Safety Data Sheet

Trade name: Magnesium Anodes
Product No: 40-xxx

SECTION 1: PRODUCT AND COMPANY INFORMATION

Product Name	American Carbon Magnesium Anodes
MSDS Number	40-100
Recommended Product Use	Corrosion Prevention
Restrictions on Product Use	None
Manufacturer	American Carbon Company W246S3244 Industrial Ln. Unit A Waukesha, WI 53189
Print Date	03/21/2015
Emergency Phone Number	262-617-2765

SECTION 2: HAZARDS IDENTIFICATION

This material is not considered hazardous in its solid form, but may create hazardous dust during handling and use. Dust in high concentrations and confined space may cause an explosive situation.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	Flammable solids (category 1) Flammable gases (category 1)

Pyrophoric solids. 1
Emits flammable gas with water contact

GHS Label Elements

Pictogram

Signal Word Danger

Hazard Statements

Contact with water releases flammable gases, may ignite spontaneously

Precautionary Statements

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses.
Hazards not otherwise classified	May form combustible dust concentrations in air during processing (including but not limited to: cutting, sanding, drilling and other processes). Users of this material should perform combustibility testing prior to use, specific to their use conditions if dust is being generated.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture Substance
CAS 7439-95-4 7439-95-4 >95% by weight

Ingredient Name	%	CAS Number
Magnesium	>99	7439-95-4

SECTION 4: FIRST AID MEASURES

Description of necessary first aid measures

Eye Contact: Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Seek medical attention if irritation persists or concerned.

Inhalation: Move exposed person to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear.

Skin Contact: Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

Ingestion: Wash mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention if irritation persists or if concerned.

Protection of first aid personnel: No action shall be taken involving any personal risk or without suitable training. If it is suspected that dust is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media: Dry powder, melting flux, dry sand, metal extinguishing powders

Unsuitable extinguishing media: Water, carbon dioxide extinguishers.

Specific hazards arising from the chemical: Combustible dust formation is a risk. Thermal decomposition can lead to release of irritating gases and vapors. Water cannot extinguish magnesium fires. The hydrogen gas produced only intensifies the fire.

Hazardous thermal decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Special protective actions for fire-fighters: Avoid dust generation. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

Special protective equipment for fire-Fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment and emergency procedures

For all personnel and Emergency Responders	Ensure adequate ventilation. Ensure that air-handling systems are operational.
Environmental Precautions	Avoid disposal of spilled material and runoff and contact with soil, waterways, drains and sewers. See section 13 for waste disposal information.

Methods and materials for containment and cleaning up

Small Spill	Sweep up and shovel. Contain spillage. Collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations. Wear protective eyewear, gloves and clothing. Refer to Section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep suitable closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advise on general occupational hygiene	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Protective Measures	Store contents under inert gas. Air and moisture sensitive. Store in a cool location. Keep away from food and beverages. Provide ventilation for containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient Name	Exposure Limits
Magnesium	No applicable occupational exposure limits

Consult local authorities for acceptable exposure limits.

Engineering measures	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep airborne concentrations of vapor and mists below exposure limits listed above if any.
Hygiene measures	Perform routine housekeeping. Wash hands before breaks and immediately after handling the product.

Respiratory	Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US or type P3 (EN143) respirator cartridges as a backup to engineering measures. When necessary use NIOSH approved breathing equipment.
Hands	Wear gloves appropriate for task being performed.
Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary. Safety glasses with side shields recommended.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form	Solid
Appearance	Silver white solid
Odor	None
Odor threshold	Not Determined
Ph	Not Determined
Melting point	650°C
Boiling point	1107°C
Flash Point	Not Determined
Evaporation rate	Not Determined
Flammable limits	
Lower:	Not Determined
Upper:	Not Determined
Vapor pressure	1 hPa at 621°C
Vapor density	Not Determined
Relative density	1.74 g/cc
Solubility	Insoluble in water
Partition coefficient: n-octanol/water	Not Determined
Auto-ignition temperature	Not Determined
Decomposition temperature	Not Determined
SADT	Not Determined
Viscosity	Not Determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Reacts violently with water.
Chemical Stability	Stable under normal conditions.
Possibility of hazardous reactions	May emit flammable gas when in contact with water.
Conditions to avoid	Incompatible materials.
Incompatible materials	Strong oxidizing agents, acids, acid chlorides, halogens
Hazardous decomposition products	Magnesium oxide

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:	No data available
Skin Corrosion/Irritation:	No data available
Serious Eye Damage/Irritation:	No data available
Respiratory or Skin Sensitization:	No data available
Germ Cell Mutagenicity:	No data available
Teratogenicity:	No data available
Carcinogenicity:	No data available
Specific Target Organ Toxicity (Repeated Exposure):	No data available
Reproductive Toxicity:	No data available
Specific Target Organ Toxicity (Single Exposure):	No data available
Aspiration Hazard:	No data available
Potential Adverse Human Health Effects and Symptoms:	No known significant effects or critical hazards.
Symptoms/Injuries After Inhalation:	No known significant effects or critical hazards.

Symptoms/Injuries After Skin Contact:	No known significant effects or critical hazards.
Symptoms/Injuries After Eye Contact:	No known significant effects or critical hazards.
Symptoms/Injuries After Ingestion:	No known significant effects or critical hazards.
Chronic Symptoms:	No known significant effects or critical hazards.

SECTION 12: ECOLOGICAL INFORMATION

Environmental effects	
Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative Potential	No data available
Mobility in soil	
Soil/water partition coefficient	No data available
Other adverse effects	The material is inert and is not expected to pose a threat to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal	The generation of waste should be avoided or minimized wherever possible. Disposal of this product and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT	
Identification Number	not regulated
Hazard Class	
Packing Group	
Proper Shipping Name	
Label Codes	
ERG Number	

In Accordance with IMDG	
Identification Number	not regulated
Hazard Class	
Packing Group	
Proper Shipping Name	
Label Codes	
ERG Number	

In Accordance with IATA	
Identification Number	not regulated
Hazard Class	
Packing Group	
Proper Shipping Name	
Label Codes	
ERG Number	

SECTION 15: REGULATORY INFORMATION

Toxic Substances Control Act (TSCA)	All ingredients are listed
SARA 302 Extremely Hazardous Substances	Not Listed
SARA 311/312 Classification	Not Applicable
Massachusetts	Not Listed
Pennsylvania	Not Listed
New Jersey	Not Listed
California Prop 65	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

Hazardous Material Information System (U.S.A.)
Health: 0 Flammability: 0 Physical Hazards: 0
Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks.

NFPA Rating (U.S.A.)
Health: 0 Flammability: 0 Reactivity Hazard: 0

History

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Prepared by	American Carbon Company
Notice to Reader	This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.