

Material Safety Data Sheet

THE ARGEN CORPORATION

5855 Oberlin Drive San Diego CA 92121-4718

SECTION 1 - SUBSTANCE IDENTIFICATION

ALLOY NAME: ARGEDENT 52SF SPECIAL

DESCRIPTION: Color: WHITE Type: 4

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

METAL	%	SYMBOL	CAS NO	ACGIH 8 HR TLV	OSHA 8 HR PEL
GOLD	51.5	Au	7440-57-5	Not established	Not established
PALLADIUM	38.4	Pd	7440-05-3	No data	No data
RUTHENIUM	<1	Ru	7440-18-8	No data	No data
INDIUM	8.5	In	7440-74-6	0.1 mg/m3	0.1 mg/m3 TWA
GALLIUM	1.5	Ga	7440-55-3	No data	No data

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:
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.
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

RESPIRATORY: Provide general ventilation and local exhaust to keep levels below the TLV stated in SECTION 2. Wear a NIOSH approved respirator for dust exceeding the TLVs.

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

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

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

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: WHITE

Odor: Not Applicable

pH: Not Applicable

Boiling Point: Not Applicable

Melting Range: 1180-1300 °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

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