

# Safety Data Sheet

# **1. IDENTIFICATION**

## **Product Identifier**

Rescue Portable Power Pack with sealed AGM/SLA batteries

#### Other means of identification

iStart, Models 700, 900, 910, 950, 1000, 1060, 1220, 1700, 1800, 2100, 3000, 3100, 4000, 4000HD, 4050, 4050HD, 5000, 5020, 6000

#### Product Code

604049, 604050, 604051, 604052, 604053, 604055, 604063, 604074, 604082, 604083, 604084, 604094, 604100, 604101, 604105, 604106, 604110, 604115, 604120

#### Recommended use of the chemical and restrictions on use

Recommended for commercial/industrial use

Not recommended for household use

#### Details of the supplier of the safety data sheet

Quick Cable Corporation 3700 Quick Drive Franksville, WI 53126-0509 www.quickcable.com

#### Emergency Telephone Number (24 hr)

INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

Hazard symbols: Xn, C, N

Risk Phrases: 33-35-40-48/23-50/53-61-62

**Risk advice to man and the environment:** May form explosive air/gas mixture during charging. Do not open battery, avoid contact with internal components. Internal components are oxide lead and electrolyte.

Short term exposure: Sulfuric acid may cause irritation of eyes, nose and throat. Prolonged contact may cause severe burns.

**Long term exposure:** Repeated contact causes irritation and skin burns. Repeated exposure to mist may cause erosion of teeth, chronic eye irritation and/or chronic inflammation of the nose, throat and bronchial tubes. Pregnant women exposed to internal components may experience reproductive/developmental effects.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS no.	Formula	Composition	EC No.	Classification
Lead	7439-92-1	Pb	70%	231-100-4	T, R 61R40 R48/20 R33 R50/53 R62
Sulfuric Acid	7664-93-9	H <sub>2</sub> SO <sub>4</sub>	20%	231-639-5	C, R35
Acrylonitrile- Butadiene- styrene	9003-56-9	/	8%	/	/
Fiber Glass	65997-17-3	/	2%	266-046-0	Xi, R36/37/38

## 4. FIRST-AID MEASURES

#### First Aid:

**Eyes:** If battery is leaking and material contacts the eye, flush thoroughly with copious amounts of running water for 15 minutes, occasionally lifting the upper and lower eyelids until no evidence of the chemical remains. Get medical aid.

**Skin**: If battery is leaking and material contacts the skin, remove any contaminated clothing and flush exposed skin with copious amounts of running water for at least 15 minutes.

**Inhalation:** Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth to mouth resuscitation. Seek medical attention if irritation develops or persists. WARNING: It may be hazardous to the person providing aid to give mouth to mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention. Loosen tight clothing such as a collar, belt or waistband.

Note to Physician: Treat symptomatically.

## **5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** In case of fire where batteries are present, flood the area with water. If any batteries are burning, water may not extinguish them but will cool the adjacent batteries and control the spread of fire. CO<sub>2</sub>, dry chemical and foam extinguishers are preferred for small fires but also may not extinguish burning batteries. Burning batteries will burn themselves out. Virtually all fires involving batteries can be controlled with water. When water is used, however, hydrogen gas may be evolved which can form an explosive mixture with air. LITH-X (powdered graphite) or copper fire extinguishers, sand. Dry ground dolomite or soda ash may also be used. These materials act as smothering agents.

**Specific Hazards arising from the Chemical:** Thermal decomposition can lead to the release of irritating gases and vapors. Batteries evolve flammable hydrogen gas during charging and may increase fire risk in poorly ventilated areas near sparks, excessive heat or open flames. Thermal shock may cause battery case to crack open. Containers may explode when heated. Firefighting water runoff and dilution water may be toxic and corrosive and may cause adverse environmental impacts.

**Protective Equipment and Precautions for Firefighters:** As in any fire, wear a self-contained breathing apparatus in pressuredemand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** If the internal battery material leaks; Notify safety personnel of large spills. Remove all sources of ignition. Carefully scoop up and place into appropriate disposal container. Neutralize any spilled electrolyte with neutralizing agents, such as soda ash, sodium bicarbonate, or very dilute sodium hydroxide solutions. Avoid runoff into storm sewers and ditches which lead to waterways. Provide ventilation. Wash spill site after material pickup is complete.

Environmental Precautions: Do not let product enter drains and environment.

**Methods for Containment and Clean UP:** Sweep up and place in suitable containers for recycle or disposal to local/national regulations (see section 13). Keep in suitable, closed containers for disposal.

# 7. HANDLING AND STORAGE

**Handling:** The battery should not be dropped or subjected to strong mechanical shock. Protect containers from physical damage to avoid leaks and spills. Place cardboard between layers of stacked batteries to avoid damage and short circuits. Do not allow conductive material to touch the battery terminals. A dangerous short circuit may occur and cause battery failure and fire. Do not allow contact with water. Do not store in direct sunlight.

**Storage:** Store in a cool, dry and well ventilated area. Elevated temperatures can result in loss of battery performance, leakage or rust. Do not expose battery to open flames, light and heat. Keep away from combustible materials, organic chemicals, reducing substances, metals, strong oxidizers and water.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Limits:

#### CAS# 7439-92-1:

 $\begin{array}{l} \label{eq:action} ACGIH: United States . TWA: 0.05 mg/m^3 \\ Australia . TWA: 0.15 mg/m^3 (dust, fume) \\ Belgium . TWA: 0.15 mg/m^3 (dust, fume) \\ Denmark . TWA: 0.05 mg(Pb)/m^3 , 0.05 mg/m^3 \\ EC . TWA: 0.05 mg(Pb)/m^3 , 0.05 mg/m^3 \\ France . VLE: 0.1 mg/m^3 \\ Japan . OEL: 0.1 mg/m^3 , 2B carcinogen \\ Korea . TWA: 0.15 mg/m^3 \\ Netherlands . MAC-TGG: 0.15 mg/m^3 \\ New Zealand . TWA: 0.1 mg(Pb)/m^3 (dust & fume) \\ Russia . STEL: 0.05 mg/m^3 \\ \end{array}$ 

#### CAS# 7664-93-9:

ACGIH: United States . TWA: 0.2 mg/m<sup>3</sup> (thoracic) Belgium . TWA: 1 mg/m<sup>3</sup>; STEL: 3 mg/m<sup>3</sup>, Skin Denmark . TWA: 1 mg/m<sup>3</sup> Finland - TWA: 1 mg/m<sup>3</sup>; STEL: 3 mg/m<sup>3</sup> France . VME: 1 mg/m<sup>3</sup>; VLE: 3 mg/m<sup>3</sup> Germany . MAK: 0.1 mg/m<sup>3</sup> (inhalable) Japan . OEL: continuous 1 mg/m<sup>3</sup> Korea . TWA: 1 mg/m<sup>3</sup> Mexico . TWA: 1 mg/m<sup>3</sup> Netherlands . MAC-TGG: 1 mg/m<sup>3</sup> New Zealand . TWA:1 mg/m<sup>3</sup> Russia . STEL: 1 mg/m<sup>3</sup>, Skin

#### CAS# 65997-17-3:

Netherlands . MAC-TGG: 10 mg/m<sup>3</sup> (dust)

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### Individual Protection for Industrial Use:

Eyes: Not necessary under normal conditions. Wear safety glasses with side shields if handling an open or leaking battery.

Skin: Not necessary under normal conditions. Use neoprene or natural rubber gloves if handling an open or leaking battery.

Clothing: Not necessary under normal conditions. Wear appropriate protective clothing if handling an open or leaking battery.

**Respirators:** In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting batteries. Respiratory Protection is not necessary under conditions of normal use.

**Other protection:** Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking to maintain good health habits.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Color:	Black
Odor:	Odorless
PH value:	<1 (Battery inside)
Vapor Pressure:	~10mmHg
Boiling point:	235-240 $^{\circ}$ F (as sulfuric acid)
Freezing/Melting Point:	No information available
Auto ignition Temperature:	No information available
Flash Point:	Not applicable
Explosion limit: Lower	4% (as hydrogen gas)
Explosion limit: Upper	74% (as hydrogen gas)
Decomposition Temperature:	No information available
Solubility in water	100% (as sulfuric acid)
Specific Gravity/Density	No information available
Partition Coefficient (n-octanol/water)	No information available

## **10. STABILITY AND REACTIVITY**

Chemical Stability: Stable under normal temperatures and pressures

**Conditions to avoid:** Incompatible materials. Prolonged overcharge, sources of ignition, excess heat, exposure to moist air or water. Mechanical and/or Electrical abuse.

**Incompatibilities with other materials:** Strong bases, combustible organic materials, reducing agents, finely divided metals, strong oxidizers and water.

Hazardous Decomposition Products: Hazardous decomposition products may form under fire conditions. Sulfur dioxide, sulfur trioxide, carbon monoxide, sulfuric acid mist and hydrogen.

Hazardous Polymerization: Will not occur.

Hazardous Reactions: None under normal processing.

## **11. TOXICOLOGICAL INFORMATION**

Acute toxicity: CAS# 7664-93-9

Draize test, rabbit, eye: 250 ug Severe Inhalation, mouse:  $LC50 = 320 mg/m^3$ Inhalation, rat:  $LC50 = 510 mg/m^3/2H$ Oral, rat: LD50 = 2140 mg/Kg

Sensitization: No information available

**Chronic Exposure:** To the best of our knowledge, the chemical, physical and toxicological properties have been thoroughly investigated.

Lead . IARC: Group 2B carcinogen

Sulfuric Acid . The international Agency for Research on Cancer (IARC) has determined that occupational exposure to stronginorganic acid mists containing sulfuric acid is carcinogenic to humans (group 1).

Acrylonitrile-butadiene-styrene: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP or EPA classification.

Fiber Glass . IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC>

## Potential Health Effects:

**Eye:** No special hazard risk under normal use. Direct contact of internal electrolyte liquid with eyes may cause severe burns or blindness.

Skin: No special hazard risk under normal use. Direct contact of internal electrolyte liquid with the skin may cause skin irritation or damaging burns.

**Ingestion:** May cause severe and permanent damage to the digestive tract. May cause circulatory system failure. Contents of an open battery can cause serious chemical burns of mouth, esophagus and gastrointestinal tract or fatal lead poisoning. Lead absorption may cause nausea, vomiting, weight loss, abdominal spasms, fatigue, and pain in the arms, legs and joints. Other effects may include central nervous system damage, kidney dysfunction and potential reproductive effects.

**Inhalation:** Inhalation of a mist of this material may cause respiratory tract irritation. Inhalation of fumes may cause metal fume fever which is characterized by flu-like symptoms with metallic taste, fever, chills, weakness and chest pain. Causes severe irritation of upper respiratory tract with coughing, burns. Breathing difficulty and possible coma. Chronic inhalation of sulfuric acid mist may increase the risk of lung cancer.

## Additional Information:

RTECS#: CAS# 7439-92-1; OF7525000/CAS# 7664-93-9; WS5600000/CAS# 9003-56-9; AT6970000/CAS# 65997-17-3; LK3651000.

# **12. ECOLOGICAL INFORMATION**

Persistence and degradability and Ecotoxicity: No information available

#### Further information on Ecology: No information available

**Other:** Do not allow product to reach ground water, water course or sewage system. Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**Contaminated Packaging:** Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery, recycling, reuse) according to local regulation.

## **14. TRANSPORT INFORMATION**

	ΙΑΤΑ	IMDG	RID/ADR
Proper Shipping Name	Batteries, wet, filled with acid	Batteries, wet, filled with acid	Batteries, wet, filled with acid
Hazard Class	8	8	8
UN Number	UN2794	UN2794	UN2794
Packing Group	Corrosive	Corrosive	Corrosive

If this battery met the test requirements for ‰onspillable wet electric strong batteries+, as provided in 49 CFR 173.159(D), are nonregulated when protected against short circuits, kept upright and securely packaged. If nonspillable wet electric strong batteries have not met these requirements, the following information would apply.

	ΙΑΤΑ	IMDG	RID/ADR
Proper Shipping Name	Batteries, wet, non-spillable	Batteries, wet, non-spillable	Batteries, wet, non-spillable
Hazard Class	8	8	8
UN Number	UN2800	UN2800	UN2800
Hazard Label	Corrosive	Corrosive	Corrosive

## 15. REGULATORY INFORMATION

Regulatory Information: Labeling according to EC Directives

Hazard Symbols: Xn C N

**Risk Phrases:** 

R 33	Danger of cumulative effects
R 35	Causes severe burns

R 36/37/38	Irritating to eyes,	respiratory system and skin

- R 40 Limited evidence of a carcinogenic effect
- R 48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
- R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R 61 May cause harm to unborn child
- R 62 Possible risk of impaired fertility

## Safety Phrases:

- S 16 Keep away from sources of ignition
- S 24 Avoid contact with eyes
- S 26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
- S 60 This material and its container must be disposed of as a hazardous waste
- S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Canada: Components of this product are listed on Canadac DSL List.

US Federal Toxic Substance Control Act (TSCA): Components of this product are listed on the TSCA Inventory

# **16. OTHER INFORMATION**

**ACGIH:** American Conference of Governmental Industrial Hygienists

- **CAS:** Chemical Abstract Service
- DSL: the Domestic Substances List of Canada
- EC: European Commission
- **IARC:** International Agency for Research on Cancer
- IATA: International Air Transport Association
- **IMDG:** International Maritime Dangerous Goods
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- LD50: Lethal dose, 50 percent kill
- NDSL: the Non Domestic List of Canada
- **NIOSH:** US National Institute for Occupational Safety and Health
- NTP: US National Toxicology Program
- **OSHA:** US Occupational Safety and Health
- **RTECS:** Registry of Toxic Effects of Chemical Substances
- **TDG:** Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations
- TSCA: Toxic Substances Control Act of USA

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#### <u>Disclaimer</u>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.