



# Safety Data Sheet

Dow Chemical Company Ltd

**Product Name:** XZ 89342.10 Experimental Polyethylene Resin

**Revision Date:** 2011/07/06

**Print Date:** 21 Jan 2014

Dow Chemical Company Ltd encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## Section 1. Identification of the substance/preparation and of the company/undertaking

### 1.1 Product identifiers

**Product Name**

XZ 89342.10 Experimental Polyethylene Resin

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified uses**

A polyethylene plastic - For industrial conversion as a raw material for manufacture of articles or goods.

### 1.3 Details of the supplier of the safety data sheet

**COMPANY IDENTIFICATION**

Dow Chemical Company Ltd  
Diamond House, Lotus Park  
Kingsbury Crescent  
TW18 3AG Staines, Middlesex  
United Kingdom

Customer Information Number:

0203 139 4000

[SDSQuestion@dow.com](mailto:SDSQuestion@dow.com)

### 1.4 EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:**

0031 115 694 982

**Local Emergency Contact:**

00 31 115 69 4982

## Section 2. Hazards Identification

### 2.1 Classification of the substance or mixture

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

This product is not classified as dangerous according to EC criteria.

### 2.2 Label elements

**Labelling according to EC Directives**

This product is not classified as dangerous according to EC criteria.

### 2.3 Other Hazards

No information available.

## Section 3. Composition/information on ingredients

### 3.2 Mixture

CAS-No. / EC-No. / Index	REACH No.	Amount	Component	Classification: REGULATION (EC) No 1272/2008
CAS-No. 83833-97-0 EC-No. Polymer	—	>= 99.0 %	1-Octene, polymer with ethene and 1-hexene##	Not classified

  

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## Voluntarily disclosed component(s).

For the full text of the H-Statements mentioned in this Section, see Section 16.

## Section 4. First-aid measures

### 4.1 Description of first aid measures

**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin Contact:** Wash skin with plenty of water. Seek first aid or medical attention as needed. If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage. Seek medical attention immediately. Suitable emergency safety shower facility should be immediately available.

**Eye Contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

### 4.2 Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

### 4.3 Indication of immediate medical attention and special treatment needed

If burn is present, treat as any thermal burn, after decontamination. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## Section 5. Fire Fighting Measures

### 5.1 Extinguishing Media

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.

### 5.2 Special hazards arising from the substance or mixture

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur. Dense smoke is emitted when burned without sufficient oxygen.

### 5.3 Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

## Section 6. Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures:** Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**6.2 Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**6.3 Methods and materials for containment and cleaning up:** Contain spilled material if possible. Sweep up. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

## Section 7. Handling and Storage

### 7.1 Precautions for safe handling

#### Handling

**General Handling:** No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Avoid breathing process fumes. Use with adequate ventilation. When appropriate, unique handling information for containers can be found on the product label. Workers should be protected from the possibility of contact with molten resin. Do not get molten material in eyes, on skin or clothing. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

Store in accordance with good manufacturing practices.

### 7.3 Specific end uses

See the technical data sheet on this product for further information.

## Section 8. Exposure Controls / Personal Protection

### 8.1 Control parameters

#### Exposure Limits

None established

### 8.2 Exposure controls

#### Personal Protection

**Eye/Face Protection:** Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent. If exposure causes eye discomfort, use a full-face respirator.

**Skin Protection:** No precautions other than clean body-covering clothing should be needed.

**Hand protection:** Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. Use gloves to protect from mechanical injury. Selection of gloves will depend on the task. Use gloves with insulation for thermal protection (EN 407), when needed.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present. In dusty or misty atmospheres, use an approved particulate respirator. Use the following CE approved air-purifying respirator: When dust/mist are present use a/an Particulate filter, type P2. When combinations of vapors, acids, or dusts/mists are present use a/an Organic vapor cartridge with a particulate pre-filter, type AP2.

**Ingestion:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

#### Engineering Controls

**Ventilation:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

## Section 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical State	Powder
Color	White
Odor	Odorless
Odor Threshold	No test data available
pH	Not applicable
Melting Point	Supplier Varies
Freezing Point	Not applicable
Boiling Point (760 mmHg)	Not applicable.
Flash Point - Closed Cup	Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	No
Flammable Limits In Air	Lower: Not applicable Upper: Not applicable

<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density (air = 1)</b>	Not applicable
<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	0.83 - 0.97 <i>Supplier</i>
<b>Solubility in water (by weight)</b>	Negligible
<b>Partition coefficient, n-octanol/water (log Pow)</b>	No data available for this product.
<b>Autoignition Temperature</b>	No test data available
<b>Decomposition Temperature</b>	No test data available
<b>Kinematic Viscosity</b>	Not applicable
<b>Explosive properties</b>	no data available
<b>Oxidizing properties</b>	no data available

## 9.2 Other information

## Section 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Polymerization will not occur.

**10.4 Conditions to Avoid:** Exposure to elevated temperatures can cause product to decompose.

**10.5 Incompatible Materials:** None known.

### 10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating. Decomposition products can include and are not limited to: Aldehydes. Alcohols. Organic acids. Decomposition products can include trace amounts of: Hydrocarbons.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute Toxicity

##### Ingestion

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking if swallowed.

Single dose oral LD50 has not been determined.

Typical for this family of materials. Estimated. LD50, Rat > 5,000 mg/kg

##### Aspiration hazard

Based on physical properties, not likely to be an aspiration hazard.

##### Dermal

No adverse effects anticipated by skin absorption.

The dermal LD50 has not been determined.

Typical for this family of materials. Estimated. LD50, Rabbit > 2,000 mg/kg

##### Inhalation

Dust may cause irritation to upper respiratory tract (nose and throat). Vapors released during thermal processing may cause respiratory irritation.

The LC50 has not been determined. .

##### Eye damage/eye irritation

Solid or dust may cause irritation or corneal injury due to mechanical action. Elevated temperatures may generate vapor levels sufficient to cause eye irritation. Effects may include discomfort and redness.

**Skin corrosion/irritation**

Prolonged contact is essentially nonirritating to skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

**Sensitization****Skin**

No relevant data found.

**Respiratory**

No relevant data found.

**Repeated Dose Toxicity**

Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

**Chronic Toxicity and Carcinogenicity**

No relevant data found.

**Developmental Toxicity**

No relevant data found.

**Reproductive Toxicity**

No relevant data found.

**Genetic Toxicology**

No relevant data found.

## Section 12. Ecological Information

**12.1 Toxicity**

Not expected to be acutely toxic to aquatic organisms.

**12.2 Persistence and Degradability**

This water-insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

**12.3 Bioaccumulative potential**

**Bioaccumulation:** No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

**12.4 Mobility in soil**

**Mobility in soil:** In the terrestrial environment, material is expected to remain in the soil where it may be subject to wind dispersion., In the aquatic environment, material is expected to float.

**12.5 Results of PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**12.6 Other adverse effects**

No relevant data found.

## Section 13. Disposal Considerations

**13.1 Waste treatment methods**

For uncontaminated material the disposal options include mechanical and chemical recycling or energy recovery. In some countries landfill is also allowed. For contaminated material the options remain the same, although additional evaluation is required. For all countries the disposal methods

must be in compliance with national and provincial laws and any municipal or local by-laws. All disposal methods must be in compliance with the EU framework Directives 91/156/EEC, 91/689/EEC and their subsequent adaptations, as implemented in National Laws and Regulations, as well as EU Directives dealing with priority waste streams. Transboundary shipment of wastes must be in compliance with EU Regulation 259/93 and subsequent modifications.

## Section 14. Transport Information

### ROAD & RAIL

NOT REGULATED

### OCEAN

NOT REGULATED

### AIR

NOT REGULATED

### INLAND WATERWAYS

NOT REGULATED

## Section 15. Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### European Inventory of Existing Commercial Chemical Substances (EINECS)

This product is a polymer according to the definition in Directive 92/32/EEC (7<sup>th</sup> Amendment to Directive 67/548/EEC) and all of its starting materials and intentional additives are listed in the European Inventory of Existing Commercial Chemical Substances (EINECS) or in compliance with European (EU) chemical inventory requirements.

### 15.2 Chemical Safety Assessment

Not applicable.

## Section 16. Other Information

### Hazard statement in the composition section

### Revision

Identification Number: 1054956 / 3005 / Issue Date 2011/07/06 / Version: 1.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

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