

# Safety Data Sheet

THE ARGEN CORPORATION

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## SECTION 1 - SUBSTANCE IDENTIFICATION

PRODUCT NAME: NP

DESCRIPTION: Color: WHITE Type: SOLDER

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

METAL	%	SYMBOL	CAS NO	ACGIH 8 HR TLV	OSHA 8 HR PEL
NICKEL	74	Ni	7440-02-0	1 mg/m3	1 mg/m3
IRON	4.5	Fe	7439-89-6	5 mg/m3	10mg/m3
BORON	3	B	7440-42-8	Not established	Not established
SILICON	4.5	Si	7440-21-3	10 mg/m3	10 mg/m3 (total dust) 5 mg/m3 (respiratory dust)
CHROMIUM	14	Cr	7440-47-3	0.5 mg/m3	0,5 mg/m3 CRVI compounds: Ceiling=0,1mg/m3

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:

BORON Boron is a cumulative weak poison. Causes depression of the circulation, persistent vomiting, diarrhea, followed by profound shock and coma. Temperature is subnormal and a scarletina-form rash may appear when much is ingested (SAX)

CHROMIUM May cause histological fibrosis of the lungs. There are some references to chromium causing lung and/or nasal cancer. In addition, chromium metal has caused tumors in laboratory animals via implant and intravenous routes. Chromium is listed as a Confirmed Human Carcinogen by the ACGIH (American Conference of Governmental Industrial Hygienists).

NICKEL Dust may cause headache, coughing, dizziness or difficult breathing. Prolonged exposure may cause dermatitis. Ingestion may cause nausea, vomiting, headaches, dizziness, gastrointestinal irritation. Target organs: Nasal cavities, lungs shin. Nickel is listed as: Possibly Carcinogenic to Humans by the IARC (International Agency for Research on Cancer) and Reasonably Anticipated to be a

#### SECTION 4 - FIRST AID MEASURES

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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.

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#### SECTION 5 - FIREFIGHTING MEASURE

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

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#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

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

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#### SECTION 7 - HANDLING AND STORAGE

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

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#### SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTIONS

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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.

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#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	WHITE
Odor:	Not Applicable
pH:	Not Applicable
Boiling Point:	Not Applicable
Melting Range:	982-1024 °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

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#### SECTION 10 - STABILITY AND REACTIVITY

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At ordinary and high (below the melting range) temperatures, the material oxidizes but is stable. At very high temperatures the alloy produces fumes.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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No specific instructions.

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## SECTION 12 - ECOLOGICAL INFORMATION

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This is an environmentally friendly material. With proper dust collecting equipment, 100% of this alloy can be recycled.

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## SECTION 13 - DISPOSAL CONSIDERATIONS

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Whenever possible, recover dust because it has economic value.

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## SECTION 14 - TRANSPORT INFORMATION

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No specific instructions.

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## SECTION 15 - REGULATORY INFORMATION

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No specific instructions.

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## SECTION 16 - OTHER INFORMATION

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