

# MATERIAL SAFETY DATA SHEET

Date: 2010/01/01 MSDS No. 746

## SECTION 1: IDENTIFICATION

Manufacturer	
Product Name	Coated electrodes: BD 6000
Telephone Number	
Fax Number	
Emergency Number	
E-mail	

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

### PREPARATION:

Core wire: Al-Bal., Si<13.0%

### Hazardous ingredients:

**Important:** This section covers the materials of which the products are manufactured. The fumes and gases produced during normal use of this product are covering in Section 5. The term "Hazardous in "Hazardous Material" should be interpreted as a term required and defined in OSHA Hazard Communication Standard 29CFR 1910-1200 and it does not necessarily imply the existence of hazard. The chemicals or compounds reportable by Section 313 of SARA are marked by the symbol #.

INGREDIENTS	CAS #	% RANGE	OSHA PEL mg/m <sup>3</sup>	ACGIH-TLV mg/m <sup>3</sup>	CARCINOGENICITY	R-PHASE
Aluminium	7429-90-5	65-75	5 (as fume)	5 (as fume)	NO	-
Silicon	7440-21-3	5-16	10	10	NO	-
Aluminium Fluoride (Aluminium Fume)	7784-18-1	1-11	2.5 (as F) 5 (Al fume)	2.5 (as F) 5 (Al fume)	NO	-
Lithium Fluoride	7789-24-4	1-11	2.5 (as F)	2.5 (as F)	NO	-
Magnesium Fluoride	7783-40-6	1-11	2.5 (as F)	2.5 (as F)	NO	-
Potassium Chloride	7447-40-7	1-11	Not Regstrd.	Not Regstrd.	NO	-
Potassium Fluoride	7789-23-3	2-12	2.5 (as F)	2.5 (as F)	NO	-
Sodium Chloride	7647-14-5	1-11	Not Regstrd.	Not Regstrd.	NO	-

## SECTION 3: HAZARD IDENTIFICATION

### Effects of acute exposure:

**Route(s) of entry:** Inhalation and skin contact.

**Eye and Skin:** when welding, arc rays can injure eyes and burn skin

**Inhalation:** Exposure to dust and welding fumes may cause irritation to upper respiratory tract. May cause respiratory sensitization in susceptible individuals.

Reasonable expected decomposition products from normal use of these products include a complex of the oxides of the materials listed in Section 2, as well as carbon monoxide, carbon dioxide, ozone, and nitrogen oxides (refer to "Characterization of Arc Welding Fume" available from the American Welding Society). The only way to determine the true identity of the decomposition products is by sampling and analysis. The composition and quantity of the fumes and gases to which a worker may be overexposed can be determined from a sample obtained from inside the welder's helmet, if worn, or in the worker's breathing zone. See ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes". Available from the American Welding Society.

**Ingestion:** Amounts ingested incidental to industrial handling are not likely to cause injury. Single dose oral toxicity is low.

**Effects of chronic exposure:** Refer to section 11 for specific toxicological information.

## SECTION 4: FIRST AID MEASURES

**Inhalation:** Remove victim to fresh air if effects occur.

**Skin:** Wash off with soap and plenty of water.

**Eyes:** Irrigate with water for several minutes.

**Ingestion:** Rinse mouth.

**Note to physician:** No particular advice.

## SECTION 5: FIRE FIGHTING MEASURES

**Means of extinguishing:** No danger requiring special measures.

**Special protective equipment when fighting fire:** none.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Individual precautions:** Avoid dust formation/breathing dust.

**Environmental protection precautions:** No particular indications

**Cleaning measures:** Remove spoiled product mechanically.

## SECTION 7: HANDLING AND STORAGE

### HANDLING:

With standard transportation equipment.

### STORAGE:

Store in a dry place in closed packages.

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**Technical measures:** Use adequate local exhaust for welding fumes. Avoid grinding dust inhalation.

**Exposure limits:** See section 2.

**Personal Protection:**

-**Respiratory protection:** use an air purifying dust respirator.

-**Hands protection:** wear appropriate gloves to prevent skin contact.

-**Eyes protection:** welder's helmets.

-**Skin protection:** wear appropriate overalls to prevent skin or body contact.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state:** Solid

**Odor:** none

**PH:** non-applicable

**Melting point:** 1160-1300 °F, 620-700° C

**Relative density:** 6-9 g/cm<sup>3</sup>

**Solubility:** insoluble in water

## **SECTION 10: STABILITY AND REACTIVITY**

**STABILITY**

**Conditions to avoid:** not applicable

**Materials to avoid:** reacts with acids.

**Hazardous decomposition products:** unknown.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

**Effects of acute exposure**

**Toxicity to animals:** unknown

**Local effects:** not applicable

**Inhalation:** not applicable for the product. For welding fumes see section 3.

**Ingestion:** not applicable

**Contact with skin:** no adverse effects expected.

## **SECTION 12: ECOLOGICAL INFORMATION**

**About product:** data are unknown.

**About ingredients:** data are unknown.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

**Product:** For product elimination, consult recycling companies or appropriate local authority.

**Package:** May be disposed in approved landfills provided local regulations are observed.

## **SECTION 14: TRANSPORT INFORMATION**

**INTERNATIONAL REGULATIONS:**

**Land shipment:** no hazard

-Rail/route (RID/ADR):

**Sea shipment:** no hazard

**Shipment by air:** no hazard

## **SECTION 15: REGULATORY INFORMATION**

**Label CEE:** not necessary

**Danger symbols and indications:**

**R-Phrases:**

**S-Phrases:**

## **SECTION 16: OTHER INFORMATION**

The information in this document is believed to be correct as of the date issued. However, no warranty is expressed to be implied regarding the accuracy or completeness of this information. This information and product are furnished on the condition that the person receiving them shall make his own determinations as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

This Material Safety Data Sheet complies with the EC directives 91/155/EEC and 93/112/EEC

Including modifications 2001/58/EC.

Complies with OSHA Communication Standard 29 CFR 1910.1200 and Superfund Amendments and Reauthorization Act (SARA) of 1986 Public Law 99-499