

## Beiblatt zum Sicherheitsdatenblatt / Supplement to the safety data sheet

### Abschnitt 1 / Section 1

#### 1.1 Produktidentifikation / Product identification

s. Original-Datenblatt / see original safety data sheet

#### 1.2 Verwendungen des Stoffs / Uses of the substance

s. Original-Datenblatt / see original safety data sheet

#### 1.3 Einzelheiten zum Lieferanten / Details of the supplier

Firmenname / *Supplier*  
 Straße / *Street*  
 Ort / *City*  
 Tel. / *Phone*  
 E-Mail / *E-Mail*

Stürmer Maschinen GmbH,  
 Dr.-Robert-Pfleger-Str. 26,  
 D-96103 Hallstadt  
 +49 (0)951 96555 - 0 (07:00 - 17:00 Uhr / 07:00 am - 05:00 pm)  
 info@stuermer-maschinen.de

#### 1.4 Notrufnummer / Emergency Telephone

Wählen Sie die passende Notrufnummer anhand des GHS-Symbols auf Ihrem Gefahrgut oder entsprechend Abschnitt 2.2 des orig. Sicherheitsdatenblattes \*.  
 Call the appropriate emergency number using the GHS symbol on your dangerous goods or according to section 2.2 of the original safety data sheet \*.

GHS Gefahren-piktogramm / GHS symbol	GHS-Kürzel/ GHS-no.	Mögliche Signalwörter/ Warning	Gefährdungsklassen / Description of hazards	Notrufnummer */ Emergency Phone *
	GHS01 bis GHS09			+49 (0)951 96555 - 590 Sammelnotrufnummer Gefahrstoffe
	GHS01	Gefahr oder Achtung / Danger or Attention	Explosive Stoffe/Gemische und Erzeugnisse mit Explosivstoff, selbstzersetzliche Stoffe/Gemische, organische Peroxide / Explosive substances / mixtures and products containing explosives, self-reactive substances / mixtures, organic peroxides	- 591
	GHS02	Gefahr oder Achtung / Danger or Attention	Selbstzersetzliche Stoffe/Gemische, organische Peroxide, entzündbare Gase, Aerosole Flüssigkeiten, Feststoffe, selbsterhitzungsfähige Gemische, pyrophore Flüssigkeiten und Feststoffe, Stoffe/Gemische, die bei Berührung mit Wasser entzündbare Gase bilden / Self-reactive substances / mixtures, organic peroxides, flammable gases, aerosols, liquids, solids, self-heating mixtures, pyrophoric liquids and solids, substances / mixtures which form flammable gases on contact with water	- 592
	GHS03	Gefahr oder Achtung / Danger or Attention	Oxidierende Gase, Flüssigkeiten, Feststoffe / Oxidizing gases, liquids, solids	- 593
	GHS04	Achtung / Attention	Verdichtete, verflüssigte, gelöste und tiefgekühlt verflüssigte Gase / Compressed, liquefied, dissolved and refrigerated liquefied gases	- 594
	GHS05	Gefahr oder Achtung / Danger or Attention	Verätzung der Haut, schwere Augenschäden, auch metallkorrosive Eigenschaften / Chemical burns to the skin, severe eye damage, also metal-corrosive properties	- 595
	GHS06	Gefahr / Danger	Äußerst schwere und schwere akute Gesundheitsschäden oder Tod / Extremely severe and severe acute damage to health or death	- 596
	GHS07	Achtung / Attention	Akute Gesundheitsschäden, Reizung der Haut, der Augen und der Atemwege, Sensibilisierung der Haut, narkotisierende Wirkungen / Acute damage to health, irritation of the skin, eyes and the respiratory tract, sensitization of the skin, narcotic effects	- 597
	GHS08	Gefahr oder Achtung / Danger or Attention	Chronische Gesundheitsschäden (Organschädigungen) bei einmaliger oder mehrmaliger Exposition, krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkungen, Lungenschäden durch Eindringen von Substanzen in die Lunge (Aspirationsgefahr), Sensibilisierung der Atemwege / Chronic damage to health (damage to organs) after single or multiple exposure, carcinogenic, mutagenic and reproductive effects, lung damage due to the penetration of substances into the lungs (risk of aspiration), sensitization of the respiratory tract	- 598
	GHS09	Achtung oder ohne Signalwort/ Attention or without wording	Giftig für Wasserorganismen mit kurz- und langfristiger Wirkung / Toxic to aquatic organisms with short and long-term effects	- 599

\* 07:00 - 17:00 Uhr, außerhalb dieses Zeitraums kann die Nummer auf dem Sicherheitsdatenblatt angerufen werden / 07:00 am - 05:00 pm, outside this time, the number on the safety data sheet can be called

Für alle anderen Informationen siehe Original-Sicherheitsdatenblatt / For all other information, see the original safety data sheet



## NP33-12 NP33-12FR

Sealed Rechargeable  
Lead-Acid Battery

### 12V, 32.9Ah

### Specifications

- **NOMINAL VOLTAGE:** 12V
- **NOMINAL CAPACITY:**
  - 20 hr. rate of 1.64A to 10.5V 32.9Ah
  - 10 hr. rate of 3.02A to 10.5V 30.2Ah
  - 5 hr. rate of 5.7A to 10.2V 28.5Ah
  - 1 hr. rate of 23.6A to 9.60V 23.6Ah
- **WEIGHT (approx.):** 24.0 pounds (10.9kgs)
- **ENERGY DENSITY (20 hr. rate):** 1.6 WH/cubic inch (98.8 WH/liter)
- **SPECIFIC ENERGY (20 hr. rate):** 16.5 WH/pound (36.2 WH/kg)
- **INTERNAL RESISTANCE OF CHARGED BATTERY:** 8.7 milliohms (approx.)
- **MAXIMUM DISCHARGE CURRENT WITH STANDARD TERMINALS:** 150 amperes
- **MAXIMUM SHORT-DURATION DISCHARGE CURRENT:** 500 amperes
- **OPERATING TEMPERATURE RANGE:**
  - CHARGE 5°F to 122°F (-15°C to 50°C)
  - DISCHARGE -4°F to 140°F (-20°C to 60°C)
- **CHARGE RETENTION (shelf life) at 68°F (20°C):**
  - 1 month 97%
  - 3 months 91%
  - 6 months 85%
- **LIFE EXPECTANCY:**
  - STANDBY USE** 3 to 5 years
  - CYCLE USE (approx.):**
    - 100% depth of discharge 250 cycles
    - 50% depth of discharge 550 cycles
    - 30% depth of discharge 1200 cycles
- **SEALED CONSTRUCTION:** Can be operated in any position without leakage.
- **STANDARD TERMINAL:** Universal or options in terminal diagram
- **HOUSING MATERIAL:** PP Resin
- **OPTIONAL:** Container and cover made from Flame Retardant PP (UL94-V0/L.O.I.>28%)

### Terminal

#### Standard

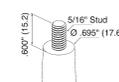


U Positive Terminal



U Negative Terminal

#### Optional



MG Positive



MG Negative



Automotive Type AP Positive



Automotive Type AP Negative

#### Terminal height above cover

Terminal Type	NP33-12 mm	ins
B	5.1	0.20
NB	22.8	0.90
MJ	28.4	1.12
AP	22.8	0.90
MG	38.1	1.50
U	22.8	0.90



NB Terminal



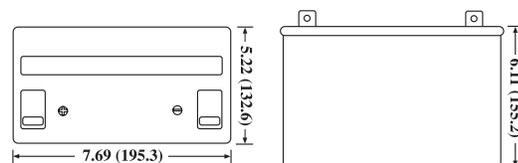
B Terminal



MJ Terminal

Note:  
Dimensions are in inches (mm)  
Tolerances are ± 0.04 in. (±1mm)  
and ± 0.08 in. (± 2mm) for height dimensions.

### Dimensions



DIMENSIONS: INCHES (MM)

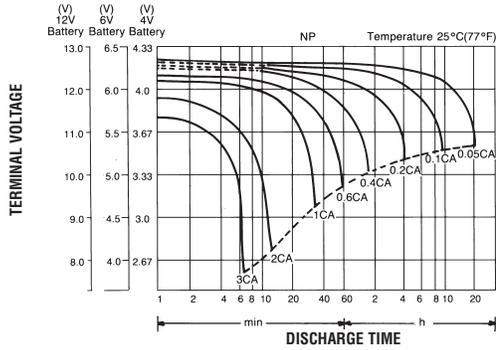


RECOGNIZED BY UL, File No. MH 14328

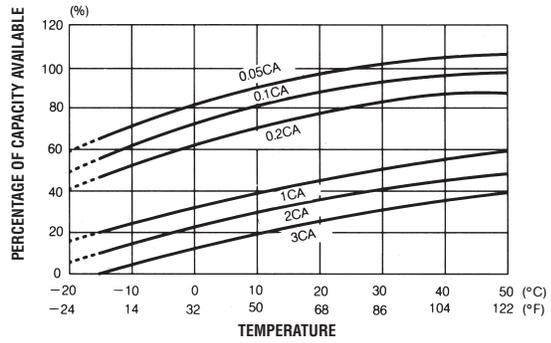
# EnergySys™

Power/Full Solutions™

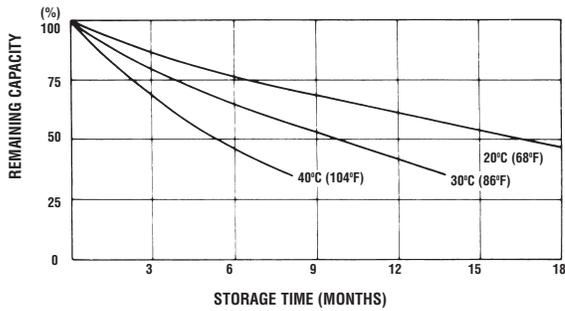
### DISCHARGE CHARACTERISTIC CURVES AT 25°C (77°F)



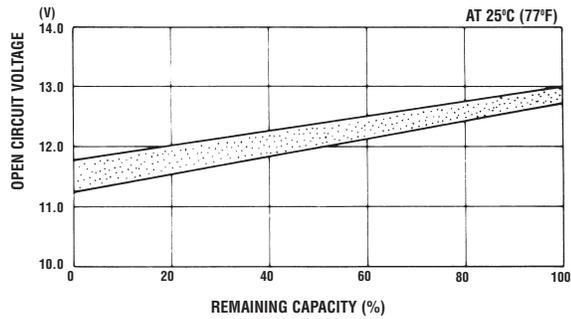
### TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY



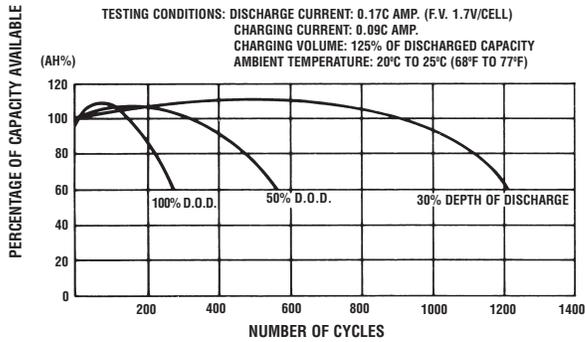
### SELF DISCHARGE CHARACTERISTICS



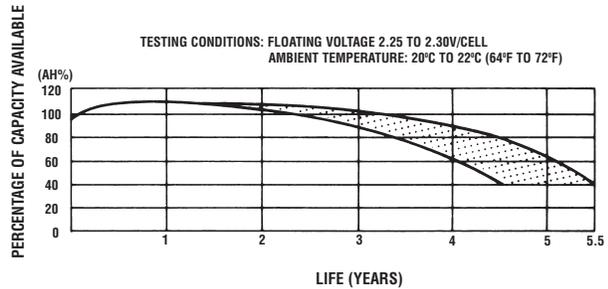
### OPEN CIRCUIT VOLTAGE VS REMAINING CAPACITY



### CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE



### FLOAT SERVICE LIFE



When the battery will be used by current in excess of 3C, consult with EnerSys prior to use.

#### CHARGING METHODS (At 20°C)

- Cycle use:** Maximum charging current 0.25C  
Charging voltage 14.4 to 15.0V
- Standby use:** Float charging voltage 13.50 to 13.80V

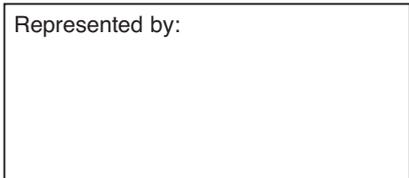
- CAUTION**
- Avoid short circuit
  - Do not charge in a sealed container.



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Represented by:





**INFORMATION ONLY - Please read Section X**

**SECTION I - Product and Manufacturer Identity**

Product Identity:	Revision Date: September 7, 2006 Supersedes: May 7, 2004
<b>Sealed Lead Battery</b>	
<b>Cyclon<sup>®</sup>, Genesis<sup>®</sup>, SBS, SBS J, Hawker XE<sup>™</sup> Odyssey<sup>®</sup> or Trolling Thunder<sup>™</sup></b>	
Manufacturer's Name and Address: EnerSys Energy Products Inc. (formerly Hawker Energy Products Inc.) 617 North Ridgeview 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 and Shipping/Handling Electrical Safety**

Conditions to Avoid: Avoid shorting, high levels of short circuit current can be developed across the battery terminals. Do not rest tools or cables on the battery. Avoid over-charging. Use only approved charging methods. Do not charge in gas tight containers.

Requirements for Safe Shipping and Handling of Cyclon<sup>®</sup> Cells:  
Warning – Electrical Fire Hazard – Protect Against Shorting

- Terminals can short and cause a fire if not insulated during shipping.
- Cyclon<sup>®</sup> product must be labeled "NONSPILLABLE" during shipping. Follow all federal shipping regulations. See section IX of this sheet and CFR 49 Parts 171 through 180, available anytime online at [www.gpoaccess.gov](http://www.gpoaccess.gov).

Requirements for Shipping Cyclon<sup>®</sup> Product as Single Cells

- Protective caps or other durable inert material must be used to insulate each terminal of each cell unless cells are shipping in the original packaging from EnerSys, in full box quantities.
- Protective caps are available for all cell sizes by contacting EnerSys Customer Service at 1-800-964-2837.

Requirements for Shipping Cyclon<sup>®</sup> Product Assembled Into Multicell Batteries

- Assembled batteries must have short circuit protection during shipping.
- Exposed terminals, connectors, or lead wires must be insulated with a durable inert material to prevent exposure during shipping.

**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 VI - Health Hazard Data (Continued)

Proposition 65: Warning: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.

### 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, Shipping and Handling

EnerSys 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, EnerSys 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". (3) The battery is capable of withstanding vibration and pressure differential tests specified in 49 CFR § 173.159(d). (4) At a temperature of 55 °C (131°F), the battery must not contain any unabsorbed free-flowing liquids, and is designed so that electrolyte will not flow from a ruptured or cracked case.

EnerSys 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 EnerSys 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".

Per 42 USC Section 14322 (US Code Title 42 – The Public Health and Welfare), packaging must be marked with the following: "Contains Sealed Lead Battery" and "Battery Must Be Recycled".

### SECTION X - Additional Information

The EnerSys Energy Products Inc. 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 EnerSys Energy Products Inc., as to the absolute correctness or sufficiency of any representation contained herein and EnerSys 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.

Informational MSDS Part Number 2602-0043 Rev. 2 (09/07/06)