## **POLYPROPYLENE**

## **CAUTIONARY RESPONSE INFORMATION** Common Synonyms Propene polymer Floats on water Call fire department. Notify local health and pollution control agencies Combustible Fire Combustible. Extinguish with water, dry chemicals, foam, or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water. DUST Not harmful. **Exposure** SOLID Not harmful. Effect of low concentrations on aquatic life is unknown. Water May be dangerous if it enters water intake Notify local health and wildlife officials. **Pollution** Notify operators of nearby water intakes

CORRECTIVE RESPONSE ACTIONS     Stop discharge	
Contain Collection Systems: Skim Clean shore line	

### 2. CHEMICAL DESIGNATIONS

- 2. CIEMICAL DESIGNATIONS
  CG Compatibility Group: 30; Olefin
  Formula: [CH(CH<sub>2</sub>)-CH<sub>2</sub>], where n is large
  IMO/UN Designation: Not listed
  DOT ID No.: Not listed
  CAS Registry No.: Currently not available
  NAERG Guide No.: Not listed
  Standard Industrial Trade Classification:
  - 51119

#### 3. HEALTH HAZARDS

- 3.1 Personal Protective Equipment: Filter respirator 3.2 Symptoms Following Exposure: No apparent toxicity
- 3.3 Treatment of Exposure: None required
- 3.4 TLV-TWA: Not listed.
- 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed.
- 3.7 Toxicity by Ingestion: Currently not available
- 3.8 Toxicity by Inhalation: Currently not available.
  3.9 Chronic Toxicity: Causes central bronchitis and peripheral bronchitis in rats and rabbits
- 3.10 Vapor (Gas) Irritant Characteristics: Currently not available 3.11 Liquid or Solid Characteristics: Currently not available
- 3.12 Odor Threshold: Currently not available
- 3.13 IDLH Value: Not listed.
- 3.14 OSHA PEL-TWA: Not listed
- 3.15 OSHA PEL-STEL: Not listed
- 3.16 OSHA PEL-Ceiling: Not listed.
- 3.17 EPA AEGL: Not listed

#### 4. FIRE HAZARDS

- 4.1 Flash Point: Not pertinent (combustible solid)
- 4.2 Flammable Limits in Air: Not pertinent
- **4.3 Fire Extinguishing Agents:** Foam, dry chemical, carbon dioxide
- 4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective.
- 4.5 Special Hazards of Combustion Products: Currently not available
- 4.6 Behavior in Fire: Currently not available
- 4.7 Auto Ignition Temperature: Currently not
- 4.8 Electrical Hazards: Not pertinent
- 4.9 Burning Rate: Not pertinent
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichometric Air to Fuel Ratio: Not pertinent.
- 4.12 Flame Temperature: Currently not
- 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent
- 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

#### 5. CHEMICAL REACTIVITY

- 5.1 Reactivity with Water: No reaction
- 5.2 Reactivity with Common Materials: Currently not available
- 5.3 Stability During Transport: Stable
- 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent
- 5.5 Polymerization: Not pertinent
- 5.6 Inhibitor of Polymerization: Not pertinent

#### 6. WATER POLLUTION

- 6.1 Aquatic Toxicity:
- 6.2 Waterfowl Toxicity: None
- 6.3 Biological Oxygen Demand (BOD): Currently not available
- 6.4 Food Chain Concentration Potential:
- 6.5 GESAMP Hazard Profile: Bioaccumulation: -Damage to living resources: -

Human Oral hazard: -Human Contact hazard: Reduction of amenities:

#### 7. SHIPPING INFORMATION

- 7.1 Grades of Purity: Commercial, 100%
- 7.2 Storage Temperature: Ambient
- 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open
- 7.5 IMO Pollution Category: Currently not available
- 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available

#### 8. HAZARD CLASSIFICATIONS

- 8.1 49 CFR Category: Not listed
- 8.2 49 CFR Class: Not pertinent
- 8.3 49 CFR Package Group: Not listed.
- 8.4 Marine Pollutant: No
- 8.5 NFPA Hazard Classification: Not listed
- 8.6 EPA Reportable Quantity: Not listed.
- 8.7 EPA Pollution Category: Not listed.
- 8.8 RCRA Waste Number: Not listed
- 8.9 EPA FWPCA List: Not listed

#### 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 Physical State at 15° C and 1 atm: Solid
- 9.2 Molecular Weight: Mixture
- 9.3 Boiling Point at 1 atm: Not pertinent (decomposes)
- 9.4 Freezing Point: Not pertinent
- 9.5 Critical Temperature: Not pertinent
- 9.6 Critical Pressure: Not pertinent
- 9.7 Specific Gravity: 0.90 at 20°C (solid)
- 9.8 Liquid Surface Tension: Not pertinent
- 9.9 Liquid Water Interfacial Tension: Not
- 9.10 Vapor (Gas) Specific Gravity: Not pertinent 9.11 Ratio of Specific Heats of Vapor (Gas):
- Not pertinent
- 9.12 Latent Heat of Vaporization: Not pertinent
- **9.13 Heat of Combustion:** (est.) –19,600 Btu/lb = –10,900 cal/g = –456 X 10<sup>5</sup> J/kg
- 9.14 Heat of Decomposition: Not pertinent
- 9.15 Heat of Solution: Not pertinent
- 9.16 Heat of Polymerization: Not pertinent 9.17 Heat of Fusion: Currently not available
- 9.18 Limiting Value: Currently not available
- 9.19 Reid Vapor Pressure: Currently not available

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	N O T		N O T		N O T		N O T
	PERTINENT		PERT INENT		. PERT - NENT		PERT   NENT

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
	N S O		N O T		N O T		N O T
	L U B L E		P E R T I N E N T		P E R T I N E N T		P ERTINENT