



SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION

MATERIAL NAME: Composite PE-AL-PE

PRODUCT USE: Hot and cold water distribution, water service, ice-melt system, air conditioning system, compressed air and process piping

MANUFACTURER/SUPPLIER: IPEX Inc.
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Canada
M1L 3K2

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PREPARED BY: Health, Safety and Environment

SECTION 2. HAZARDS IDENTIFICATION

This product is an article and therefore is not subject to the requirements of the federal Hazardous Products Act (HPA) and Health Canada's Hazard Products Regulations (HPR) to provide a Safety Data Sheet (SDS). This product should not present a health or safety hazard under recommended or normal use.

This product is an article and therefore is not subject to the requirements of the US Hazard Communication Standard (HCS) (29 CFR 1910.1200) to provide a Safety Data Sheet (SDS). This product should not present a health or safety hazard under recommended or normal use.

Classification GHS Not Classified
GHS labelling No Labeling Applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

This article does not contain any substances required to be mentioned according to the criteria of WHMIS 2015.

SECTION 4. FIRST AID MEASURES

EYES: Wash eyes with clean low-pressure water. If irritation persists, seek medical advice.

SKIN: Wash with soap and water.

INGESTION: Adverse health effects due to ingestion are not anticipated. If gastric irritation or discomfort persist, do not induce vomiting, seek medical advice.

INHALATION: If symptoms are experienced, move victim to fresh air, if symptoms persists, obtain medical attention.

Notes to Physician: Smoke and hazardous decomposition products produced in fires involving polyethylene resins can be irritating and may cause pulmonary edema in severely exposed individuals. As this effect may be delayed in onset, a 72- hour post-expose observation is recommended. Carboxyhemoglobin levels should also be monitored to assess the degree of carbon monoxide absorption in these individuals.

**ACUTE/CHRONIC
(LONG-TERM)
SYMPTOMS
AND EFFECTS:**

Not expected to present a significant hazard under anticipated conditions of normal use.



SECTION 5. FIRE-FIGHTING MEASURES

- SPECIAL FIRE FIGHTING:** Fire fighters must wear NIOSH approved SCBA (Self-Contained Breathing Apparatus) to provide protection against combustion products. Evacuate all unprotected personnel.
- EXTINGUISHING MEDIA:**
- Small Fire:** Dry Chemical, CO₂, water spray.
 - Large Fire:** For fire involving aluminum fines or chips, used dry sand of Class extinguishing agents approved for this use. Use dry chemical, CO₂. **Do not use** water or other liquids, foam, or halogenated extinguishing agents. Use flooding quantities of water until well **after fire is out.**
- HAZARDOUS COMBUSTION PRODUCTS:** Carbon dioxide, carbon monoxide, aldehydes, olefinic and paraffinic compound, traces of organic acids, ketones, alcohols and small amounts of other organic vapors may be produced. (see section 10).

SECTION 6. ACCIDENTAL RELEASE MEASURES

- PERSONAL PRECAUTIONS:** No special personal precautions required.
- ENVIRONMENTAL PRECAUTIONS:** No special environmental precautions required.
- MATERIALS NOT TO BE USED FOR CONTAINMENT AND CLEAN UP:** None applicable.
- PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL:** Not applicable.
- EMERGENCY OVERVIEW:** Blue or gray semi-rigid inert tubing. Come in coil. Odorless or with a light sweet odor coming from the PE processed compound. NOT HAZARDOUS by OSHA Hazard Communication definition but will burn if exposed to flame.

SECTION 7. HANDLING AND STORAGE

- HANDLING PROCEDURES AND EQUIPMENT:** Keep dust off walking surfaces, it may create a slipping hazard. Keep material away from sparks, flames and other ignition sources. Do not use near welding operations, flames or hot surfaces. Prevent accumulation of dust in enclosed space. Provide adequate ventilation to remove dust, heat and other emissions.
- STORAGE REQUIREMENTS:** Store tubing away from heat and ignition sources, combustible materials, strong oxidizing and incompatible chemicals. Avoid accumulation of dust by frequent cleaning and suitable storage areas.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

- EXPOSURE LIMITS:** Not required for articles.
- RESPIRATORY PROTECTION** No dust mask is required under normal use. Use NIOSH/MSHA approved respirator for dust where atmosphere exceeds



recommended limits. Respirable dust (PNOC) ACGIH 3mg/m³, OSHA 5mg/m³.

HAND PROTECTION:

Use work gloves under normal use to avoid cuts. When handling heated materials, be sure to use heat-resistant gloves.

EYES AND FACE PROTECTION:

Safety glasses should be worn. Non-vented chemical goggles should be worn when there is potential for exposure to vapors or combustion product.

FOOTWEAR:

Not applicable.

CLOTHING:

No special clothing is required.

OTHER:

Not applicable.

ENGINEERING CONTROLS TO BE USED:

If user operations generate dust or fumes, ventilate area to prevent accumulation. If ventilation is used to convey aluminum dust, generated by grinding, sawing, special ventilation procedures may be necessary to avoid explosion hazards. (see NFPA #65 and 651). Further information can be obtained from NFPA-654. "Standard for the Prevention of Fire and Dust Explosions in Chemical, Dye, Pharmaceutical and Plastics Industries."

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:

Solid

ODOUR:

Slight, sweet odour

APPEARANCE:

Blue or grey round tube with silver grey core. Come in various lengths.

BOILING POINT:

Not applicable

MELTING POINT:

Polyethylene layers: Not available
Aluminum Core: 623°C - 651°C (1153°F - 1204°F)

VAPOUR PRESSURE:

Not applicable

VAPOUR DENSITY:

Not applicable

SPECIFIC GRAVITY:

0.935

SOLUBILITY IN WATER @20°C:

Insoluble

VOLATILES, % BY VOLUME:

Not applicable

pH:

Not applicable

ODOUR THRESHOLD:

Not available

EVAPORATION RATE:

Not applicable

COEFFICIENT WATER/OIL DISTR:

Not applicable



SOFTENING POINT (Vicat):	85°C - 127°C (185°F - 261°F)
FLAMMABILITY / CLASSIFICATION:	Not classified. Polymer will burn but does not ignite readily
FLASH POINT:	Not applicable
AUTOIGNITION:	Not available
RATE OF BURNING:	Not applicable
IMPACT/SHOCK SENSITIVITY:	Not applicable
STATIC DISCHARGE:	Polyethylene dust particles can explode violently above 390°C (734°F) at airborne concentrations above 20 g/m ³ (dust/cloud condition).
EXPLOSIVE LEVEL: (% volume)	Lower: Not applicable Upper: Not applicable
LOWER FLAMMABLE LIMIT:	Not established
UPPER FLAMMABLE LIMIT:	Not established
DECOMPOSITION TEMPERATURE:	Not available
VISCOSITY:	Not applicable

SECTION 10. STABILITY AND REACTIVITY DATA

CHEMICAL STABILITY:	Stable
REACTIVITY:	Generally considered inert, but decomposes with heat above 300°C (572°F).
INCOMPATIBLE WITH OTHER SUBSTANCES:	<p>Polyethylene layer: Strong oxidizing agents (perchloric acid, nitric acid, fluorine). Organic solvents (benzene, petroleum ether, gasoline, lubricating oil, chlorinated hydrocarbons and aromatic hydrocarbons may attack polyethylene layer). Strong acids (fuming sulphuric acid).</p> <p>Aluminum layer: Finely divided aluminum reacts with water, mineral acids, harsh alkalis, and halogenated compounds to produce hydrogen gas. (see NFPA #491M for specific incompatible material). If re-melted, moisture present in cavities or on external surfaces may cause an explosion.</p>
HAZARDOUS DECOMPOSITION:	Polyethylene compound may emit various oligomers, waxes and other hydrocarbons including acetaldehyde, formaldehyde, acrolein, butyaldehyde, crotonaldehyde, benzaldehyde, benzene, toluene, xylene, styrene, formic acid, acetic acid, furan, tetrahydrofuran and acetone. Also, decomposition may generate carbon monoxide and carbon dioxide.
CONDITIONS TO AVOID:	Dust from polyethylene or aluminum may form explosive mixture with air. Avoid remelting of Aluminum compound. If re-melted, moisture present in cavities or external surfaces may cause an explosion.
HAZARDOUS REACTIONS:	Not available.

SECTION 11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECT:

SKIN:	Solid polyethylene and solid aluminum does not affect skin.
EYES:	Fine particles issued from mechanical action may cause mild irritation. Thermal decomposition product (fumes) may produce irritation to the eyes and cause tearing. The symptoms normally stop when exposure ceases.
INHALATION:	Polyethylene and aluminum dust is considered a nuisance particle. Inhalation of vapors released at high heat exposure and fine dust particles may cause mild respiratory tract irritation but does not seem to cause any significant health effects.
INGESTION:	No known health hazard appears to be posed by ingestion of small amounts of polyethylene or aluminum. A physician should be consulted if large amounts are ingested.
LONG TERM EFFECTS:	Pure polyethylene seems to be biologically inert and does not affect the body during normal exposure. All additives in this compound have no known chronic health effects. Medical conditions generally aggravated by exposure to molten aluminum; pre-existing upper respiratory and lung diseases such as, but not limited to, Bronchitis, Emphysema, and Asthma.
CARCINOGENICITY:	Polyethylene compound not listed with IARC, NTP, ACGIH or OSHA as a carcinogen. Components of Aluminum alloy such as Chromium and certain of their compound are published with NTP, IARC and ACGIH.
SUMMARY:	Not considered to be toxic for humans or animals.
EYES EFFECTS:	Draize score: Not available
SKIN EFFECTS:	Draize score: Not available
ACUTE ORAL EFFECTS:	LD ₅₀ : Not available
ACUTE INHALATION EFFECTS:	LC ₅₀ : Not applicable
IRRITATION OF PRODUCT:	Fine particles may cause mild eye irritation. Processing emissions may cause lacrimation (tearing), eye and respiratory irritation.
SENSITIZATION:	Not available
SYNERGISM WITH:	Not available
REPRODUCTIVE EFFECTS:	Not a reproductive hazard
TERATOGENICITY:	Not teratogenic
MUTAGENICITY:	Not mutagenic
CARCINOGENICITY:	Polyethylene compound: not listed with IARC, NTP, ACGIH or OSHA as a carcinogen. Ingredient in the aluminum alloy is listed in NTP, IARC and ACGIH

