



MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION

MATERIAL NAME: ABS Pipe and Fittings

PRODUCT USE: Plumbing product (drain, waste, vent), Industrial piping

SECTION 2. PREPARATION INFORMATION

<p><u>MANUFACTURER/SUPPLIER:</u> IPEX Inc. 807 Pharmacy Avenue Scarborough, Ontario Canada M1L 3K2</p>	<p><u>TELEPHONE NO.:</u> (416) 445-3400</p> <p><u>PREPARED BY:</u> Health, Safety and Environment</p> <p><u>DATE PREPARED:</u> March 9th 2015</p>
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SECTION 3. HAZARDOUS INGREDIENTS

This product consists primarily of high molecular weight polymers. Substances listed below are reportable hazardous ingredients as defined by the OSHA Hazard Communication Standard. Exposure limits, when available, are also listed. Styrene, if present, is listed below based upon its IARC classification as a possible carcinogen.

Additional compositional data are also provided in Section 11, REGULATORY INFORMATION, subject to supplier notification requirements.

INGREDIENT NAME	CAS NUMBER	OSHA	UNITS	ACGIH	UNITS
Carbon Black	1333-86-4	3.5	mg/m ³ PEL	3.5	mg/m ³ TLV
Styrene	100-42-5	50.0	Ppm PEL	50.0	ppm TLV
		100.0	Ppm STEL	100.0	ppm STEL

SECTION 4. PHYSICAL DATA

PHYSICAL STATE: Solid

ODOUR AND APPEARANCE: Pipe and Fittings with slight odour

BOILING POINT: Not applicable

MELTING POINT: See COMMENT below

VAPOUR PRESSURE (mmHg): Negligible

VAPOUR DENSITY (air=1): Not applicable

SPECIFIC GRAVITY (water=1): > 1

WATER SOLUBILITY: Insoluble

% VOLATILES: Negligible

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pH:	Not applicable
ODOUR THRESHOLD:	Not established
EVAPORATION RATE:	Negligible
COEFFICIENT WATER/OIL DISTR:	Not established
COMMENT:	This product does not exhibit a sharp melting point, but softens gradually over a wide temperature range.

SECTION 5. FIRE OR EXPLOSION HAZARD

FIRE FIGHTING:	Approved pressure demand breathing apparatus and protective clothing should be used for all fires. Water spray is the preferred extinguishing medium. This product will melt but will not be carried on the surface of water.
EXTINGUISHING MEDIA:	Water spray and foam. Water is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition.
HAZARDOUS COMBUSTION PRODUCTS:	Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, hydrogen cyanide, hydrocarbon fragments and carbon dioxide.
FLASH POINT:	Not applicable
LOWER FLAMMABLE LIMIT:	Not established
UPPER FLAMMABLE LIMIT:	Not established
AUTOIGNITION:	508°C (946°F), estimated
CONDITIONS OF FLAMMABILITY:	Requires a continuous flame source to ignite.
IMPACT SENSITIVITY:	Not sensitive to mechanical impact.
STATIC DISCHARGE:	Not sensitive to static discharge.

SECTION 6. REACTIVITY DATA

STABILITY:	Stable under recommended conditions of storage and handling.
REACTIVITY:	Not reactive under recommended conditions of handling, storage, processing and use.
CONDITIONS TO AVOID:	Do not exceed melt temperature recommendations in product literature.
HAZARDOUS DECOMPOSITION:	Processing fumes evolved at recommended processing conditions may include trace levels of styrene, acrylonitrile, acrolein, acetaldehyde, acetophenone, ethylbenzene, cumene, 4-vinylcyclohexene and phenols.

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SECTION 7. TOXICOLOGICAL PROPERTIES

ORAL ACUTE: Oral LD₅₀ (Rat) > 5 g/kg, estimated.

COMPONENTS: Styrene monomer is listed as a possible carcinogen by IARC. Rats exposed to acrylonitrile by inhalation or ingestion induced brain, zymball gland (no comparable human gland) and stomach tumours.

EMERGENCY OVERVIEW: ABS Pipe and Fittings with slight or no odour. Can burn in a fire creating dense toxic smoke. Molten plastic can cause severe thermal burns. Fumes produced if melted or burned may cause eye, skin and respiratory tract irritation. Secondary operations, such as grinding, sanding or sawing, can produce dust which may present an explosion or respiratory hazard.

POTENTIAL HEALTH EFFECTS

EYE: Product may cause irritation or injury due to mechanical action.
SKIN: ABS Pipe and Fittings not likely to cause skin irritation.
INGESTION: Not acutely toxic.

CHRONIC/CARCINOGENICITY

NTP: Not tested
OSHA: Not regulated
IARC: Listed

MEDICAL RESTRICTIONS: There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing fumes.

NOTE: OSHA, IARC and/or NTP have listed carbon black and heavy metals, present in some colorants, as carcinogens. If these colorants are present in this product, they are shown in SECTION 2. These colorants are essentially bound to the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

SECTION 8. PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT TO BE USED: When cutting, the use of eye protection and a NIOSH-approved respirator for dust is recommended.

ENGINEERING CONTROLS TO BE USED: Ventilate adequately when cutting.

WASTE DISPOSAL: Handle in accordance with federal, state, provincial and municipal regulations.

PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL: Pipe fragments and debris should be swept up and removed to a disposal container.

HANDLING PROCEDURES AND EQUIPMENT: Avoid creating and breathing ABS dust.

STORAGE REQUIREMENTS: None

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SPECIAL SHIPPING INFORMATION:

Not applicable

SECTION 9. EMERGENCY AND FIRST AID MEASURES

SPECIFIC FIRST AID MEASURES:

No situation is likely to arise from routine handling of ABS Pipe and Fittings.

EYES:

Remove contact lenses at once. Immediately flush eyes with copious quantities of water or normal saline for at least 20-30 minutes. If irritation persists, seek medical attention.

SKIN:

Wash skin thoroughly with soap and water. Seek medical attention if rash or burn occurs.

INGESTION:

Not probable. If a large amount is swallowed, seek medical attention.

INHALATION:

Not likely to be inhaled due to physical form.

SECTION 10. REGULATORY INFORMATION

Listed below are chemical substances subject to supplier notification requirements. The percentages, when present, represent average values.

INGREDIENT NAME	CAS NUMBER	EPCRA 313 %	WHMIS %	NPRI %	CA-65 %	FL RI
4-ethenylcyclohexene	100-40-3				<0.1	
Styrene	100-42-5	0.2				
Acrylonitrile	107-13-1				<0.01	

CA-65: Chemical substances identified under the California Proposition 65 column are known to the State of California to cause cancer and/or reproductive toxicity.

TSCA STATUS: This product complies with the Chemical Substance Inventory requirements of the US EPA Toxic Structures Control Act (TSCA).

WHMIS CLASSIFICATION: Not a controlled product.

SECTION 11. ADDITIONAL GENERAL INFORMATION

Disclaimer:

The information contained in this material safety data sheet is based on information available to IPEX Inc. and is believed to be accurate. Where this information is based on data developed by third parties, IPEX Inc. expressly denies liability. IPEX Inc. makes no warranty, expressed or implied, regarding the accuracy of this information or data or the results obtained from its use. All recommendations are made without guarantee, since the conditions of use of this product are beyond IPEX Inc.'s control. IPEX Inc. assumes no responsibility for any damages resulting from the use of this product described herein.

Please consult IPEX Inc. for further information.

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