Material Safety Data Sheet

THE ARGEN CORPORATION

5855 Oberlin Drive San Diego CA 92121-4718

SECTION 1 - SUBSTANCE IDENTIFICATION

ALLOY NAME: ARGELITE 61

DESCRIPTION: Color: WHITE Type: 4

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

METAL % SYMBOL CAS NO ACGIH 8 HR TLV OSHA 8 HR PEL

Note: % values are in weight percent and reflect nominal composition.

Note: 'x' denotes a content of less than one percent

SECTION 3- HAZARDS IDENTIFICATION

EYES: Contact with eyes may cause severe irritation and possible eye burns.

SKIN: May cause severe irritation and possible burns.

INGESTION: May cause gastrointestinal irritation with nausea, vomiting, and diarrhea.

INHALATION: May cause irritation and burns to the respiratory tract.

NOTE: Exposure levels for elements in this alloy are listed in SECTION 2. The following health data

is for specific elements:

SILVER Absorption of silver compounds by ingestion, inhalation or through broken skin

can cause argyria, a permanent bluish-grey discoloration of the skin, conjuctiva and mucous membranes. Generalized argyria develops after 2 to 25 years of exposure. There are no systematic effects or symptoms and no physical disability. Silver is considered an experimental equivocal tumorigenic agent by RTECS

criteria.

GALLIUM May cause bone marrow depression.

INDIUM May cause fetal effects based upon animal studies. May cause lung damage and

blood abnormalities. Target Organs: Blood, kidneys, liver, lungs.

RHENIUM The toxicological properties of this material have not been investigated. Use

appropriate procedures to prevent direct contact and inhalation.

RUTHENIUM The toxicological properties of this substance have not been fully investigated.

May be harmful if swallowed.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally

lifting the upper and lower lids.

SKIN CONTACT: Scrub skin thoroughly with soap and water.

INGESTION: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Induce vomiting.

**Never give anything by mouth to an unconscious person. Get medical aid.

INHALATION: Remove affected person to fresh air and assist with additional oxygen if necessary.

Get first aid if other symptoms appear.

SECTION 5 - FIREFIGHTING MEASURE

This material is fire and explosion resistant. Heating Beyond the melting range may generate fumes which are not flammable.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION: Use proper personal protective equipment as described in section 8.

SECTION 7 - HANDLING AND STORAGE

Avoid inhalation of fumes while melting and dust while grinding. Wash hands thoroughly before eating or smoking to avoid ingestion.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTIONS

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

RESPIRATORY: Provide general ventilation and local exhaust to keep levels below the TLV stated in SECTION

Wear a NIOSH approved respirator for dust exceeding the TLVs.

HAND: Latex gloves are recommended while grinding, heat resistant gloves should be worn while can handling hot metals or molds.

EYE PROTECTION: Wear eye protection suitable to each individual operation.

OTHER: Wear apron, lab coat or other protective clothing.

Appearance: WHITE

Odor: Not Applicable Not Applicable pH: **Boiling Point:** Not Applicable Melting Range: 1130-1275 °C Flash Point: Not Applicable Flammability: Not Applicable Autoflammability: Not Applicable **Explosive Properties:** Not Applicable Oxidizing Properties: Not Applicable Vapor Pressure: Not Applicable Solubility(Water/Fat): Insoluble

SECTION 10 - STABILITY AND REACTIVITY

At ordinary and high (below the melting range) temperatures, the material oxidizes but is stable. At very high temperatures the alloy produces fumes. SECTION 11 - TOXICOLOGICAL INFORMATION No specific instructions. **SECTION 12 - ECOLOGICAL INFORMATION** This is an environmentally friendly material. With proper dust collecting equipment, 100% of this alloy can be recycled. **SECTION 13 - DISPOSAL CONSIDERATIONS** Whenever possible, recover dust because it has economic value. **SECTION 14 - TRANSPORT INFORMATION** No specific instructions. SECTION 15 - REGULATORY INFORMATION No specific instructions. **SECTION 16 - OTHER INFORMATION**

The information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof. However, THE ARGEN CORPORATION makes no representations as to the completeness of accuracy thereof and information is supplied upon the condition that the persons receiving the above material will make there own determination as to its suitability for their purposes prior to use. In no event will "THE ARGEN CORPORATION" be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers.

Revision Date: 5/30/2011