

PUR 661 LP

RELICON-HARDENER 485-02

SAFETY DATA SHEET

According to annexe II Regulation (EC) No 1907/2006 (modified by EU 453/2010)

Revision date : 09.08.2017

Print date : 09.08.2017

Version : 1.0

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

1.1 Product identifier

Trade name : Relicon-Hardener 485-02

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

No data available

1.3 Details of the supplier of the safety data sheet

Prysmian Câbles et Systèmes France
Zone industrielle - rue du port au vin
89100 - Gron / France

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1.4 Emergency telephone number

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Health hazards

health hazards

Acute Tox. 2

hazard statements for health hazards

H330 Fatal if inhaled

H332 Harmful if inhaled.

health hazards

Skin Irrit. 2

hazard statements for health hazards

H315 Causes skin irritation.

health hazards

Eye Irrit. 2

hazard statements for health hazards

H319 Causes serious eye irritation.

health hazards

Resp. Sens. 1

hazard statements for health hazards

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

health hazards

Skin Sens. 1

hazard statements for health hazards

H317 May cause an allergic skin reaction.

health hazards

Carc. 2

hazard statements for health hazards

H351 Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

health hazards

STOT SE 3

hazard statements for health hazards

H335 May cause respiratory irritation.

health hazards

STOT RE 2

hazard statements for health hazards

H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

2.2 Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]****Hazard pictograms**

GHS07



GHS08

Signal word

Danger

Hazard Statements**Hazard statements for health hazards:**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation. H332 Harmful if inhaled.

H330 Fatal if inhaled / Acute Tox 2

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Precautionary Statements**General:**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Prevention:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P285 In case of inadequate ventilation wear respiratory protection.

Response:

P304 + P340 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P261 + P273 + P302 + P311 + P342 If experiencing respiratory symptoms: call a POISON CENTER or doctor/physician

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to.

Product identifiers

Hazard components for labelling

9016-87-9 Polymethylene polyphenyl isocyanate

Special rules for supplemental label elements for certain mixtures

EUH208 Contains Isocyanate. May produce an allergic reaction.

Special rules on packaging

Tactile warning according to EN/ISO 11683.

Additional information

This mixture does not contain any substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

2.3 Other hazards

No data available

SECTION 3: Composition / information on ingredients

remark

Full text of H- and EUH-phrases: see section 16.

3.1/3.2 Mixture related information

Hazardous ingredients

Chemical Name CAS-No.		Classification (REGULATION (EC) No 1272 / 2008)	Concentration
Polymethylene polyphenyl polyisocyanate CAS 9016-87-9	H410 Very toxic to aquatic life with long lasting effects.	Acute Tox. 4, H332 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Resp. Sens. 1, H334 / Skin Sens. 1, H317 / Carc. 2, H351 / STOT SE 3, H335/STOT RE 2, H373	>=40 - <=100 %

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

Following skin contact

Wash immediately with:

Water and soap

Do not wash with:

Solvents/Thinner

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Do not induce vomiting. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures**Additional information**

Burning produces heavy smoke. Do not allow run-off from fire-fighting to enter drains or water courses. Use water spray jet to protect personnel and to cool endangered containers.

5.1 Extinguishing media**Suitable extinguishing media**

alcohol resistant foam

Carbon dioxide (CO₂)

Extinguishing powder

Water mist

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters**Special protective equipment for firefighters**

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel****Emergency procedures**

Remove all sources of ignition. Provide adequate ventilation.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Ensure waste is collected and contained.

6.3 Methods and material for containment and cleaning up**For containment****Suitable material for taking up**

Sand

Earth

Kieselguhr

Water (with cleaning agent)

Unsuitable material for taking up

Absorbing material, organic

For cleaning up**Suitable material for diluting or neutralizing**

For dirty surfaces: Mixture (flammable) of water (45Vol.%) + ethanol / isopropanol (50Vol.%) + ammonia dissolution (density=0,88) (5Vol.%)

Mixture (not flammable) of sodium carbonate (5Vol.%) + water (95Vol.%)

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advices on general occupational hygiene**

When using do not eat, drink, smoke, sniff. Work in well-ventilated zones or use proper respiratory protection. Draw up and observe skin protection programme. Use protective skin cream before handling the product. Thorough skin-cleansing after handling the product.

Protective measures**Advices on safe handling**

In case of allergy, asthma and chronic respiratory problems no handling with formulations like this. Never use pressure to empty container. Use only in well-ventilated areas.

Measures to prevent fire

No special fire protection measures are necessary.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Store in a place accessible by authorized persons only. Keep container tightly closed. Container should not be closed gas-tight.

Hints on joint storage**Materials to avoid**

Keep away from:

Strong acid

alkali

Oxidising agent

Storage class

Combustible liquids

Combustible solids

Non-combustible liquids

Non-combustible solids

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place.

Protect against:

Heat

UV-radiation/sunlight

Humidity

CO₂-formation causes pressure in closed containers.

storage temperature: 5 - 35 °C

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

CAS 9016-87-9 4,4'-Diphenylmethane diisocyanate, isomeres and homologues

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure

refer to chapter 7. No further action is necessary.

Personal protection equipment

Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Skin protection

Suitable gloves type

Gloves with long cuffs

Suitable material

CR (polychloroprene, chloroprene rubber)

NBR (Nitrile rubber)

Thickness of the glove material >0,5 mm 8h

Wearing time with occasional contact (splashes): >480 min

additional hand protection measures

Take recovery periods for skin regeneration. Check leak tightness/impermeability prior to use.

Body protection

Suitable protective clothing

Chemical protection clothing

Respiratory protection

Respiratory protection necessary at: insufficient ventilation

Suitable respiratory protection apparatus

Filtering Half-face mask (DIN EN 149) ABEK-P2

Suitable respiratory protection apparatus:

Self-contained respirator (breathing apparatus) (DIN EN 133)

remark

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state

liquid

Colour

black

Odour

characteristic

	Parameter	Method - source - remark
pH		No data available
Melting point/freezing point		No data available
Initial boiling point and boiling range	>360 °C	
Flash point (°C)	>208 °C	
Evaporation rate		No data available
Flammable solids		No data available
Flammable aerosols		No data available
Upper explosion limit (Vol-%)		No data available
Lower explosion limit (Vol-%)		No data available
Vapour pressure	<0,005 Pa (20 °C)	
Density	ca. 1,238g/cm (20 °C)	
Vapour density		No data available
Fat solubility (g/L)		No data available
Water solubility (g/L)		insoluble
Soluble (g/L) in		No data available
Partition coefficient: n-octanol/water		No data available
Auto-ignition temperature		No data available
Auto-ignition temperature		No data available
Decomposition temperature		No data available
Explosives		No data available
Oxidising gases		No data available
Oxidising liquids		No data available
Oxidising solids		No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Materials to avoid

The formulation slowly react with water under...

Formation of:

Carbon dioxide

Exothermic reaction with:

Alkali (Iye)

Acid, concentrated

Oxidising agent

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

Exothermal decomposition with formation of:

Alcohols Amines

Hydrogen cyanide (hydrocyanic acid)

Isocyanate

Carbon dioxide

Carbon monoxide.

Nitrogen oxides (NO_x)

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity: inhalation**

The acute inhalation median lethal concentration (LC50) and 95% confidence limits of the test material TODI, in the Sprague-Dawley Crl : CD[®] BR strain rat, were calculated to be:

All animals: 2.74 (1.85 - 4.07) mg/L

Males only: 2.06 (1.37 -3.08) mg/L

Females only: 4.44 (1.55 - 12.7) mg/L

TODI has to be classified for acute toxicity category 4 (H332: Harmful if inhaled) according to Regulation (EC) No 1272/2008 (CLP/GHS).

SECTION 12: Ecological information**12.1 Hazardous to the aquatic environment (acute / short-term)**

Hazard category: Aquatic Acute 1

Hazard statement:H400: Very toxic to aquatic life

12.2 Hazardous to the aquatic environment (long-term)

Hazard category: Aquatic Chronic 1

Hazard statement:H410: Very toxic to aquatic life with long lasting effects.

M-Factor acute:1

M-Factor chronic:1

12.3 Short-term toxicity to fish

The 96 -hour LC50 value based on time-weighted-mean measured concentrations was 0.25 mg/L with 95% confidence limits of 0.22 - 0.28 mg/L. The NOEC was determined to be 0.18 mg/L.

12.4 Short-term toxicity to aquatic invertebrates

The 48-hour EC50 value based on time-weighted mean measured concentrations was greater than 1.2 mg/L and correspondingly the No Observed Effect Concentration was greater than or equal to 1.2 mg/L.

12.5 Toxicity to aquatic algae

The 72-hour EC50 value based on the time-weighted mean measure test concentrations was greater than 1.5 mg/L and correspondingly the No Observed Effect Concentration was greater than or equal to 1.5 mg/L.

12.6 Toxicity to microorganism

Based on measured inhibition rates it can be stated that the 3-hour EC20, EC50 and EC80 were higher than 1000 mg/L. The NOEC was determined to be 1000 mg/L.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Appropriate disposal/Product:

Waste disposal according to official state regulations.

Appropriate disposal / Package

Contaminated packaging:

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning. Packing which cannot be properly cleaned must be thrown away.

Waste code product 080501

Special monitoring requiring wastes: Yes.

Waste name

waste isocyanates

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN-No.	not applicable	not applicable	not applicable
14.2 Proper Shipping Name			
14.3 Class(es)			
14.4 Packing group			
14.5 ENVIRONMENTALLY HAZARDOUS			
14.6 Special precautions for user			
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			

Special precautions for user

Transportation inside the factory premises: Transportation only in closed, upright and safed containers. Make sure that persons who handle the product are instructed and know what to do in case of accidental spill.

SECTION 15: Regulatory information

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

National regulations

France

N°62 (art L461-4, art L461-6 et D461-1)

Water hazard class (WGK)

slightly hazardous to water (WGK 1)

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Relevant R-, H- and EUH-phrases (Number and full text)

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye

H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H410 Very toxic to aquatic life with long lasting effects.

Department issuing safety data sheet : Usine de Gron

Contact : C. SPITERI

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