

# **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 1 / 11

Replaced revision:8 (Dated 03/09/2020)

# **Safety Data Sheet**

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

#### 1.1. Product identifier

Product name BITUBOND

**UFI:** 4UE0-R0FC-F003-ATST

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

Intended use Special Type Waterproofing Bituminous Varnish - Asphalt Glue

#### 1.3. Details of the supplier of the safety data sheet

NORDIA S.A. 364 Kifisias Av. 15233 Chalandri - Greece Phone: +30 22950 22225 - Fax: +30 22950 22120

info@marmoline.gr www.marmoline.gr

#### 1.4. Emergency telephone number

For urgent inquiries refer to (0030) 2105589400 (0030) 2107793777

### **SECTION 2. Hazards identification**

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

azara diaddination and indication.					
Flammable liquid, category 3	H226	Flammable liquid and vapour.			
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.			
Eye irritation, category 2	H319	Causes serious eye irritation.			
Skin irritation, category 2	H315	Causes skin irritation.			
Specific target organ toxicity - single exposure,	H335	May cause respiratory irritation.			
category 3					
Hazardous to the aquatic environment, chronic	H412	Harmful to aquatic life with long lasting effects.			
toxicity, category 3					

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

#### Hazard pictograms:







Signal words: Warning

Hazard statements:

**H226** Flammable liquid and vapour.

**H373** May cause damage to organs through prolonged or repeated exposure.



## **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 2 / 11

Replaced revision:8 (Dated 03/09/2020)

#### **SECTION 2.** Hazards identification .../>>

H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.

**H412** Harmful to aquatic life with long lasting effects.

Precautionary statements:

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

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**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.

P405 Store locked up.

P501 Dispose of contents / container in accordance with local and national regulations.

**Contains:** Reaction mass of ethylbenzene and m-xylene and p-xylene

Product not intended for uses provided for by Directive 2004/42/EC.

#### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

#### **SECTION 3. Composition/information on ingredients**

#### 3.2. Mixtures

Contains:

Identification x = Conc. % Classification (EC) 1272/2008 (CLP)

Reaction mass of ethylbenzene and m-xylene and p-xylene

CAS  $35 \le x < 45$  Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304,

STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI to the

CLP Regulation: C

EC 905-562-9 STA Dermal: 1100 mg/kg, LC50 Inhalation vapours: >10 mg/l/4h

INDEX

REACH Reg. 01-2119488216-32-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

#### **SECTION 4. First aid measures**

#### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available



## **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 3 / 11

Replaced revision:8 (Dated 03/09/2020)

#### **SECTION 5. Firefighting measures**

#### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

#### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

#### 5.3. Advice for firefighters

#### **GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

#### **SECTION 6. Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

#### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

#### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

#### **SECTION 7. Handling and storage**

### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3. Specific end use(s)

Information not available



# **BITUBOND**

Revision nr 9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 4 / 11

Replaced revision:8 (Dated 03/09/2020)

#### **SECTION 8. Exposure controls/personal protection**

Deutschland

Slovensko

Flláta

#### 8.1. Control parameters

DEU

GRC

SVK

Regulatory References:

НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАШИТА НА РАБОТЕШИТЕ ОТ РИСКОВЕ. **BGR** България

СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (кам. ДВ. бр.5 от 17

SHAN 2020: )

Česká Republika Naľzení vlády i. 41/2020 Sb. Naľzení vlády, kterým se miní naľzení vlády i. 361/2007 Sb., C7F

kterým se stanoví podmínky ochrany zdraví pi práci, ve zniní pozdijších pedpisl

Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und

Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung

gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56

FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS

Π.Δ. 26/2020 (ΦΕΚ 50/A  $^{\circ}$  6.3.2020) Εναρμόνοη τις ελληνός ναμοθεύος προς  $^{\circ}$  διοθές των

ύπω 2017/2398/ΕΕ, 2019/130/ΕΕ ο 2019/983/ΕΕ «α το τοποτοία τις κότος 2004/37/ΕΚ "από με το ποτοία του πολούου από τις κότος που σούοια μετα έθνα

σε καρκιογόνους ή μειολλαγόνους παράγονης κατά την εγιασία''»

Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki HUN Magyarország

tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről

Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama HRV Hrvatska

na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021) NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopla

nariadenie vlády Slovenskei republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami

súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších

predpisov

**GBR** United Kingdom EH40/2005 Workplace exposure limits (Fourth Edition 2020) OEL EU EU

Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU)

2017/2398: Directive (EU) 2017/164: Directive 2009/161/EU: Directive 2006/15/EC: Directive

2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

TLV-ACGIH **ACGIH 2021** 

reshold Limit V	/alue						
Туре	Country	TWA/8h				Remarks / Observations	
		mg/m3	ppm				
TLV	CZE	200		400		SKIN	
AGW	DEU	440	100	880	200	SKIN	
MAK	DEU	440	100	880	200	SKIN	
VLEP	FRA	221	50	442	100	SKIN	
TLV	GRC	435	100	650	150	SKIN	
AK	HUN	221		442		SKIN	
GVI/KGVI	HRV	221	50	442	100	SKIN	
NPEL	SVK	221	50	442		SKIN	
WEL	GBR	220	50	441	100		
OEL	EU	221	50	442	100	SKIN	
TLV-ACGIH		434	100	651	150		

Health - Derived no-eff	ect level - Di	NEL/DMEL						
Effects on consumers					Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	1,6				
				mg/kg/d				
Inhalation	174	174	VND	14,8	289	289	VND	77
	mg/m3	mg/m3		mg/m3	mg/m3	mg/m3		mg/m3
Skin			VND	108			VND	180
				ma/ka/d				ma/ka/d

Leaend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction. VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

#### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.



### BITUBOND

Revision nr 9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 5 / 11

Information

Method: ASTM D41

Replaced revision:8 (Dated 03/09/2020)

#### SECTION 8. Exposure controls/personal protection .../>>

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

**EYE PROTECTION** 

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529. **ENVIRONMENTAL EXPOSURE CONTROLS** 

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

### **SECTION 9. Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

**Properties** Value Appearance liquid Colour black Odour characteristic Melting point / freezing point Not available Initial boiling point Not available Flammability Not available Lower explosive limit Not available Upper explosive limit Not available Flash point 23 ≤ T ≤ 60 °C Auto-ignition temperature Not available

Not available

Kinematic viscosity >10 mm2/sec (DIN ISO Cup 3

mm)

g/l

Solubility insoluble in water Partition coefficient: n-octanol/water Not available Vapour pressure Not available Density and/or relative density 0.90-0.95

Relative vapour density Not available

Particle characteristics Not applicable

#### 9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

@EPY 11.1.2 - SDS 1004.14



## **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 6 / 11

Replaced revision:8 (Dated 03/09/2020)

### **SECTION 10. Stability and reactivity**

#### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

#### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

#### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

#### 10.5. Incompatible materials

Information not available

#### 10.6. Hazardous decomposition products

Information not available

### **SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure.

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

#### **ACUTE TOXICITY**

ATE (Inhalation - vapours) of the mixture: > 20 mg/l

ATE (Oral) of the mixture: Not classified (no significant component)

ATE (Dermal) of the mixture: >2000 mg/kg

Reaction mass of ethylbenzene and m-xylene and p-xylene

STA (Dermal): 1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

LD50 (Oral): > 2000 mg/kg Rat LC50 (Inhalation vapours): > 10 mg/l/4h Rat

#### SKIN CORROSION / IRRITATION

Causes skin irritation



# **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 7 / 11 Replaced revision:8 (Dated 03/09/2020)

#### **SECTION 11. Toxicological information** .../>>

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

#### **RESPIRATORY OR SKIN SENSITISATION**

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### **CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

#### STOT - SINGLE EXPOSURE

May cause respiratory irritation

Target organs

Information not available

Route of exposure

Information not available

#### STOT - REPEATED EXPOSURE

May cause damage to organs

Target organs

Information not available

Route of exposure

Information not available

#### **ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class Viscosity: >10 mm2/sec (DIN ISO Cup 3 mm)

#### 11.2. Information on other hazards



## **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 8 / 11

Replaced revision:8 (Dated 03/09/2020)

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

#### **SECTION 12. Ecological information**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

#### 12.1. Toxicity

Reaction mass of ethylbenzene and m-xylene and p-xylene

 LC50 - for Fish
 > 1 mg/l/96h

 EC50 - for Crustacea
 > 1 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 > 1 mg/l/72h

Chronic NOEC for Fish > 1 mg/l based on test data

Chronic NOEC for Crustacea > 0,1 mg/l

#### 12.2. Persistence and degradability

Reaction mass of ethylbenzene and m-xylene and p-xylene Rapidly degradable

#### 12.3. Bioaccumulative potential

Reaction mass of ethylbenzene and m-xylene and p-xylene Partition coefficient: n-octanol/water 3,12

#### 12.4. Mobility in soil

Information not available

#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

#### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

#### 12.7. Other adverse effects

Information not available

#### **SECTION 13. Disposal considerations**

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

**CONTAMINATED PACKAGING** 

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

#### **SECTION 14. Transport information**

#### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1263

#### 14.2. UN proper shipping name

ADR / RID: PAINT RELATED MATERIAL IMDG: PAINT RELATED MATERIAL IATA: PAINT RELATED MATERIAL



# **BITUBOND**

Revision nr 9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 9 / 11

Replaced revision:8 (Dated 03/09/2020)

### **SECTION 14. Transport information** .../>>

#### 14.3. Transport hazard class(es)

ADR / RID:

Class: 3

Label: 3

IMDG:

Class: 3

Label: 3

IATA:

Class: 3

Label: 3



#### 14.4. Packing group

ADR / RID, IMDG, IATA: Ш

#### 14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

#### 14.6. Special precautions for user

HIN - Kemler: 30

Special provision: 163, 367, 650

IMDG:

IATA: Cargo:

Pass.:

Special provision:

Limited Quantities: 5 L

Limited Quantities: 5 L

Maximum quantity: 220 L

Maximum quantity: 60 L

A3, A72, A192

ADR / RID:

EMS: F-E, <u>S-E</u>

Tunnel restriction code: (D/E)

Packaging instructions: 366 Packaging instructions: 355

### 14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

### **SECTION 15. Regulatory information**

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

Seveso Category - Directive 2012/18/EU:

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

**Product** Point

3 - 40

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

Substances subject to the Stockholm Convention:

None

#### Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### ΕN



# **NORDIA S.A.**

# **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 10 / 11

Replaced revision:8 (Dated 03/09/2020)

#### **SECTION 15. Regulatory information** .../>>

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

#### **SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3 Flammable liquid, category 3
Acute Tox. 4 Acute toxicity, category 4
Asp. Tox. 1 Aspiration hazard, category 1

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Eye Irrit. 2 Eye irritation, category 2 Skin Irrit. 2 Skin irritation, category 2

**STOT SE 3** Specific target organ toxicity - single exposure, category 3 **Aquatic Chronic 3** Hazardous to the aquatic environment, chronic toxicity, category 3

H226 Flammable liquid and vapour.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.

**H304** May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

H319 Causes serious eye irritation.
H315 Causes skin irritation.

**H335** May cause respiratory irritation.

**H412** Harmful to aquatic life with long lasting effects.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### **GENERAL BIBLIOGRAPHY**

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament



### **BITUBOND**

Revision nr.9 Dated 13/09/2022 Printed on 13/09/2022 Page n. 11/11 Replaced revision:8 (Dated 03/09/2020)

# SECTION 16. Other information .../>>

- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

02/03/08/09/11/12/14/15/16.