

**Safety Data Sheet**  
**Brigadier**

**SECTION I - IDENTIFICATION**

**PRODUCT NAME:** Brigadier  
**PRODUCT USE:** Cleaner & Degreaser

**PRODUCT CODE:** 2280

**COMPANY NAME:** ATCO International  
**COMPANY PHONE:** 1-800-723-2826

**COMPANY ADDRESS:** 1401 Barclay Circle, S.E. Marietta, GA 30060  
**EMERGENCY PHONE:** 800-255-3924

**SECTION II – HAZARDS IDENTIFICATION**

**CLASSIFICATION:** Flammable Aerosol: Category 2

Liquefied Gas

**HAZARD STATEMENT(S):** **WARNING:** Flammable Aerosol Contains gas under pressure; May explode if heated.

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.



**SYMBOL:**

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

**SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS**

<b>HAZARDOUS INGREDIENT</b>	<b>CAS NUMBER</b>	<b>PERCENT</b>
1,8-p-Menthadiene	5989-27-5	1-5%
Propane/n-Butane	68476-86-8	3-7%

**SECTION IV - FIRST AID MEASURES**

**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 advice or attention.

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

**INHALATION:** Move to fresh air.

**SKIN:** Immediately wash with soap and warm water for 15 minutes.

**ACUTE HEALTH HAZARDS:** None Known

**CHRONIC HEALTH HAZARDS:** Dermatitis may occur due to long-term irritation.

**NOTE TO PHYSICIAN:** There is no specific treatment regimen. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**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.

**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:** None Known

**SECTION VI – ACCIDENTAL RELEASE MEASURES**

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

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**SPILL:** Clean up using cloth or absorbent material. dispose of product-containing wiping cloth or absorbent paper in suitable manner. place waste in proper containers for waste disposal.  
**WASTE DISPOSAL:** Dispose in accordance with local, state and federal laws. Non-hazardous  
**RCRA STATUS:** Non-hazardous

**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.

**OTHER PRECAUTIONS:** Keep out of the reach of children.

**INCOMPATIBILITY:** Strong acids

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

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
1,8-p-Menthadiene	N/A	N/A
Propane/n-Butane	1000 ppm	1000 ppm

**ENGINEERING CONTROLS / VENTILATION:** Mechanical recommended if used in confined spaces.

**RESPIRATORY PROTECTION:** Wear NIOSH/MSHA approved respiratory protection if used in confined, poorly ventilated areas. **PERSONAL PROTECTIVE EQUIPMENT:** Safety glasses and chemical resistant gloves

**ADDITIONAL MEASURES:** Wash hands and clothing in contact with product after use.

**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** White Foam

**ODOR:** Citrus-Orange scent

**ODOR THRESHOLD:** N/D

**BOILING POINT:** N/D

**FREEZING POINT:** N/D

**FLAMMABILITY:** Flammable Aerosol

**FLASH POINT:** N/D

**AUTOIGNITION TEMPERATURE:** N/D

**LOWER FLAMMABILITY LIMIT:** N/D

**UPPER FLAMMABILITY LIMIT:** N/D

**VAPOR PRESSURE (mm Hg):** 23.8 mmHg @ 77°F (25°C)

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

**EVAPORATION RATE:** 0.1 Slow

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** .990 @ 77° F (25° C)

**pH:** 12.1

**SOLIDS (%):** N/D

**SOLUBILITY IN WATER:** 100%

**PARTITION COEFFICIENT: n-OCTANOL/WATER (K<sub>ow</sub>):** N/D

**VOLATILITY INCLUDING WATER (%):** 100%

**VOLATILE ORGANIC COMPOUNDS (VOC):** 9.8%

**DIELECTRIC STRENGTH (Volts):** N/A

**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:** Strong acids

**HAZARDOUS DECOMPOSITION OR BY-PRODUCT:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

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**POSSIBLE HAZARDOUS REACTIONS:** None Known

**SECTION XI – TOXICOLOGICAL INFORMATION**

**TOXICOLOGICAL INFORMATION:** Not Established

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

**EYES:** Mild if any irritation

**INGESTION:** Not a likely route of exposure under normal product handling conditions.

**INHALATION:** Acute exposure may cause nausea, vomiting, coughing and pulmonary irritation.

**SKIN:** May cause irritation, dryness, redness with prolonged or repeated contact.

**MEDICAL CONDITION AGGRAVATED:** Pre-existing disorders of the skin, respiratory system, and eyes will be aggravated by over exposure.

**ACUTE HEALTH HAZARDS:** None Known

**CHRONIC HEALTH HAZARDS:** Dermatitis may occur due to long-term irritation.

**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:** None Known

**SECTION XIII – DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL:** Dispose in accordance with local, state and federal laws. Non-hazardous

**RCRA STATUS:** Non-hazardous

**SECTION XIV - TRANSPORTATION INFORMATION**

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

**HAZARD CLASS/DIVISION:** 2.1

**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:** N/A

**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:** None

**SARA 313 REPORTABLE INGREDIENTS:** None

**CLEAN WATER ACT:** None

**STATE REGULATIONS:** California Proposition 65: None

**INTERNATIONAL REGULATIONS:** All components are listed or exempted.

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**NFPA HEALTH:** 0  
**NFPA FLAMMABILITY:** 1  
**NFPA REACTIVITY:** 1  
**NFPA OTHER:** N/A

**HMIS HEALTH:** 0  
**HMIS FLAMMABILITY:** 1  
**HMIS REACTIVITY:** 1  
**HMIS PROTECTION:** A

**SECTION XVI - ADDITIONAL INFORMATION****PREPARATION BY:** Technical Services

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

**DATE PREPARED:** 05/20/2015**REVISION DATE:** 05/20/2015

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