

SAFETY DATA SHEET

According to EC 1907/2006 (REACH)

Date last verification : 2017-05-29
Revision date : 2017-05-29
Publication date : 2004-01-26

Version number : 5.0

Last modifications in sections : 2 - 3

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

1.1. Product identifier

SDS : 21617
Supplier : POLYCHROMAL B.V.
Postbus 8043
1802 KA Alkmaar
The Netherlands
TEL:+31 72 5670799
FAX:+31 72 5624095
Tradename : POROPRINT PENETRATING RETARDER
Chemical name : ETHYL DIGLYCOL
CAS number : 111-90-0
EC-number : 203-919-7
REACH registration number : 01-2119475105-42
Formula : $C_2H_5O(CH_2)_2O(CH_2)_2OH$
Molecular weight : 134.20

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

Use : Various
Uses advised against : Data not available.

1.3. Details of the supplier of the safety data sheet

Supplier safety data sheet : Philips Electronics Nederland B.V., Philips Environment & Safety, High Tech Campus 37, 5656 AE Eindhoven, Tel. +31 (0)40 2747588
Responsible department : dangerous_goods@philips.com

1.4. Emergency telephone number

Emergency telephone number : +31 (0)497-598315

* SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

(EC) No 1272/2008

Serious eye irritation

Category 2

H319

2.2. Label elements

(EC) No 1272/2008

Hazard pictogram(s)



Signal word : Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands/skin thoroughly after handling.

P280.3 Wear eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Hazardous component(s) ETHYL DIGLYCOL**Remarks on labelling** none**2.3. Other hazards**

If applicable: see section 6.1 and section 7.1.

*** SECTION 3: Composition/information on ingredients**

Component	CAS-no.	Index No.	Percentage(%)	Label
	EC-no.	Registration no.		
ETHYL DIGLYCOL	111-90-0		100.0	GHS07 H319 Eye irrit. 2
	203-919-7	01-2119475105-42		

For the full text of the H-sentences mentioned in this section, see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures**

- Skin** : Remove contaminated clothes as soon as possible. Remove residue substance as soon as possible (e.g. rinse with plenty of water). In case of a serious exposure call for a doctor.
- Ingestion** : If victim is conscious let him rinse the mouth with water. Do NOT let him drink. In case of general disorders bring victim into the hospital, otherwise call for a doctor.
- Inhalation** : Bring victim into the fresh air as soon as possible and let rest. In case of severe exposure call for a doctor. In case of breathing problems, loose squeezing clothes and if victim is conscious bring victim in high sitting position. In case of stagnation of breathing give IMMEDIATELY oxygen and transport to hospital as soon as possible.
- Eyes** : Rinse for a long time with plenty of water. In case of eye-sight disturbances bring victim immediately into the hospital, in other cases call for a doctor

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

- Skin** local : The substance is prickling: redness.
: Degreasing: in case of sustained contact a rough, dry skin, eczema.
- Ingestion** general : The substance may be absorbed via the skin.
local : The substance is prickling: sore throat.
general : The substance may be absorbed after ingestion.
- Inhalation** local : The substance is with atomising prickling: sore throat.
general : The substance may be absorbed after inhalation.
- Eyes** local : The substance is irritating: redness, pain.
- Remarks symptoms** : The substance has an effect on: the liver, the kidneys, the central nervous system, the the male genitalia.

4.3. Indication of any immediate medical attention and special treatment needed

For advice on further treatment contact a (national) poison center.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable fire-extinguisher**

carbon dioxide, extinguishing powder, water spray, alcohol resistant foam

Unsuitable fire-extinguisher

not traceable

5.2. Special hazards arising from the substance or mixture**Hazardous decomposition products in fire** : carbon monoxide**5.3. Advice for firefighters**

In the event of fire, wear protective clothing and use breathing apparatus that is independent of the ambient air.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Precautions

Use protective equipment. See section 8.
Read label before use.

Emergency procedure

Is not to be expected.

6.2. Environmental precautions

Remainder material or uncleaned empty packagings have to be incinerated in a proper installation or dumped on an approved landfill, in accordance with local and national legislation.

6.3. Methods and material for containment and cleaning up

Spillage procedure

Absorb the liquid in appropriate absorbent (e.g. Powersorb, dry sand, diatomite, vermiculite etc.), shovel the mixture into plastic bags and remove to the central depot for hazardous waste.

6.4. Reference to other sections

See section 8 for appropriate personal protection.
See section 13 for additional information on waste treatment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Observe label precautions.

Do not eat, drink or smoke in work areas. Remove contaminated clothing and protective equipment. Wash hands after leaving the work area.

Local exhausting : Depends on processing circumstances, but at least good room ventilation.

Storage code (on behalf of PGS 15) : none

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : See also any precautionary statements in section 2.2.
Store product in a closed packaging, cool, dry, under inert gas, in a well ventilated area.

7.3. Specific end use(s)

Data not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits :

applicable to: The Netherlands (20 °C; 1013 mbar)

TWA(8 hours): 180 mg/m3 S ETHYL DIGLYCOL

applicable to: Sweden (20 °C; 1013 mbar)

TWA(15 minutes): 170 mg/m3 C S ETHYL DIGLYCOL

TWA(8 hours): 80 mg/m3 S ETHYL DIGLYCOL

applicable to: Switzerland (20 °C; 1013 mbar)

TWA(8 hours): 50 mg/m3 ETHYL DIGLYCOL(as inhalable dust)

TWA(15 minutes): 100 mg/m3 ETHYL DIGLYCOL(as inhalable dust)

C=Ceiling; S=Skin

Remarks exposure limits :

none

DNEL (Derived No Effect Level)

Worker - Inhalation - Long term exposure - Systemic effects: 37 mg/m3

ETHYL DIGLYCOL

Source : Chemicalcards

Worker - Dermal - Long term exposure - Systemic effects: 50 mg/kg bw/day

ETHYL DIGLYCOL

Source : Chemicalcards

PNEC (Predicted No Effect Concentration)

Fresh water: 0.74 mg/l

ETHYL DIGLYCOL

Source : Chemicalcards

Marine water: 0.074 mg/l

ETHYL DIGLYCOL

Source : Chemicalcards

Intermittent releases: 10 mg/l

ETHYL DIGLYCOL

Source : Chemicalcards

8.2. Exposure controls

Advised personal protection :

Hands	:	butyl rubber gloves neoprene gloves
Breakthrough time	:	For information: consult the supplier of the gloves.
Eyes	:	acid goggles
Inhalation	:	none (when sufficient exhausting)
Skin	:	protective clothing (such as: apron, coverall, boots)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	colourless
Odour	:	specific
Odour threshold (20°C; 1013 mbar)	:	not traceable
pH	:	≥5 - ≤9
Melting point/range	:	≥-80 °C - ≤-76 °C
Apparent melting point	:	not applicable
Boiling point/range	:	≥195 °C - ≤203 °C (1013 mbar)
Flash point/range	:	≥93 °C - ≤96 °C
Vapor rate/range	:	not traceable
Flammability (solid, gas)	:	data not available
Explosive limits	:	LEL:≥1.2 vol.% - UEL:≤23.5 vol.%
Vapour pressure	:	0.01 kPa (20 °C)
Relative density	:	≥0.990 - ≤0.999 (water=1) (20 °C)
Solubility in water	:	complete
Log Po/w	:	-0.80
Autoignition temperature	:	≥202 °C - ≤218 °C
Decomposition temperature	:	not traceable
Viscosity	:	3.9 mPa.s (25 °C)
Dust explosions possible in air	:	not applicable
Oxidising properties	:	no

Source : IUCLID

9.2. Other information

Solubility in fat	:	not traceable
Electrostatic charge	:	not traceable
Critical temperature	:	not applicable
General	:	Product is hygroscopic.

SECTION 10: Stability and reactivity

10.1. Reactivity

See section 10.2 - 10.6.

10.2. Chemical stability

The substance or mixture is stable under normal conditions. See also section 10.4.

10.3. Possibility of hazardous reactions

Reactions with water	:	no
Other hazardous conditions	:	In contact with air peroxides may be formed.

10.4. Conditions to avoid

Data not available.

10.5. Incompatible materials

Hazardous reactions with	:	oxidizing substances, strong acids, strong alkaline solutions, light metals, acid chlorides, acid anhydrides, oxygen, see info. section 10.3 SDS
--------------------------	---	--

10.6. Hazardous decomposition products

Hazardous decomposition products at heating : none

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity
LD-50: 5.5 g/kg (ORL-RAT) ETHYL DIGLYCOL **Source** : Easi View

Acute dermal toxicity
LD-50: 8.5 g/kg (SKN-RBT) ETHYL DIGLYCOL **Source** : Easi View

Acute inhalation toxicity
There are no data available.

Ames test
not traceable

Skin corrosion/irritation
The substance or mixture is not classified for skin corrosion/-irritation.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory or skin sensitisation
The substance or mixture is not classified for respiratory or skin sensitisation.

Germ cell mutagenicity
The substance or mixture is not classified for germ cell mutagenicity.

Carcinogenicity
The substance or mixture is not classified for carcinogenicity.

Additional information regarding carcinogenicity (NTP, IARC, OSHA)
NTP: no IARC: no OSHA: no ETHYL DIGLYCOL

Reproductive toxicity
The substance or mixture is not classified for reproductive toxicity.

Specific target organ toxicity-single exposure
The substance or mixture is not classified for specific target organ toxicity-single exposure.

Specific target organ toxicity-repeated exposure
The substance or mixture is not classified for specific target organ toxicity-repeated exposure.

Aspiration hazard
The substance or mixture is not classified for aspiration hazard.

Symptoms

Skin	local	: The substance is prickling: redness.
		: Degreasing: in case of sustained contact a rough, dry skin, eczema.
	general	: The substance may be absorbed via the skin.
Ingestion	local	: The substance is prickling: sore throat.
	general	: The substance may be absorbed after ingestion.
Inhalation	local	: The substance is with atomising prickling: sore throat.
	general	: The substance may be absorbed after inhalation.
Eyes	local	: The substance is irritating: redness, pain.
Remarks symptoms		: The substance has an effect on: the liver, the kidneys, the central nervous system, the the male genitalia.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity
LC-50: 13400 mg/l/96H (Fish) ETHYL DIGLYCOL **Source** : IUCLID
EC-50: ≥3940 - ≤4670 mg/l/48H (Daphnia) ETHYL DIGLYCOL **Source** : IUCLID

12.2. Persistence and degradability

Biological oxygen demand : not traceable
Chemical oxygen demand : 1.74 g/g ETHYL DIGLYCOL **Source** : IUCLID
Biological/chemical oxygen demand ratio : not traceable
Degradability : not traceable

12.3. Bioaccumulative potential

Bioconcentration factor (BCF) : not traceable
Log Po/w : -0.80 ETHYL DIGLYCOL **Source** : IUCLID

12.4. Mobility in soil

Henry Constant : not traceable

12.5. Results of PBT and vPvB assessment

Data not available.

12.6. Other adverse effects

Remarks on ecotoxicity : none

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Remainder material or uncleaned empty packagings have to be incinerated in a proper installation or dumped on an approved landfill, in accordance with local and national legislation.

SECTION 14: Transport information

14.1. UN number

Not subject to Transport-regulation Dangerous Substances

14.2. UN proper shipping name

Not subject to Transport-regulation Dangerous Substances

14.3. Transport hazard class(es)

Not subject to Transport-regulation Dangerous Substances

14.4. Packing group

Not subject to Transport-regulation Dangerous Substances

14.5. Environmental hazards

Marine pollutant : no

14.6. Special precautions for user

Not subject to Transport-regulation Dangerous Substances

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Data not available.

SECTION 15: Regulatory information

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

- The component(s), as mentioned in section 3, are registered in the Toxic Substances Control Act Inventory (TSCA-USA).

15.2. Chemical safety assessment

- Data not available.

SECTION 16: Other information

Remarks on SDS : none

Overview relevant H-sentences from all components in section 3

H319 Causes serious eye irritation.

Training advice

Provide adequate information, instruction and training for operators.

A key or legend to abbreviations and acronyms used in the safety data sheet

REACH	Registration, Evaluation and Authorisation of Chemicals
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
CAS	Chemical Abstracts Service
TGG = TWA	Time Weighted Average
LEL	Lower Explosive Limit
UEL	Upper Explosive Limit
NTP	National Toxicology Program
KHC	Known Human Carcinogen
RAHC	Reasonably Anticipated Human Carcinogen
IARC	International Agency for Research on Cancer

OSHA	Occupational Safety & Health Administration
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
RID	Règlement concernant le transport international ferroviaire des marchandises dangereuses
UN	United Nations
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
EmS	Emergency Schedule

* Point to alterations with regard to the previous version.

The information provided in this Safety Data Sheet is believed to be correct as of the date issued. Philips Electronics Nederland B.V. makes no warranty as to its contents, nor as to its fitness for any particular purpose or use.