

Product Name: CORRUGATED ALUMINUM PIPE AND ACCESSORIES

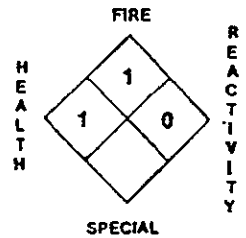
Manufacturing Facility, Company, or Subsidiary: Several Facilities

Address: 1001 Grove Street, Middletown, Ohio 45044

Phone (during normal business hours): 513/425-2178

Date of Preparation: July 1, 1989 WHL

NFPA 704 RATING



SECTION I — COMPONENT DATA:

Chemical Components	C.A.S. Number	% WL
Primary Metals:		
Aluminum	7429-90-5	min. 95
Silicon	7440-21-3	max. 1.8
Manganese	7439-96-5	max. 1.8
Magnesium	7439-95-4	max. 1.4
Chromium	7440-47-3	max. 0.4

SECTION II — PHYSICAL DATA:

Boiling Point: N/A
Physical State: Solid
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Melting Point: 950-1215°F
Specific Gravity (H₂O = 1): 2.5-2.9
Appearance and Odor: Odorless - silvery gray

SECTION III — FIRE & EXPLOSION HAZARD DATA:

Flash Point (°F): N/A
Flammability Limits (%/Vol): LEL: N/A
Auto-Ignition Temperature (°F): N/A
Method Used: N/A
UEL: N/A
Extinguishing Media: See Special Instructions.
Special Fire-Fighting instructions: For fires involving Aluminum fines or chips use dry sand or Class D extinguishing agents. DO NOT USE water or other liquids, foam or halogenated extinguishing agents.

Unusual Fire and Explosion Hazards: Suspended Aluminum dust, allowed to accumulate in a confined area, may be explosive.

SECTION IV — REACTIVITY DATA:

Stability (conditions to avoid): Stable
Incompatibility (materials to avoid): Anhydrous bromine

Hazardous Decomposition Products: Finely divided Aluminum reacts with water, mineral acids, harsh alkalis and halogenated compounds to produce hydrogen gas that may form explosive air mixtures.

SECTION V — HEALTH HAZARD DATA:

Primary Route(s) of Entry: Inhalation.
Effects of Exposure: No toxic effects would be expected from its inert solid form. Prolonged, repeated overexposure to fumes or dusts generated during heating, cutting, brazing or welding may cause adverse health effects associated with the following constituents:

Inhalation:

- Aluminum:** No known health effects. Generally considered to be in the nuisance dust category.
- Silicon:** May produce X-ray changes in the lungs without disability.
- Magnesium:** May cause irritation of the eyes and nose.
- Manganese:** Pneumonitis, CNS involvement, including irritability, difficulty in walking, speech disorders, compulsive behavior, mask-like face and a Parkinson-like syndrome.
- Chromium:** The dusts of chromium metal are usually reported to be relatively non-toxic, although there are reports of a nodular type of pulmonary disease with impairment of lung function. Some insoluble chromium compounds are suspect carcinogens.

Skin Contact:

Not likely.

Eye Contact:

May cause irritation.

Ingestion:
Not likely.

Medical Conditions Known to be Aggravated by Exposure to this Material:

Persons with lung disorders or diseases may be at an added risk as a result of overexposure to this material.

Exposure Limits:

Chemical Components	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)		NTP Listed	IARC Listed
		Fume	Dust		
Aluminum*	15 (TWA as dust)	5-TWA	10-TWA	No	No
Silicon	10 (TWA as dust)	5-TWA	10-TWA	No	No
Manganese*	1 (TWA), 3 (STEL)	1-TWA 3-STEL	5-TWA	No	No
Magnesium	10 (TWA as fume)	10-TWA		No	No
Chromium*	1 (TWA as dust)		0.5-TWA	Yes	Yes

*On Toxic Chemical List (Section 313 SARA)

SECTION VI — EMERGENCY & FIRST-AID PROCEDURES:

Inhalation: Seek medical attention, if necessary.

Skin: If irritation develops, remove contaminated clothing immediately, and wash contaminated skin with soap or mild detergent and water for five minutes. If irritation persists, seek medical attention.

Eyes: In case of contact, immediately wash eyes with large amounts of water for fifteen minutes, occasionally lifting the lower and upper lids. Seek medical attention, if necessary.

Ingestion: Seek medical attention, if necessary.

SECTION VII — SPECIAL HANDLING INFORMATION:

Ventilation: Ventilation, as described in the *Industrial Ventilation Manual* produced by the American Conference of Governmental Industrial Hygienists, shall be provided in areas where exposures are above the permissible exposure limits or threshold limit values specified by OSHA or other local, state, and federal regulations.

Respiratory Protection: A properly fitted, NIOSH-approved, dust-fume respirator should be worn during welding or burning whenever welding fumes exceed the threshold limit value (TLV) or other recommended limits, in accordance with the OSHA Respiratory Protection Standard (29 CFR 1910.134).

Protective Clothing: Use appropriate protective clothing, such as welder's aprons and gloves, when welding or burning.

Eye Protection: Use face shield (8" minimum) and/or goggles when welding, burning, or grinding.

SECTION VIII — SPILL, LEAK & DISPOSAL PROCEDURES:

Action to Take for Spills (use appropriate safety equipment): N/A

Waste Disposal Method: N/A

SECTION IX — SPECIAL PRECAUTIONS/ADDITIONAL INFORMATION:

Precautions to be Taken in Handling and Storage: None

DOT Information:

Hazardous Material Proper Shipping Name: N/A

Hazard Class: N/A

Identification Number: N/A

EPA Hazardous Waste Number: N/A

Additional Information: During welding, precautions should be taken for airborne contaminants and noxious gases that may originate from the welding process. Of special concern are silica or silicates, or both; fluorides; copper; manganese; carbon monoxide and nitrogen oxides. Arc and sparks generated when welding with this product could be a source of ignition for combustible and flammable materials.

While the information and recommendations set forth on this data sheet are believed to be accurate as of the present date, Contech makes no warranty with respect thereto and disclaims all liability from reliance thereon.