Safety Data Sheet

PAC-4000

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Petersen Aluminum Corporation
1005 Tonne Road
Elk Grove Village, IL 60007

Telephone: 800-PAC-CLAD

Fax: 800-722-7150

Product Name: PAC-4000

Recommended Use: Metal composite material for buildings

Restrictions on Use: For Industrial/Commercial use only

Emergency Contact: (317) 894-9400

SECTION 2: HAZARD IDENTIFICATION

GHS Classification: Not Classified
Signal Word: Not Applicable
Other Hazards: May form combustible dust concentrations in air if small particles are generated during further processing, handling or by other means.
Precautionary Statements: Not Applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS#	Component Percent
Thermoset phenolic/kraft core	Not Applicable	50 -60
Aluminum overlays (0.024" face, 0.010" back)	7429-90-5	40 - 50
Adhesive	Not Applicable	<3

SECTION 4: FIRST AID MEASURES

Eye Contact: Aluminum or plastic shavings (fines) may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

Skin Contact: Plastic dust(s) of certain species can elicit contact dermatitis in sensitized individuals as well as mechanical irritation resulting in erythema and hives. Aluminum slivers or shavings may mechanically irritate the skin. Get medical help if rash, irritation, or dermatitis occurs and persists.

Inhalation: Remove to fresh air. Get medical help if persistent irritation, severe coughing, or breathing difficulty occurs.

Ingestion: Not applicable under normal use.

Most Important Symptoms / Effects

Eye: Irritation and/or redness; rubbing eye may cause mechanical damage.

Skin: Rash or redness; may cause dermatitis.

Inhalation: Nasal and respiratory irritation.

Ingestion: Not applicable

Chronic Exposure: May aggravate short term effects.

Indication of Immediate Medical Attention and Special Treatment, If Necessary: None known.

SECTION 5: FIREFIGHTING MEASURES

Suitable and Unsuitable Extinguishing Media: Product is NFPA 285 tested as non-combustible. Use fire-fighting techniques such dry chemical, CO2 or sand which are appropriate to the surrounding fire. Use a water spray to cool fire-exposed areas and to protect personnel.

Specific Hazards Arising from the Chemical: Explosive mixtures may be generated upon contact of aluminum with halogen acids, sodium hydroxide, bromates, iodates, or ammonium nitrate. Fine aluminum chips, turnings, and dusts in air may explode if ignition source is present.

Specific Protective Equipment and Precautions for Fire-Fighters: Organic and metal fumes may be released during a fire. Fire fighters should wear self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: No special requirements are necessary. Isolate release area and keep unnecessary or untrained people away. Avoid skin or eye contact with spilled material. See Section 8 for personal protection gear.

Environmental Precautions: Phenolic core or aluminum shavings (fines) produced by cutting or remanufacturing may be vacuumed or shoveled for recovery or disposal. Advise EPA, state or local agencies as required.

Methods for Cleaning Up: Not a hazardous material or waste. Phenolic core or aluminum shavings (fine) produced by cutting or remanufacturing may be vacuumed or shoveled for recovery or disposal.

SECTION 7: HANDLING AND STORAGE

Handling and Storage: No special handling precautions are required. Do not store where product may come in contact with halogen acids, sodium hydroxide, bromates, iodates, ammonium nitrate, oxidizing agents, and solvents. Contact seller or manufacturer for storage guidelines to maintain product quality.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limits

Component Name	ACGIH	OSHA
Aluminum dust	10 mg/m3 (total)	15 mg/m3 (total) 5 mg/m3 (respirable)

Engineering Controls: Use appropriate ventilation to maintain airborne concentration limits below exposure limits. All hot work (welding, cutting) should be done under adequate ventilation to remove fumes and gases.

Eye and Face Protection: Not applicable for product in purchased form. Goggles or safety glasses are recommended when machining this product.

Skin Protection: Not required. Cloth, canvas or leather gloves are recommended to minimize cuts, metal slivers and or mechanical irritation from handling product.

Respiratory Protection: Not applicable for product in purchased form. However, a NIOSH/MSHA-approved respirator is recommended when the allowable exposure limits may be exceeded.

General Hygiene: Follow good hygienic and housekeeping practices. Minimize blowdown or other practices which generate high airborne-dust concentrations. If processing of this product generates dust or if extremely fine particulate is generated, obtain and follow the safety procedures and equipment guides contained in Aluminum Association Bulletin F-1 and the National Fire Protection Association (NFPA) brochures listed in Section 16. Local ventilation and vacuum systems must be designed to handle explosive dusts. Dry vacuums and electrostatic precipitators must not be used, unless specifically approved for use with flammable/explosive dusts. Dust collection systems must be dedicated to aluminum dust only and should be clearly labeled as such. Do not co-mingle fines of aluminum with fines of iron, iron oxide (rust) or other metal oxides. Do not allow chips, fines or dust to contact water, particularly in enclosed areas. Avoid all ignition sources. Good housekeeping practices must be maintained. Do not use compressed air to remove settled material from floors, beams or equipment. Clean up areas where dust settles to avoid excessive accumulation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State	Solid, appearance varies	Flash Point (PMCC)	Not Applicable
Specific Gravity (Water=1)	Varies, aluminum – 2.7	Upper Flammability Limits	Not Applicable
Evaporation Rate (ether = 1)	Not Applicable	Lower Flammability Limits	Not Applicable
pH	Not Applicable	Auto-ignition Temperature	>400 °F
Solubility in Water	None	Decomposition Temperature	Not Determined
Odor	None	Vapor Pressure	Not Applicable
Odor Threshold	Not Applicable	Vapor Density (Air-=1)	Not Applicable
Melting/Freezing Point	Not Applicable	Partition Coefficient (n-octanol/water)	Not Applicable
Boiling Range	Not Applicable	Viscosity (mPas, 20 °C)	Not Applicable
Initial Boiling Point	Not Applicable	Critical Temperature	Not Applicable

Note: Physical and chemical properties are provided for safety, health and environmental considerations and do not fully represent product specifications. Those should be requested separately.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not reactive at normal storage and use conditions

Chemical Stability: Stable at normal storage and use conditions

Possibility of Hazardous Reactions: Will not occur under normal conditions

Conditions to Avoid: Avoid halogen acids, sodium hydroxide, bromates, iodates, ammonium nitrate, oxidizing agents, and solvents. Explosive mixtures may be generated upon contact of aluminum with halogen acids, sodium hydroxide, bromates, iodates, or ammonium nitrate. Fine aluminum chips, turnings, and dusts in air may explode if ignition source is present.

Incompatible Materials: Avoid halogen acids, sodium hydroxide, bromates, iodates, ammonium nitrate, oxidizing agents, and solvents.

Hazardous Decomposition Products: Material can produce or release possibly toxic materials in a fire.

SECTION 11: TOXICOLOGICAL INFORMATION

Specific toxicity tests have not been conducted on this mixture. In accordance with OSHA's Hazard Communication Standard 1910.1200, this mixture is assumed to have the same health hazards as its significant components.

Acute Toxicity Effects: Likely routes of exposure are inhalation, skin and eye contact with fine particles. Product ingestion is not applicable. Aluminum or plastic shavings (fines) may cause mechanical irritation to the eye. Aluminum slivers or shavings may mechanically irritate the skin. Contact with plastic dust(s) of certain species can elicit contact dermatitis in sensitized individuals as well as mechanical irritation resulting in erythema and hives. Plastic dust may aggravate preexisting respiratory conditions or allergies.

Chronic Toxicity Effects: Long term or repeated exposure may aggravate any acute symptoms.

Carcinogenicity: No components of this product above the declaration level of 0.1% have been definitively identified by IARC, OSHA or NTP as carcinogenic.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Not Determined	**Degradability**	Not Determined
Mobility	Not Determined	**Bioaccumulation**	Not Determined

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state/province, and federal environmental regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Information: Not Regulated

SECTION 15: REGULATORY INFORMATION

TSCA Status: All components are listed in the TSCA inventory

SARA 311/312 Reporting Categories: None

SARA 313 Reportable Ingredients: None

California Proposition 65: No chemicals in this product are subject to the reporting requirements.

SECTION 16: OTHER INFORMATION

References: Aluminum Association's Bulletin F-1, "Guidelines for Handling Aluminum Fines Generated During Various Aluminum Fabricating Operations." The Aluminum Association, 1525 Wilson Boulevard, Suite 600, Arlington, Virginia 22209, www.aluminum.org.

NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids

NFPA 484, Standard for Combustible Metals (NFPA phone: 800-344-3555)

NFPA 70, Standard for National Electrical Code (Electrical Equipment, Grounding and Bonding)

NFPA 77, Standard for Static Electricity

Abbreviations:
ACGHI: American Conference of Governmental Industrial Hygienists
CAS#: Chemical Abstracts System Number
IARC: International Agency for Research on Cancer
MSHA: Mining Safety and Health Administration
NIOSH: National Institute for Occupational Safety and Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit (15 minutes)
TLV: Threshold Limit Value
TWA: Time-Weighted Average (8 hours)

Department Issuing SDS: Health and Safety

User's Responsibility: The information contained in this safety data sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.