

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: DuraStar(TM) Polymer DS1900HF Natural

Product No.: DS1900HF, P22970FC, P22970FA, P22970FZ, P22970FB, P22970FT, 50114002, P22970FP, P22970F3, P22970FF

Synonyms, Trade Names: not applicable

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

Identified uses: Plastics

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier

Eastman Chemical Company
200 South Wilcox Drive
Kingsport, TN 37660-5280 US
+14232292000

Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

1.4 Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

SECTION 2: Hazards identification

CAUTION!
MOLTEN MATERIAL WILL PRODUCE THERMAL BURNS

SECTION 3: Composition/information on ingredients

3.1 / 3.2 Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification	Notes
copolyester	100%	proprietary	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
Eye contact:	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist. If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin contact:	Wash with soap and water. Get medical attention if symptoms occur. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn. Get medical attention.
Ingestion:	Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed:	Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.
---	--

4.3 Indication of any immediate medical attention and special treatment needed

Hazards:	Contact with molten substance/product may cause severe burns to skin and eyes.
Treatment:	Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards:	Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures.
------------------------------	---

5.1 Extinguishing media

Suitable extinguishing media:	Water spray. Dry chemical. Carbon Dioxide.
--------------------------------------	--

Unsuitable extinguishing media:	None known.
--	-------------

5.2 Special hazards arising from the substance or mixture:	Powdered material may form explosive dust-air mixtures.
---	---

5.3 Advice for firefighters

Special Fire Fighting Procedures:	Minimize dust generation and accumulation.
--	--

Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
--	---

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** Wear appropriate personal protective equipment.
- 6.2 Environmental precautions:** Not regarded as dangerous for the environment.
- 6.3 Methods and material for containment and cleaning up:** Sweep up and place in a clearly labeled container for chemical waste.
- Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** Avoid contact with molten material.
- 7.2 Conditions for safe storage, including any incompatibilities:** Keep container closed.
- 7.3 Specific end use(s):** Plastics.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Occupational exposure limits

If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.2 Exposure controls

Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information: Eye bath. Washing facilities.

Eye/face protection: It is a good industrial hygiene practice to minimize eye contact. Wear a face shield when working with molten material.

Skin protection**Hand protection:**

It is a good industrial hygiene practice to minimize skin contact. When material is heated, wear gloves to protect against thermal burns.

Other:

No data available.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures:

Observe good industrial hygiene practices.

Environmental Controls:

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance****Physical State:**

Solid

Form:

Pellet

Color:

natural color

Odor:

Odorless

Odor Threshold:

Not determined.

pH:

Not applicable

Melting Point

varies with product

Boiling Point:

No data available.

Flash Point:

not applicable, combustible solid

Evaporation Rate:

Not determined.

Flammability (solid, gas):

No data available.

Flammability Limit - Upper (%)-:

No data available.

Flammability Limit - Lower (%)-:

No data available.

Vapor pressure:

Not determined.

Vapor density (air=1):

No data available.

Specific Gravity:

> 1

Solubility(ies)**Solubility in Water:**

Negligible

Solubility (other):

No data available.

Partition coefficient (n-octanol/water):

No data available.

Autoignition Temperature:

No data available.

Decomposition Temperature:

Thermal stability not tested. Low stability hazard expected at normal operating temperatures.

Dynamic Viscosity:	No data available.
Kinematic viscosity:	Not determined.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	None known.
10.2 Chemical stability:	Stable
10.3 Possibility of hazardous reactions:	None known.
10.4 Conditions to avoid:	None at ambient temperatures.
10.5 Incompatible materials:	Strong oxidizing agents.
10.6 Hazardous decomposition products:	Carbon Dioxide. Carbon Monoxide.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	None known.
Ingestion:	None known.
Skin contact:	Molten material will produce thermal burns.
Eye contact:	Molten material will produce thermal burns.

11.1 Information on toxicological effects

Acute Toxicity

Oral

Product:	No data available.
-----------------	--------------------

Specified substance(s)

copolyester	Oral LD-50: (Rat): > 3,200 mg/kg Oral LD-50: (Mouse): > 3,200 mg/kg
-------------	--

Dermal

Product:	No data available.
-----------------	--------------------

Specified substance(s)

copolyester	Dermal LD-50: (Guinea Pig): > 1,000 mg/kg
-------------	---

Inhalation

Product:	No data available.
-----------------	--------------------

Specified substance(s) copolyester	No data available.
Repeated dose toxicity Product:	No data available.
Specified substance(s) copolyester	No data available.
Skin corrosion/irritation: Product:	No data available.
Specified substance(s) copolyester	(Guinea Pig, 10 d): Slight
Serious eye damage/eye irritation: Product:	No data available.
Specified substance(s) copolyester	(Rabbit, 24 h): Slight
Respiratory or skin sensitization: Product:	No data available.
Specified substance(s) copolyester	(Guinea Pig) - non-sensitizing
Germ cell mutagenicity In vitro Product:	No data available.
Specified substance(s) copolyester	No data available.
In vivo Product:	No data available.
Specified substance(s) copolyester	No data available.
Carcinogenicity Product:	No data available.
Specified substance(s) copolyester	No data available.
Reproductive toxicity Product:	No data available.
Specified substance(s) copolyester	No data available.
Specific target organ toxicity - single exposure Product:	No data available.

Specified substance(s)

copolyester

No data available.

Specific target organ toxicity - repeated exposure**Product:**

No data available.

Specified substance(s)

copolyester

No data available.

Aspiration hazard**Product:**

No data available.

Specified substance(s)

copolyester

No data available.

Other adverse effects:

No data available.

SECTION 12: Ecological information**12.1 Toxicity****Acute toxicity****Fish****Product:**

No data available.

Specified substance(s)

copolyester

LC-50 (Fathead Minnow, 96 h): > 100 mg/l (highest concentration tested)

Aquatic invertebrates**Product:**

No data available.

Specified substance(s)

copolyester

LC-50 (daphnid, 96 h): > 100 mg/l (highest concentration tested)

LC-50 (snail, 96 h): > 100 mg/l (highest concentration tested)

LC-50 (flatworm, 96 h): > 100 mg/l (highest concentration tested)

Chronic Toxicity**Fish****Product:**

No data available.

Specified substance(s)

copolyester

No data available.

Aquatic invertebrates**Product:**

No data available.

Specified substance(s)

copolyester

No data available.

Toxicity to Aquatic Plants**Product:**

No data available.

Specified substance(s)

copolyester

No data available.

12.2 Persistence and degradability**Biodegradation**

Product: No data available.

Specified substance(s)

copolyester No data available.

Biological Oxygen Demand:

Product No data available.

Specified substance(s)

copolyester No data available.

Chemical Oxygen Demand:

Product No data available.

Specified substance(s)

copolyester No data available.

BOD/COD ratio

Product No data available.

Specified substance(s)

copolyester No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

copolyester No data available.

12.4 Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

copolyester No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

copolyester No data available.

12.6 Other adverse effects:

No data available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

General information: No data available.

Disposal Methods:

Dispose of waste and residues in accordance with local authority requirements. Incinerate.

SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Class not regulated

IMDG - International Maritime Dangerous Goods Code

Class not regulated

IATA

Class not regulated

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: noncontrolled

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List

NONE

OSHA: nonhazardous

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is not listed on the DSL.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is not listed on AICS. In Australia, its use is restricted to research and development purposes only.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is not listed on the Korean inventory.

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 1, Flammability - 1, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: New SDS

Key literature references and sources for data: No data available.

Training information: No data available.

Regulation (EC) No. 1272/2008

Issue Date: 04/08/2012

SDS No:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.