



NFPA 704 RATING

**INFORMATION ONLY - Please read Section X**

**SECTION I - Product and Manufacturer Identity**

Product Identity:	Revision Date: June 1999
<b>Sealed Lead Battery</b> <b>Cyclon<sup>®</sup>, Genesis<sup>®</sup>, SBS, Hawker XT<sup>™</sup></b> <b>Used on Aviation/Military Applications</b>	<b>Product Contained in Metal Case</b> <b>for Environmental Requirements</b>
Manufacturer's Name and Address: Hawker Energy Products Inc. 617 North Ridgeway Drive Warrensburg, MO 64093-9301	Emergency Telephone Number: (660) 429-2165 Customer Service Telephone Number: 800-964-2837

**SECTION II - Ingredients**

Hazardous Components	CAS #	OSHA PEL-TWA	% (By weight)
Lead	7439-92-1	50µg/m <sup>3</sup>	45 - 60 %
Lead Dioxide	1309-60-0	50µg/m <sup>3</sup>	15 - 25 %
Sulfuric Acid Electrolyte	7664-93-9	1.0 mg/m <sup>3</sup>	15 - 20 %
Non-Hazardous Materials	N/A	N/A	5 - 10 %

**SECTION III - Physical/Chemical Characteristics**

Boiling Point - N/A	Specific Gravity (H <sub>2</sub> O=1) - NA
Vapor Pressure (mm Hg.) - N/A	Melting Point - N/A
Solubility in Water - N/A	Appearance & Color - N/A

**SECTION IV - Fire & Explosion Hazard Data**

Flash Point (Method Used): N/A	Flammable Limits: N/A	LEL: N/A	UEL: N/A
Extinguishing Media: Multipurpose Dry chemical, CO <sub>2</sub> or water spray.			
Special Fire Fighting Procedures: Cool Battery exterior to prevent rupture. Acid mists and vapors in a fire are toxic and corrosive.			
Unusual Fire and Explosion Hazards: Hydrogen gas may be produced and may explode if ignited. Remove all sources of ignition.			

**SECTION V- Reactivity Data**

Conditions to Avoid: Avoid shorting. Avoid over-charging. Use only approved charging methods. Do not charge in gas tight containers.
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**SECTION VI - Health Hazard Data**

Routes of Entry: N/A	Health Hazards (Acute & Chronic): N/A
Emergency & First Aid Procedures:	Battery contains acid electrolyte which is absorbed in the separator material. If battery case is punctured, completely flush any released material from skin or eyes with water.

## SECTION VII - Precautions for Safe Handling & Use

Steps to be taken in case material is released or spilled:	Avoid contact with acid materials. Use soda ash or lime to neutralize. Flush with water.
Waste Disposal Method:	Dispose of in accordance with Federal, State, & Local Regulations. Do not incinerate. Batteries should be shipped to a reclamation facility for recovery of the metal and plastic components as the proper method of waste management. Contact distributor for appropriate product return procedures.

## SECTION VIII - Control Measures - Not Applicable

## SECTION IX - Transportation

Hawker Energy Products Inc. batteries are starved electrolyte batteries which means the electrolyte is absorbed in the separator material. The batteries are also sealed. As of September 30, 1995, Hawker Energy Products Inc. batteries were classified as "nonspillable batteries", and as such are not subject to the full requirements of 49 CFR § 173.159. The previous exempt classification, "Dry Batteries, Not Restricted" was discontinued effective September 30, 1995. "Nonspillable" batteries are excepted from the regulation's comprehensive packaging requirements if the following conditions are satisfied: (1) The battery is protected against short circuits and is securely packaged. (2) For batteries manufactured after September 30, 1995, the battery and outer packaging must be plainly and durably marked "NONSPILLABLE" or "NONSPILLABLE BATTERY" and (3) The battery is capable of withstanding vibration and pressure differential tests specified in 49 CFR § 173.159(d).

Hawker Energy Products Inc. batteries have been tested by WYLE Scientific Services & Systems Laboratories Group and determined to be in compliance with the vibration and pressure differential tests contained in 49 CFR § 173.159(d), and therefore as of September 30, 1995, excepted from the DOT requirements set forth in 49 CFR § 173.159, other than paragraph (d).

Battery shipments from Hawker Energy Products Inc. Warrensburg location, will be properly labeled in accordance with applicable DOT regulations.

**Packaging changes performed at other locations may require additional labeling, since in addition to the battery itself containing the required marking, the outer packaging of the battery must also contain the required marking: "NONSPILLABLE" OR "NONSPILLABLE BATTERY".** Because the batteries are classified as "Nonspillable" and meet the three conditions above, [from § 173.159(d)] they do not have an assigned UN number nor do they require additional DOT hazard labeling.

The regulation change effective September, 1995, was to clarify and distinguish to shippers and transporters, all batteries that have been tested and determined to be in compliance with the DOT Hazardous Material Regulations, the International Civil Aeronautics Organization (ICAO), and the International Air Transport Association (IATA) Packing Instruction 806 and Special Provision A67, and therefore excepted from all other requirements of the regulations and classified as a "nonspillable battery".

## SECTION X - Additional Information

The Hawker sealed lead acid battery is determined to be an "article" according to the OSHA Hazard Communication Standard and is thereby excluded from any requirements of the standard. The Material Safety Data Sheet is therefore supplied for informational purposes only.

The information and recommendations contained herein have been compiled from sources believed to be reliable and represent current opinion on the subject. No warranty, guarantee, or representation is made by Hawker Energy Products Inc., as to the absolute correctness or sufficiency of any representation contained herein and Hawker Energy Products Inc. assumes no responsibility in connection therewith, nor can it be assumed that all acceptable safety measures are contained herein, or that additional measures may not be required under particular or exceptional conditions or circumstances.

**N/A or Not Applicable - Not applicable for finished product used in normal conditions.**