

1 Identification of substance

- Trade name: **Charmor® DP15**
- Application of the substance / the preparation Chemical intermediate
- Manufacturer/Supplier:
Perstorp Polyols, Inc.
600 Matzinger Road
Toledo, Ohio 43612
(419) 729-5448
800-537-0280
Fax: 419-729-3291
- Information department: EHS-department Perstorp Specialty Chemicals AB
- Emergency information:
(United States) - CHEMTREC 1-800-424-9300.
(Int.) +46 8 337043 (Emergency Response Center, Sweden)

2 Composition/Data on components

Chemical components:

126-58-9	Dipentaerythritol	85-100%
115-77-5	Pentaerythritol	0-15%

3 Hazards identification

- Information pertaining to particular dangers for man and environment:
- Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- NFPA ratings (scale 0 - 4)



Health = 1
Fire = 3
Reactivity = 0

- HMIS-ratings (scale 0 - 4)

HEALTH	1
FIRE	3
REACTIVITY	0

Health = 1
Fire = 3
Reactivity = 0

4 First aid measures

- After inhalation: Take affected persons into fresh air and keep calm.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Rinse out mouth and then drink plenty of water or milk.

5 Fire fighting measures

- Suitable extinguishing agents:
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet

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6 Accidental release measures

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:** Pick up mechanically.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Information for safe handling:**
 - Prevent formation of dust.
 - Provide suction extractors if dust is formed.
 - Any deposit of dust which cannot be avoided must be regularly removed.
 - Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
 - Protect against electrostatic charges.
 - Dust can combine with air to form an explosive mixture.
 - Use explosion-proof apparatus / fittings and spark-proof tools.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

115-77-5 Pentaerythritol

PEL	15* 5** mg/m ³ *total dust **respirable fraction
REL	10* 5** mg/m ³ *total dust **respirable fraction
TLV	10 mg/m ³

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:**
 - Suitable respiratory protective device recommended.
 - Dustfilter
- **Protection of hands:**



Protective gloves

- **Material of gloves**
 - Chloroprene rubber, CR
 - Nitrile rubber, NBR
- **Penetration time of glove material**
 - The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Safety glasses

9 Physical and chemical properties

· General Information

Form:	Powder
Color:	White
Odor:	Odorless

· Change in condition

Boiling point/Boiling range:	276°C (529°F) (30 mm Hg)
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· Flash point:

>150°C (>302°F)

· Auto igniting:

Product is not selfigniting.

· Danger of explosion:

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
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· Explosion limits:

> 20 g/m ³

· Density at 20°C (68°F):

200-220 kg/m ³ (ASTMD1958-96)
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· Solubility in / Miscibility with

Water at 20°C (68°F):	1.8 g/l
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· Segregation coefficient (n-octanol/water): -2 log POW

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Dangerous reactions Risk of dust explosion.

· Dangerous products of decomposition: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

126-58-9 Dipentaerythritol

Oral	LD50	> 2000 mg/kg (rat)
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115-77-5 Pentaerythritol

Oral	LD0	> 5110 mg/kg (rat)
	LD50	25 500 mg/kg (rat)
Inhalative	LC50/4 h	NOEL > 11 mg/l (rat)

· Primary irritant effect:

on the skin:	No irritant effect.
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on the eye:	No irritating effect.
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Sensitization:	No sensitizing effects known.
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Other information (about experimental toxicology):	Ames test: Negative (Not a mutagen)
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· **Subacute to chronic toxicity:**

126-58-9 Dipentaerythritol

AMES test | Negative OECD 471 (salmonella typhimurium)

115-77-5 Pentaerythritol

AMES test | Negative OECD 471 (salmonella typhimurium)

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

· **Information about elimination (persistence and degradability):**

126-58-9 Dipentaerythritol

BOD28 | 2.0 g/g (-)

BOD7 | 9.5 mg/g (-)

COD | 2.0 g/g (-)

115-77-5 Pentaerythritol

BOD28 | 0.99 g/g (OECD 301)

COD | 1380 mg/g (-)

TOD | 1300 mg/g (-)

· **Other information:** The product is biodegradable.

· **Behavior in environmental systems:**

· **Mobility and bioaccumulation potential:**

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

126-58-9 Dipentaerythritol

BCF | 3.2 - (-)

· **Ecotoxicological effects:**

· **Aquatic toxicity:**

126-58-9 Dipentaerythritol

EC0 | > 100 mg/l (alga)

> 100 mg/l (daphnia)

LC50/96 h | > 100 mg/l (fish)

115-77-5 Pentaerythritol

EC10/18 h | 18 200 mg/l (bacteria)

EC3/7 d | 16 500 mg/l (alga)

EC50/24 h | 38 900 mg/l (daphnia)

LC0/48 h | > 5000 mg/l (fish)

· **Remark:** Harmless to fish up to the tested concentration

13 Disposal considerations

· **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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· **Canadian Domestic Substance List (DSL)**

All ingredients are listed.

· **Chinese Chemical Inventory of Existing Chemical Substances**

All ingredients are listed.

· **Japan Existing and New chemical Substance List (ENCS)**

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115-77-5	Pentaerythritol

· **Korea Existing Chemical Inventory**

126-58-9	Dipentaerythritol	KE-12030
115-77-5	Pentaerythritol	KE-03218

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** EHSQ-department, Perstorp Specialty Chemicals AB.

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