOUNDS (VOC):** 77%  
**DIELECTRIC STRENGTH (Volts):** N/D  
**DECOMPOSITION TEMPERATURE:** N/D  
**VISCOSITY:** N/D

**SECTION X – STABILITY AND REACTIVITY DATA**

**REACTIVITY:** None Known  
**CHEMICAL STABILITY:** Stable  
**CONDITIONS TO AVOID:** Temperatures greater than 122°F and sources of ignition.

**INCOMPATIBILITY:** Certain plastics  
**HAZARDOUS DECOMPOSITION OR BY-PRODUCT:** None Known  
**POSSIBLE HAZARDOUS REACTIONS:** None Known

**SECTION XI – TOXICOLOGICAL INFORMATION**

**TOXICOLOGICAL INFORMATION: Mineral Spirits - 8052-41-3:** Draize test, rabbit, eye: 500 mg/24H Moderate. **Heptane - 142-82-5:** Oral LD 50 Rat: 15,000 mg/kg; Inhalation LC 50 Rat: 103 g/m<sup>3</sup>, 4 h; Dermal LD 50 Rabbit: 2,000 mg/kg

**ROUTES OF ENTRY:** Eyes, Ingestion, Inhalation, Skin

**EYES:** Causes irritation, burning, redness, tearing.

**INGESTION:** May cause gastrointestinal irritation, nausea, diarrhea, vomiting, abdominal cramps.

**INHALATION:** May cause irritation to the respiratory tract, nausea, vomiting.

**SKIN:** May cause mild irritation, localized defatting, repeated prolonged contact may cause allergic reaction in some individuals.

**MEDICAL CONDITION AGGRAVATED:** Preexisting disorders of skin, lung, and heart

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

Skin: defatting and dermatitis

Inhalation: Anesthetic, irritation, Central Nervous System depression

Oral: abdominal irritation, nausea, vomiting, diarrhea, aspiration risk

**CHRONIC HEALTH HAZARDS:** None known

**CARCINOGENICITY:** OSHA: No ACGIH: No NTP: No IARC: No OTHER: N/A

**SECTION XII – ECOLOGICAL INFORMATION**

**ECOLOGICAL INFORMATION:** Not Established

**BIODEGRADABILITY:** This product is 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 local, State and Federal regulations. Do not dump in sewers. Use sand or other non-combustible absorbent material to clean up spill and place in container for later disposal. Containers may contain hazardous residue.

**RCRA STATUS:** Liquid could be classified as D001 under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

**SECTION XIV - TRANSPORTATION INFORMATION**

**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.

**HAZARD CLASS/DIVISION:** 2.1

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**UN/NA NUMBER:** UN 1950  
**PACKAGING GROUP:** N/A

**AIR SHIPMENT**

**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.  
**HAZARD CLASS/DIVISION:** 2.1  
**UN/NA NUMBER:** UN 1950

**SHIPPING BY WATER:**

**VESSEL (IMO/IMDG)**  
**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.  
**HAZARD CLASS/DIVISION:** 2.1  
**UN/NA NUMBER:** UN 1950  
**ENVIRONMENTAL HAZARDS WATER:** Marine Pollutant

**SECTION XV - REGULATORY INFORMATION**

**TSCA STATUS:** All Chemicals are listed or exempt.  
**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** None  
**SARA 311/312 HAZARD CATEGORIES:** Fire Hazard  
**SARA 313 REPORTABLE INGREDIENTS:** None  
**STATE REGULATIONS:** California Proposition 65: None  
**INTERNATIONAL REGULATIONS:** The components of this product are listed on the chemical inventories of the following countries: Australia, Canada, China, Europe (EINECS), Japan, Korea, Philippines.

<b>NFPA HEALTH:</b>	1	<b>HMIS HEALTH:</b>	1
<b>NFPA FLAMMABILITY:</b>	3	<b>HMIS FLAMMABILITY:</b>	3
<b>NFPA REACTIVITY:</b>	1	<b>HMIS REACTIVITY:</b>	1
<b>NFPA OTHER:</b>	None	<b>HMIS PROTECTION:</b>	B

**SECTION XVI - ADDITIONAL INFORMATION**

**PREPARATION BY:** Jonathon Jarvis  
**DATE PREPARED:** 01/06/2014  
**REVISION DATE:** 11/24/2014

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

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