

MATERIAL SAFETY DATA SHEET

I. MANUFACTURER/DISTRIBUTOR and PRODUCT IDENTIFICATION

DISTRIBUTOR: Alro Steel Corporation 3100 East High Street Jackson, MI 49204	REVIEWED AND REVISED: 12/21/95 by Alro Steel Corporation	EMERGENCY PHONE NUMBER: (517) 787-5500
MANUFACTURER: Various Sources	CHEMICAL NAME: Aluminum and Alloys	CHEMICAL FAMILY: Metals

II. CHEMICAL COMPONENTS

See section II-C, Product Description & Hazardous Ingredients/Identity Information.

III. PHYSICAL DATA

Melting point F°: 950 - 1215	Specific Gravity(H ₂ O=1): 2.5 - 2.9	Vapor pressure: n/a
% Volatile by Volume: n/a	Vapor Density (Air=1): n/a	Evaporation Rate: n/a
Solubility in Water(% by weight): nil	Appearance and Odor: Metallic appearance, no odor. Solid at normal conditions.	

IV. FIRE AND EXPLOSION DATA

PRODUCT NONFLAMMABLE. Damp aluminum dust may spontaneously heat with liberation of hydrogen to form explosive air mixtures. Do not use water or halogen on dust fires, use dry powder or sand.

V. HEALTH HAZARD INFORMATION

See Section V-A, General Health Hazard Information and Section IX. Appropriate personal protective equipment is required when melting, casting, forging, machining, or otherwise processing. The nature of activity will determine the form of protection necessary, i.e., glasses, respirator, clothing and ear protection.

VI. REACTIVITY DATA

STABILITY: Stable	INCOMPATIBILITY: Anhydrous bromine	HAZARDOUS POLYMERIZATION: n/a
HAZARDOUS DECOMPOSITION PRODUCTS and CONDITIONS TO AVOID: See Fire and Explosion Section. See Additional Information Section.		

VII. SPILL AND LEAK PROCEDURES/ ENVIRONMENTAL

Used or unused product should be tested to determine hazard status and disposal requirements under federal, state and local laws and regulations. This material may be reclaimed for reuse. See section II-A for information concerning materials subject to SARA Title III reporting requirements.

VIII. SPECIAL PROTECTION

RESPIRATORY PROTECTION: When limits are exceeded, use proper approved respirator. (Consult OSHA and/or State or Local codes for all requirements)

VENTILATION: Use local exhaust when cutting, grinding or welding.

EYE PROTECTION AND PROTECTIVE CLOTHING: Proper protective clothing and appropriate face and eye protection should be used when processing.

IX. SPECIAL PRECAUTIONS & ADDITIONAL INFORMATION

(1) PEL/TLV exposures should be controlled to remain below OSHA and ACGIH specifications to insure proper health protection of workers. (2) Acids and bases in contact with aluminum may generate explosive mixtures with hydrogen. (3) Finely divided Aluminum will form explosive mixtures in air. It will also form explosive mixtures in air in the presence of bromates, iodates, or ammonium nitrate. (4) When remelting aluminum scrap, entrapped moisture or the presence of strong oxidizers such as ammonium nitrate could cause an explosion. (5) Do not touch cast or heated aluminum without knowing the temperature. Aluminum experiences no color change during heating. (6) Aluminum powder must be packed and shipped as a flammable solid, UN1396. (7) Hard alloy ingots in the 2000 and 7000 series must be stress relieved to prevent explosion or violent cracking when sawed. (8) The welding of aluminum alloys may generate carbon dioxide, ozone, carbon monoxide, nitrogen oxides, infra-red radiation and ultra-violet radiation, in addition to metal fume. (9) Vapor degreaser must be properly maintained to limit the accumulation of aluminum fines. Such accumulation could result in a potential degreaser fire or explosion. (10) Some aluminum scrap may be contaminated with oil at levels greater than 1%. Melting of aluminum scrap may generate oil vapors which are irritating to the eyes and upper respiratory tract. Prolonged or repeated skin contact with oil may cause skin irritation. (11) Nickel, Chromium, Lead, Beryllium and Cadmium, listed on California's Proposition 65 list of "Chemicals Known to the State to cause Cancer or Reproductive Harm", may exist in aluminum alloys at the maximum concentrations by weight - Ni (1.20), Cr (0.35), Pb (0.70), Be (0.05), Ca (0.05).

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