

Printing date 13.04.2011 Revision: 13.04.2011

# 1 Identification of the substance/mixture and of the company/undertaking

- · Product identifier
- · Trade name: MARIPUR 7000
- · Relevant identified uses of the substance or mixture and uses advised against No relevant identified uses mixture of substances.
- · Application of the substance / the preparation Polyurethane primer
- · Details of the supplier of the safety data sheet

MARIS POLYMERS SA

Industrial Area of Inofita

Inofita, Voiotia

Tel: +30 22960 32918 Fax: +30 22960 32919

e-mail: info@marispolymers.gr
· Emergency telephone number:
Poisoning Centre in Athens, Greece

Phone: +30 2107793777

#### 2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



#### GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

(Contd. on page 2)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 1)

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R20/21-40-48: Harmful by inhalation and in contact with skin. Limited evidence

of a carcinogenic effect. Danger of serious damage to health by

prolonged exposure.

Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

R10: Flammable.

· Information concerning particular hazards for human and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · Label elements
- · Labelling according to EU guidelines: The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- · Code letter and hazard designation of product:



Xn Harmful

- · Hazard-determining components of labelling: diphenylmethanediisocyanate, isomeres and homologues m-tolylidenediisocyanate xylene
- · Risk phrases:

10 Flammable.

20/21 Harmful by inhalation and in contact with skin.

36/37/38 Irritating to eyes, respiratory system and skin.

40 Limited evidence of a carcinogenic effect.

May cause sensitisation by inhalation and skin contact. 42/43

Danger of serious damage to health by prolonged exposure. 48

(Contd. on page 3)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 2)

- · Safety phrases:
- 9 Keep container in a well-ventilated place.
- Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 25 Avoid contact with eyes.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29 Do not empty into drains.
- 36/37 Wear suitable protective clothing and gloves.
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- This material and its container must be disposed of as hazardous waste.
- · Special labelling of certain preparations: Contains isocyanates. See information supplied by the manufacturer
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

· Components:		
CAS: 1330-20-7	xylene	35-55%
EINECS: 215-535-7	Xn R20/21	
Index number: 601-022-00-9	<b>X</b> Xi R38	
	R10	
	Flam. Liq. 3, H226	
	Acute Tox. 4, H312; Acute Tox. 4,	

H332; Skin Irrit. 2, H315

(Contd. on page 4)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

CAS: 123-86-4	n-butyl acetate	d. of page 3 5-25%
EINECS: 204-658-1	R10-66-67	3-2370
Index number: 607-025-00-1		
macx number: 007-023-00-1	Flam. Liq. 3, H226 STOT SE 3, H336	
G.1.G. 001.6.0F.0		5.050/
CAS: 9016-87-9	diphenylmethanediisocyanate,isomeres	5-25%
	and homologues	
	Xn R20-40-48	
	Xn R42/43 Xi R36/37/38	
	<u>A</u>	
	Resp. Sens. 1, H334 Acute Tox. 4, H332; Skin Irrit. 2,	
	H315; Eye Irrit. 2, H319; Skin	
	Sens. 1, H317; STOT SE 3, H335	
CAS: 26471-62-5	m-tolylidenediisocyanate	
EINECS: 247-722-4	T+ R26	0.10-1%
Index number: 615-006-00-4	Xn R40	
maca number: 013 000 00 4	Xn R42/43	
	Xi R36/37/38	
	R52/53	
	Carc. Cat. 3	
	Acute Tox. 2, H330	
	Resp. Sens. 1, H334; Carc. 2,	
	H351	
	Skin Irrit. 2, H315; Eye Irrit. 2,	
	H319; Skin Sens. 1, H317; STOT	
	SE 3, H335	
	Aquatic Chronic 3, H412	

## 4 First aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Take affected persons out into the fresh air.

- · After inhalation:
- Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 5)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 4)

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Rinse mouth. Consult a doctor for safety reasons.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder
- · For safety reasons unsuitable extinguishing agents: Water
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device and protective clothes.
- · Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

GB



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 5)

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- $\cdot$  Requirements to be met by storerooms and receptacles:

Store in a cool location.

Keep in cool and well-ventilated workplace.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

1330-20-7 xylene

WEL \$hort-term value: 441 mg/m<sup>3</sup>, 100 ppm

Long-term value: 220 mg/m<sup>3</sup>, 50 ppm

Sk; BMGV

123-86-4 n-butyl acetate

WEL \$hort-term value: 966 mg/m³, 200 ppm

Long-term value: 724 mg/m³, 150 ppm

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEL \$hort-term value: 0.07 mg/m<sup>3</sup>

Long-term value: 0.02 mg/m<sup>3</sup>

Sen; as -NCO

(Contd. on page 7)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 6)

#### 26471-62-5 m-tolylidenediisocyanate

WEL \$hort-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

Sen; as -NCO

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Respiratory protection:



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· Eye protection:



Safety glasses

(Contd. on page 8)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

· Body protection:

(Contd. of page 7)



Protective work clothing

Physical and chemical propert		
· Information on basic physical and o	chemical properties	
· General Information		
· Appearance:	I :	
Form: Colour:	Liquid Transparent Vallowich	
· Odour:	Transparent – Yellowish characteristic	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Melting point/Melting range:	Not applicable.	
Boiling point/Boiling range:	124°C	
· Flash point:	27°C	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	370°C	
· Decomposition temperature:	Not determined.	
· Self-igniting:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive. However, formation	
	of explosive air/vapour mixtures are possible.	
Explosion limits:		
Lower:	1.1 Vol %	
Upper:	7.5 Vol %	
· Vapour pressure at 20°C:	10.7 hPa	
· Density at 20°C:	1.00 g/cm <sup>3</sup>	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	

(Contd. on page 9)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

Solubility in / Miscibility with water:

Not determined.

Segregation coefficient (n-octanol/water):

Not determined.

Viscosity:

Dynamic:
Kinematic at 20°C:

Not determined.

Not determined.

Not determined.

### 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

Stable at environment temperature.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:

No dangerous decomposition products known.

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification:

1330-20-7 xylene

Oral LD50 4300 mg/kg (rat)
Dermal LD50 2000 mg/kg (rabbit)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

Sensitizing effect by skin contact is possible by prolonged exposure.

(Contd. on page 10)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 9)

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Xn

· SensitisationMay cause sensitisation when inhaled.

### 12 Ecological information

- · Toxicity
- · Acquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation



Disposal must be made according to National Legislation.



Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

Packaging may be reused or recycled after cleaning.

GB

(Contd. on page 11)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 10)

### 14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class: 3 Flammable liquids.

· UN-Number: 1866 · Hazard label: 3

 $\cdot \ Maritime \ transport \ IMDG:$ 



· IMDG Class: 3

· UN Number: 1866

· Label 3

· Packaging group: III

· EMS Number: F-E,S-E

· Proper shipping name: RESIN SOLUTION

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 3

· UN/ID Number: 1866

· Label 3

· Packaging group: III

· Proper shipping name: RESIN SOLUTION

- · UN "Model Regulation": UN1866, RESIN SOLUTION, 3, III
- · Special precautions for user Warning: Flammable liquids.
- · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

GB

(Contd. on page 12)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 11)

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to EU guidelines:

  The product has been classified and marked in accordance with EU Directives /

  Ordinance on Hazardous Materials.
- · Code letter and hazard designation of product:



Xn Harmful

- · Hazard-determining components of labelling: diphenylmethanediisocyanate,isomeres and homologues m-tolylidenediisocyanate xylene
- · Risk phrases:
  - Flammable.
- 20/21 Harmful by inhalation and in contact with skin.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 40 Limited evidence of a carcinogenic effect.
- 42/43 May cause sensitisation by inhalation and skin contact.
- Danger of serious damage to health by prolonged exposure.
- · Safety phrases:
- 9 Keep container in a well-ventilated place.
- Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 25 Avoid contact with eyes.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29 Do not empty into drains.
- 36/37 Wear suitable protective clothing and gloves.
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- This material and its container must be disposed of as hazardous waste.
- · Special labelling of certain preparations: Contains isocyanates. See information supplied by the manufacturer

(Contd. on page 13)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 12)

· Chemical safety assessment: A Chemical Safety Assessment has been carried out.

### 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.

· Relev	ant p	hrases
---------	-------	--------

· Relevant p	hrases
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if
	inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer

Suspected of causing cancer. H351

Harmful to aquatic life with long lasting effects. H412

Harmful by inhalation. R20

Harmful by inhalation and in contact with skin. R20/21

Very toxic by inhalation. R26

R36/37/38 Irritating to eyes, respiratory system and skin.

R38 Irritating to skin.

Limited evidence of a carcinogenic effect. R40

May cause sensitisation by inhalation and skin contact. R42/43

R48 Danger of serious damage to health by prolonged exposure.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

· Department issuing MSDS:

(Contd. on page 14)



Printing date 13.04.2011 Revision: 13.04.2011

Trade name: MARIPUR 7000

(Contd. of page 13)

SustChem Engineering LTD 144, 3rd Septemvriou, 112 51

Athens, Greece

Tel: +30 210 8252510 Fax:+30 210 8252575 e-mail: info@suschem.gr web site: www.suschem.gr

· Contact: MARIS POLYMERS SA · Abbreviations and acronyms:

ADR: Accord européensur le transport des marchandisesdangereuses par Route (European

Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandisesdangereuses par chemin

defer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association"

(IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

GB