,the use of polyethylene compound is used in many cases
,including the production of plastic pipes and piping connections
which is prepared from industrial quality recycled materials and
a small percentage of new materials along with the modification
. .of properties through nano materials, which has many advantages

Use of uniform raw materials in construction and production
Has soot with a standard spread percentage
High resistance to sunlight
Reasonable and competitive price in domestic and foreign markets
Consistent and desirable product quality
.percent compound 100 to 40 Use of

Polyethylene materials that are used in the manufacture of plastic appliances, plastic pipes and piping connections have different types that are classified based on density. The density of polyethylene material is determined according to the size of the polymer chain, the type and number of branches in the chain and will determine the type of polyethylene. The types of polyethylene materials are divided into :the following three categories
Linear polyethylene compound polymer compounds are one of the most widely used polymers that can be used in the water supply
.pipe production industry

tons 1250 25kg in jumbo bag :Packing and delivery

name material :PE100BLACK COMPOUND		
data lab sample : 2022/08/16		
Properties	ReferenceTest method	value
Melt flow index(190◦C/5kg)	ISO1133-A,isiri6980-1	0.21gr/10min
Melt flow index(190◦C/2.16kg)	ISO1133-A,isiri6980-1	——
Density(method A-metanol 23◦C)	ISO1183-1,isiri7090-1,2	0.953gr/cm³
Carbon Blak Content	ISO 6964	2.21
Ash content		0.02
Disp/Carbon Black	ISO18553	1-A1
Elongation at Break	ISO6964	≥ %750
Yield Strength		≥ 20 Mpa
Tensil Strength at Break		≥ 25 Mpa
Oxidation Induction Time 210◦C	ISO 11357	≥ 40 min
Melting Point	ISO 11357-6	140◦C
Escr (50◦C . A :10% Igepal Co-630)	ASTM D1693	≥ 1000 hr
Total Volatiles	EN 12099	180mg/kg

PE-100 A | **SAFETY DATA SHEET** (SDS)

SECTION 1 - IDENTIFICATION

Product identifier	PE-100 A
Other means of identification	None
Recommended use and restrictions on use	Construction product / Refer to technical information
Initial supplier identifier	PUREPOXY 301, rue Omer-DeSerres #105, Blainville, Quebec, CANADA J7C 0K2 Phone – 438-492-4450
Emergency telephone number/restriction on use	Canada – CANUTEC 24 hour number 613-996-6666

SECTION 2 - HAZARD IDENTIFICATION

Classification of hazardous product
(name of the category or subcategory of the hazard class)

Acute toxicity oral (Category 5)
Skin irritation (category 2)
Eye irritation (category 2A)
Skin sensitization (category 1)
Hazardous to the aquatic environment – Acute (Category 2)
Hazardous to the aquatic environment - Chronic (Category 2)

Information elements
(symbols, signal words, hazard statements and precautionary statements of the category/subcategory)

DANGER

H303 May be harmful if swallowed.
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects

P261 Avoid breathing dust/fume/gas/mist/vapours/spray. **P264** Wash hands/nails/face thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace. **P273** Avoid release to the environment. **P280** Wear protective gloves/ protective clothing/ eye protection/ face protection. **P302 + P352** IF ON SKIN: Wash with plenty of water. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P362 + P364** Take off contaminated clothing and wash before reuse. **P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P312** Call a POISON CENTER or doctor/ physician if you feel unwell. **P391** Collect spillage. **P405** Store locked up. **P501** Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other Hazards Known None

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name (common name/synonyms)	CAS NUMBER or other	Concentration (%)
Epoxy resin reaction product Bisphenol A (Epichlorohydrin)	25085-99-8	60-100
Alkyl (C12-C14) glycidyl ether	68609-97-2	1-10
Benzyl alcohol	100-51-6	1-10

All ingredients are listed according to OSHA (29 CFR).

* Statement - This safety data sheet provides concentration range(s) instead of the actual concentration(s) considered trade secret(s).

SECTION 4 - FIRST AID MEASURES

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor.

Ingestion IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a doctor if you feel unwell.

Skin contact IF ON SKIN: wash with plenty of water (15-20 minutes). IF SKIN irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Eye contact IF IN EYES, Rinse cautiously with water for several minutes (15-20). Remove contact lenses, if present and easy to do. Continue rinsing.

Most important symptoms and effects (acute and delayed) Causes severe skin, respiratory or digestive tract burns and eye damage.

Indication of immediate medical attention/special treatment In all cases, call a doctor. Do not forget this document.

SECTION 5 - FIREFIGHTING MEASURES

Specific hazards of the hazardous product (hazardous combustion products) Carbon oxides and other irritant/toxic gases and fumes.

Suitable and unsuitable extinguishing media In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish surrounding products.

Special protective equipment and precautions for fire-fighters During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Absorb spillage to prevent material-damage. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).

Methods and materials for containment and cleaning up Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling

Wear protective gloves/ protective clothing/ eye protection/ face protection.

Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dust/fume/gas/mist/vapours/ spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapours or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters (biological limit values or exposure limit values and source of those values)

Exposure limits: None known

Appropriate engineering controls

Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Individual protection measures/personal protective equipment

Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance / color	Clear liquid	**Vapour pressure**	Not available
Odour	Characteristic	**Vapour density**	Not available
Odour threshold	Not available	**Relative density**	1.122 (g/ml)
pH	Not available	**Solubility**	Not available
Melting point / Freezing point	Not available	**Partition coefficient of n-octanol/water**	Not available
Initial boiling point/ranges	Not available	**Auto-ignition temperature**	Not available
Flash point	> 199.4°F (93°C)	**Decomposition temperature**	Not available
Evaporation rate	Not available	**Viscosity**	1200 - 1400 cps
Flammability (solid, gas)	Not available	**VOC**	45 g/L
Upper/Lower flammability or explosive limits	Not available	**Other**	None know

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Does not react under the recommended storage and handling conditions prescribed.
Chemical Stability	Stable under the recommended storage and handling conditions prescribed.
Possibility of hazardous reactions	None known
Conditions to avoid (static discharge, shock or vibration)	None known
Incompatible materials	Oxidizing materials; etc.
Hazardous decomposition products	None known

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)	May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
Symptoms related to the physical, chemical and toxicological characteristics	Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing;
Delayed and immediate effects (chronic effects from short-term and long-term exposure)	Skin Sensitization – Possible; Respiratory Sensitization – No data available; Germ Cell Mutagenicity – No data available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA; Reproductive Toxicity – No data available; Specific Target Organ Toxicity — Single Exposure – No data available; Specific Target Organ Toxicity — Repeated Exposure – No data available; Aspiration Hazard – No data available; Health Hazards Not Otherwise Classified – No data available.
Numerical measures of toxicity (ATE; LD_{50} & LC_{50})	CAS 100-51-6 LD50 Oral - Rat – 1230 mg/kg; ATE not available in this document.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial information)	No data available for this product
Persistence and degradability	No data available
Bioaccumulative potential	Bioconcentration potential is moderate
Mobility in soil	No data available.
Other adverse effects	Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Information on safe handling for disposal/methods of disposal/contaminated packaging
Dispose of contents/container into safe container in accordance with local, regional or national regulations.

SECTION 14 - TRANSPORT INFORMATION

UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations:
NOT REGULATED

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):
UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol-A-(epichlorhydrin) epoxy resin); CLASS 9; PG III

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air):
UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol-A-(epichlorhydrin) epoxy resin); CLASS 9; PG III

Special Precautions (transport/conveyance): May also be shipped as a LIMITED QUANTITY in accordance with TDG.

Environmental hazards (IMDG or other): Marine Pollutant

Bulk transport (usually more than 450L in capacity): Possible

SECTION 15 - REGULATORY INFORMATION

Safety/health Canadian regulations specifics	Refer to Section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental Canadian regulations specifics	Refer to Section 3 for ingredient(s) of the DSL
Safety/health/environmental outside regulations specifics Bioaccumulative potential	United States OSHA information: This product is regulated according to OSHA (29 CFR). United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14. United States TCSA information: Refer to the ingredients listed in Section 3.
National Fire Protection Association (NFPA)	HEALTH: 1 FLAMMABILITY: 1 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3. HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

SECTION 16 - OTHER INFORMATION

Date of the latest revision of the safety data sheet	Febuary 4, 2020 version 5
Corrections	SDS Template modifications
References	Safety Data Sheets from manufacturer/supplier

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute toxicity estimate
CAS	Chemical Abstract Service
DSL	Domestic Substance List
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal concentration
LD	Lethal Dosage
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
STEL	Short-term Exposure Limit
TDG	Transport of dangerous goods in Canada
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.