

Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

1. NATURE OF THE MATERIALS AND MANUFACTURING COMPANY

IDENTIFICATION OF THE PRODUCT: POLYURETHANE SEALANT

USE OF THE PRODUCT: One component elastic sealant suitable for various types of use.

PRODUCT REGISTRATION NUMBER Not available.

COMPANY IDENTIFICATION: INDASA – Indústria de Abrasivos, S. A.

ZONA INDUSTRIAL DE AVEIRO, LOTE 46

PO BOX 3005

3801-101 AVEIRO - PORTUGAL

TEL.: + 351 234 303 600 FAX: + 351 234 303 601 E-MAIL: INDASA@INDASA.PT

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 data sheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. 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:

Respiratory sensitization, category 1 H334 - May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

2.2. Label elements:

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

Hazard pictograms:



Signal word: Danger

Hazard statements: H334 - May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

EUH204 - Contains isocyanates. May produce an allergic reaction.

• **Precautionary statements:** P284 - In case of inadequate ventilation] wear respiratory protection.

P304+P340 - IF INHALED: remove person to fresh air and keep comfortable for

breathing.

P342+P311 - If experiencing respiratory symptoms: call a POISON CENTER /

doctor / . . .

Contains: TRIS(NONYLPHENYL)PHOSPHITE

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

2.3. Other hazards:

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



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

3. COMPOSITION/INFORMATION ON THE COMPONENTS

3.1 Substances: Information not relevant

3.2 Mixtures:

Contains:

Chemical name	(%)	(%) N.º Identification		Classification 1272/2008 (CLP)	PBT / WEL	
REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p- XYLENE	0–5,7	CAS:	-	Flam. Liq. 2 H225 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	-	
		INDEX:	-			
		EC:	905-562-9			
		REACH:	01-2119555267-33			
XYLENE (BENZENE <0,01%)	0–5,7	CAS:	1330-20-7	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 Note C	-	
		INDEX:	601-022-00-9	Note C		
		EC: REACH:	215-535-7 01-2119488216-32-XXXX			
ETHYL ACETATE	1–1,5	CAS:	141-78-6	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336 EUH066	-	
		INDEX:	607-022-00-5			
		EC: REACH:	205-500-4 01-2119475103-46			
DIPHENYLMETHAN E DIISOCYANATE, ISOMERS AND HOMOLOGUES	0,89–1	CAS: INDEX: EC: REACH:	9016-87-9	Carc. 2 H351 Acute Tox. 4 H332 STOT RE 2 H373 Eye Irrit. 2 H319 Skin Irrit. 2 H315 STOT SE 3 H335 Resp. Sens. 1 H334 Skin Sens. 1 H317	-	
BIS (2,2,6,6 – TETRAMETHYL-4- PIPERIDYL) SEBACATE	0,3–0,35	CAS: INDEX: EC: REACH:	52829-07-9 - 258-207-9 01-2119537297-32-XXXX	Eye Irrit. 2 H319 Aquatic Chronic 2 H411	- -	
	0,25-0,3	CAS:	101-68-8	Carc. 2 H351 Acute Tox. 4 H332 STOT RE 2 H373	-	

Page 2 of 16



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

DIPHENYLMETHAN E-4,4'- DIISOCYANATE				Eye Irrit. 2 H319 Skin Irrit. 2 H315 STOT SE 3 H335 Resp. Sens. 1 H334 Skin Sens. 1 H317 Note 2 C	
		INDEX:	615-005-00-9		
		EC:	202-966-0		
		REACH:	01-2119457014-47-XXXX		
TRIS (NONYLPHENYL)P	0,2–0,25	CAS:	26523-78-4	Skin Sens. 1 H317 Aquatic Acute 1 H400 M=1 Aquatic Chronic 1 H410	-
HOSPHITE		INDEX:	-		
		EC:	247-759-6		
		REACH:	01-2119520601-54-XXXX		

Note: Upper limit is not included into the range.

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

The two substances with no. REACH: 01-2119555267-33 and Nr. REACH: 01-2119488216-32 constitute a mixture in variable proportions and then the maximum percentage to be considered in the finished product is equal to the maximum considered for only one of them. They having the same classification, each combination does not involve changes in the final classification of the mixture.

4. FIRST-AID MEASURES

4.1 Description of first aid measures

Inhalation Remove to open air. If the subject stops breathing, administer artificial respiration. Get

medical advice/attention immediately.

Skin contact Remove contaminated clothing. Rinse skin with a shower immediately. Get medical

advice/attention immediately. Wash contaminated clothing before using it again.

Eye contact 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.

Ingestion Get medical advice/attention immediately. Do not induce vomiting. Do not administer

anything not explicitly authorised by a doctor.

4.2 Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by the contained substances, see chap. 11.

4.3 Indication of any immediate medical attention and special treatment needed

Information not available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

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

Page 3 of 16



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

5.3 Advice for fire-fighters

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 firefighting 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).

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.

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. Check incompatibility for container material in section 7. 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.

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. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. 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. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well-ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 10

7.3 Specific end use(s)

Information not available.



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United	EH40/2005 Workplace exposure limits
	Kingdom	
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	NLD Nederland Databank of the social and Economic Concil
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
EU	TLV-ACGIH	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV - ACGIH	ACGIH 2014

Hazardous ingredients:

DIISONONYL PHTHALATE								
Threshold Limit Value								
Type	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
WEL	GBR	5						

		XYLENE (BENZENE <0.0	1%)		
Threshold Limit Value						
Туре	Country	TW	A/8h	STE	L/15min	
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN.
MAK	DEU	440	100	880	200	SKIN.
VLA	ESP	221	50	442	100	SKIN.
VLEP	FRA	221	50	442	100	SKIN.
WEL	GBR	220	50	441	100	-
TLV	GRC	435	100	650	150	-
GVI	HRV	221	50	442	100	SKIN.
TLV	ITA	221	50	442	100	SKIN.
OEL	NLD	210	-	442	-	SKIN.
NDS	POL	100	-	-	-	-
MAK	SWE	221	50	442	100	SKIN.
OEL	UE	221	50	442	100	SKIN.
TLV-ACGIH	-	434	100	651	150	-

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value for water, intermittent release	0,327	mg/l



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg

Health - Derived no-effect level - DNEL / DMEL

		Effects on	consumers	3	Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	-	-	VND	1,6mg/kg	-	-	-	-
Inhalation	VND	174mg/m3	VND	14,8mg/m3	VND	289mg/m3	VND	77mg/m3
Skin	-	-	VND	108mg/kg	-	-	VND	180mg/kg

REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE								
Threshold Limit Value								
Туре	Country	TWA/8h		STE				
		mg/m3	ppm	mg/m3	ppm			
TLV-ACGIH	-	221	50	442	100	-		

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value for water, intermittent release	0,327	mg/l
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg

Health - Derived no-effect level - DNEL / DMEL

		Effects on	consumers	3	Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	-	-	VND	1,6mg/kg	-	-	-	-
Inhalation	VND	174mg/m3	VND	14,8mg/m3	VND	289mg/m3	VND	77mg/m3
Skin	-	-	VND	108mg/kg	-	-	VND	180mg/kg

	ETHYL ACETATE									
Threshold Limit Value										
Туре	Country	TW	A/8h	STE	_/15min					
		mg/m3	ppm	mg/m3	ppm					
AGW	DEU	1500	400	3000	800	-				
MAK	DEU	1500	400	3000	800	-				
VLA	ESP	1460	400	-	-	-				
VLEP	FRA	1400	400	-	-	-				
WEL	GBR	-	200	-	400	-				
TLV	GRC	1400	400	-	-	-				
GVI	HRV	-	200	-	400	-				
OEL	NLD	550	-	1100	-	-				
NDS	POL	200	-	600	-	-				



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

MAK	SWE	500	150	1100	300	-
TLV-ACGIH	-	1441	400	-	-	-

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,26	mg/l
Normal value in marine water	0,026	mg/l
Normal value for fresh water sediment	1,25	mg/kg
Normal value for marine water sediment	0,125	mg/kg
Normal value for water, intermittent release	1,65	mg/l
Normal value of STP microorganisms	650	mg/l
Normal value for the terrestrial compartment	0,24	mg/kg

Health - Derived no-effect level - DNEL / 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	4,5mg/kg	-	-	-	-
Inhalation	734mg/m3	734mg/m3	367mg/m3	367mg/m3	1468mg/m3	1468mg/m3	734mg/m3	734mg/m3
Skin			VND	37mg/kg	-	-	VND	63mg/kg

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.							
Threshold Limit Value							
Туре	Country	TW	A/8h	STEI	_/15min		
		mg/m3	ppm	mg/m3	ppm		
OEL	ITA	-	0,005	-	-	-	
TLV - ACGIH	-	-	0,005	-	-	-	

BUMETRIZOLE							
Threshold Limit Value							
Type Country TWA/8h STEL/15min							
		mg/m3	ppm	mg/m3	ppm		
TLV - ACGIH	-	10	-	-	-	-	

• BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,005	mg/l
Normal value in marine water	0,0005	mg/l
Normal value for fresh water sediment	8,02	mg/kg
Normal value for marine water sediment	0,802	mg/kg
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	1,6	mg/kg

Health - Derived no-effect level - DNEL / DMEL

		Effects or	consumers	3	Effects on workers			
Route of	Acute Acute Chronic		Chronic	Acute	Acute Acute Chronic		Chronic	
exposure	local systemic local systemic				local	systemic	local	systemic



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

Oral	VND	1mg/kg	VND	1mg/kg	-	-	-	-
Inhalation	VND	1,4mg/m3	VND	1,4mg/m3	VND	5,6mg/m3	VND	5,6mg/m3
Skin	VND	1mg/kg	VND	1mg/kg	VND	2mg/kg	VND	2mg/kg

	DI	PHENYLMETH	IANE-4,4'-DIISO	CYANATE		
Threshold Limit Value						
Туре	Country	TWA/8h		STE	L/15min	
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	0,05	-	0,05	-	-
MAK	DEU	0,05	-	0,05	-	SKIN
MAK	DEU	0,05	-	0,05	-	INHAL
VLA	ESP	0,052	0,005	-	-	-
VLEP	FRA	0,1	0,01	0,2	0,02	-
TLV	GRC	0,2	-	0,2	-	-
NDS	POL	0,05	-	0,2	-	-
MAK	SWE	0,03	0,002	0,05 (C)	0,005 (C)	-
TLV-ACGIH	-	0,051	0,005	-	-	-

Predicted no-effect concentration - PNEC

Normal value in fresh water	1,01	mg/l
Normal value in marine water	0,11	mg/l
Normal value of STP microorganisms	1,01	mg/l
Normal value for the terrestrial compartment	1,01	mg/kg

Health - Derived no-effect level - DNEL / DMEL

		Effects on c	onsumers		Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemi c	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	20mg/kg bw/d	-	-	-	-	-	-
Inhalatio n	0,05mg/m3	0,05mg/m 3	0,025mg/m 3	0,025 mg/m3	0,1mg/m3	0,1mg/m3	0,05mg/m 3	0,05mg/m 3
Skin	17,2mg/cm 2	25mg/kg bw/d	-	-	28,7mg/cm 2	50mg/kg/ d	-	-

• 2.2 - DIMORPHOLINODIETHYL ETHER

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,1	mg/l
Normal value in marine water	0,01	mg/l
Normal value for fresh water sediment	8,2	mg/kg
Normal value for marine water sediment	0,82	mg/kg
Normal value for water, intermittent release	1	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	1,58	mg/kg



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

Health - Derived no-effect level - DNEL / 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	0,5mg/kg/d	-	-	-	-
Inhalation	-	-	VND	1,8mg/m3	-	-	VND	7,28mg/m3
Skin	-	-	VND	0,5mg/kg/d	-	-	VND	1mg/kg/d

Legend:

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

Respiratory protection: In case of exceeding the threshold value (e.g., TLV-TWA) of the substance or one or

more of the substances present in the product, it is advisable to wear a mask with filter type A for organic vapours, the class (1, 2 or 3) must be chosen according to the limit

concentration of use (1000, 5000 or 10000 ppm) (ref. standard EN 14387).

Hand protection: Protect your hands with work gloves, category III (ref. standard EN 374). For the final

choice of material, you need to assess the type of use. In case of contact for the short term or as protection against splashes, use gloves made of nitrile (0.3mm thickness, permeation time >480 min.). In the event of continued exposure use butyl rubber gloves (0.4mm thickness, permeation time> 480 min.). Contaminated gloves should

be removed.

Eye protection: Wear airtight protective goggles (see standard EN 166).

Skin protection: Wear category II professional long-sleeved overalls and safety footwear (see Directive

89/686/EEC and standard EN ISO 20344). Wash body with soap and water after

removing protective clothing.

Environmental: The emissions generated by manufacturing processes, including those generated by

ventilation equipment, should be checked to ensure compliance with environmental

standards.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: paste

Colour: various

Odour: typical

Odour threshold: Not available.

pH: Not available.

Melting point / freezing point: Not available.

Initial boiling point: Not available.

Boiling range: Not available.



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

Flash point: Not applicable.

Evaporation rate: Not available.

Flammability (solid, gas): Not flammable.

Lower in flammability limit: Not available.

Upper in flammability limit: Not available.

Lower explosive limit: Not available.

Upper explosive limit: Not available.

Vapour pressure: Not available.

Vapour density: Not available.

Relative density: 1,33 Kg/l

Solubility: insoluble in water

Partition coefficient: n-octanol/water: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: 60000 - 120000 cps

Explosive properties: Not available.

Oxidising properties: Not available.

9.2. Other information:

VOC (Directive 2010/75/EC): 6,90% - 91,77 g/litre

VOC (volatile carbon): Not available

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:

The vapours may also form explosive mixtures with the air.

10.4 Conditions to avoid: Avoid overheating. Avoid bunching of electrostatic charges. Avoid all

sources of ignition.

10.5 Incompatible materials: Information not available.

10.6 Hazardous decomposition

products:

In the event of thermal decomposition or fire, gases and vapours that are

potentially dangerous to health may be released.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Page 10 of 16

Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

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.

Inhalation of this product causes sensitization, which may then give rise to a series of inflammatory episodes, most of all characterized by obstruction and affecting the respiratory system. Sometimes, sensitization phenomena arise together with evident rhinitis and asthma.

Damages to the respiratory system depend on the inhaled quantity, on the product concentration in the working environment and on the exposure time.

This product contains isocyanates. Producer's specifications are as follows: Ready-to-use products containing isocyanates may irritate mucosa's, particularly those of the respiratory system, and may give rise to hypersensitivity reactions. Vapour or aerosol inhalation may lead to sensitization. Please take all the measures used for all solventcontaining products while manipulating isocyanate-containing products. Avoid vapour and aerosol inhalation. People with allergic or asthmatic precedents or subject to respiratory disorders should not handle products containing isocyanates.

This product contains sensitizing substance/s and may cause allergic reactions.

TRIS(NONYLPHENYL)PHOSPHITE

LD50 (Oral). > 15000 mg/kg Rattus sp.

LD50 (Dermal). > 2000 mg/kg Oryctolagus sp.

DIPHENYLMETHANE DIISOCYANATE. ISOMERS AND HOMOLOGUES.

LD50 (Oral). > 10000 mg/kg Rattus sp.

LD50 (Dermal). > 9400 mg/kg Oryctolagus sp.

LC50 (Inhalation). 0,31 mg/l/4h Rattus sp.

DIPHENYLMETHANE-4,4'-DIISOCYANATE

LD50 (Oral). > 2000 mg/kg Rattus sp.

LD50 (Dermal). > 9400 mg/kg Oryctolagus sp.

LC50 (Inhalation). 2,24 mg/l Rattus sp.

BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE

LD50 (Oral). > 2000 mg/kg Rattus sp.

LD50 (Dermal). > 2000 mg/kg Rattus sp.

LC50 (Inhalation). 5 mg/l Rattus sp.

REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE

LD50 (Oral), 5627 mg/kg Mus sp.

LD50 (Dermal). > 5000 ml/kg Oryctolagus sp.

LC50 (Inhalation). 6700 ppm/4h Rattus sp.

ETHYL ACETATE

LD50 (Oral). 5620 mg/kg Rattus sp.

LD50 (Dermal). > 20000 mg/kg Oryctolagus sp.

LC50 (Inhalation). 1600 mg/kg Oryctolagus sp.

XYLENE (BENZENE < 0.01%)

LD50 (Oral). 5627 mg/kg Mus sp.

LD50 (Dermal). > 5000 mg/kg Oryctolagus sp.

LC50 (Inhalation). 6700 ppm/4h Rattus sp.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

TRIS(NONYLPHENYL)PHOSPHITE LC50 - for Fish.

7,1 mg/l/96h Danio rerio



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES. LC50 - for Fish. > 1000 mg/l/96h Danio rerio

EC50 - for Algae / Aquatic Plants. > 1640 mg/l/72h Scenedesmus subspicatus

Chronic NOEC for Crustacea. > 10 mg/l Daphnia magna

DIPHENYLMETHANE-4,4'-DIISOCYANATE

LC50 - for Fish. > 1000 mg/l/96h Danio rerio

Chronic NOEC for Algae / Aquatic Plants. 1640 mg/l Desmodesmus subspicatus

BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE

LC50 - for Fish. 4,4 mg/l/96h Brachydanio rerio

EC50 - for Algae / Aquatic Plants. 1,9 mg/l/72h Scenedesmus subspicatus

REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE LC50 - for Fish. 2,6 mg/l/96h Salmo gairdneri

EC10 for Algae / Aquatic Plants. 1,9 mg/l/72h Selenastrum capricornutum

ETHYL ACETATE

LC50 - for Fish. > 212 mg/l/96h

EC50 - for Crustacea. 260 mg/l/48h Daphnia pulex

XYLENE (BENZENE < 0.01%)

LC50 - for Fish. 2,6 mg/l/96h Oncorhynchus mykiss

EC50 - for Algae / Aquatic Plants. 4,36 mg/l/72h Pseudokirchneriella subcapitata

Chronic NOEC for Fish. > 1,3 mg/l Oncorhynchus mykiss Chronic NOEC for Crustacea. 1,57 mg/l Daphnia magna

12.2. Persistence and degradability:

TRIS(NONYLPHENYL)PHOSPHITE

NOT rapidly biodegradable.

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

NOT rapidly biodegradable.

BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE

NOT rapidly biodegradable.

ETHYL ACETATE

Solubility in water. > 10000 mg/l

Rapidly biodegradable.

XYLENE (BENZENE < 0.01%)

Rapidly biodegradable.

12.3. Bio accumulative potential:

ETHYL ACETATE

Partition coefficient: n-octanol/water. 0,68 BCF. 30

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 greater than 0,1%.



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

12.6. Other adverse effects:

Information not available.

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.

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

14. TRANSPORT INFORMATION

14.1. UN number.

Not applicable.

14.2. UN proper shipping name.

Not applicable.

14.3. Transport hazard class(es).

Not applicable.

14.4. Packing group.

Not applicable.

14.5. Environmental hazards.

Not applicable.

14.6. Special precautions for user.

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

15. REGULATORY INFORMATION

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

Seveso category: None.

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

Product: Point: 3

Contained substance.

Point: 52 DIISONONYL PHTHALATE

Point: 56 DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

Point: 56 DIPHENYLMETHANE-4,4'-DIISOCYANATE

Reg. no.: 01-2119457014-47-XXXX

Substances in Candidate List (Art. 59 REACH):

None.

Substances subject to authorization (Annex XIV REACH):

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

None

Substances subject to the Rotterdam Convention:

None.

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.

German regulation on the classification of substances hazardous to water (VwVwS 2005).

WGK 2: Hazard to waters.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

16. OTHER INFORMATION

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

Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Resp. Sens. 1 Respiratory sensitization, category 1

Skin Sens. 1 Skin sensitization, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H351 Suspected of causing cancer.

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.

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

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH204 Contains isocyanates. May produce an allergic reaction.

Use descriptor system:

ERC 2 Formulation of preparations

ERC 5 Industrial use resulting in inclusion into or onto a matrix

ERC 8b Wide dispersive indoor use of reactive substances in open systems

PC 1 Adhesives, sealants

PC 21 Laboratory chemicals

PROC 10 Roller application or brushing

PROC 15 Use as laboratory reagent

PROC 3 Use in closed batch process (synthesis or formulation)

PROC 4 Use in batch and other process (synthesis) where opportunity for exposure arises



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

PROC 5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC 8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC 9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

SU 10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU 17 General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment

SU 19 Building and construction work

LEGEND:

ADR: European Agreement concerning the carriage of Dangerous goods by Road

CAS NUMBER: Chemical Abstract Service Number

CE50: Effective concentration (required to induce a 50% effect)

CE NUMBER: Identifier in ESIS (European archive of existing substances)

CLP: EC Regulation 1272/2008 DNEL: Derived No Effect Level EmS: Emergency Schedule

GHS: Globally Harmonized System of classification and labelling 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 NUMBER: Identifier in Annex VI of CLP

LC50: Lethal Concentration 50%

LD50: Lethal dose 50%

OEL: Occupational Exposure Level

PBT: Persistent bio accumulative and toxic as REACH Regulation

PEC: Predicted environmental Concentration

PEL: Predicted exposure level

PNEC: Predicted no effect concentration

REACH: EC Regulation 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 STEL: Short-term exposure limit

TWA: Time-weighted average exposure limit

VOC: Volatile organic Compounds

vPvB: Very Persistent and very Bio accumulative as for REACH Regulation

WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY:

- 1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 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

Other information's:

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

The purpose of this safety sheet is to describe the products in terms of health and safety and not as a product specification, guaranteeing their properties.

	Page	15	of	1	6
--	------	----	----	---	---



Regulation (EC) nr. 1907/2006

11th of July 2018, SP04.00381 Rev. 1

The information on this Data Sheet is accurate to the best of our knowledge as to the proper use and handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with other products or any other process is the responsibility of the user.

The information does not form part of any contractual agreement. It remains the user's responsibility to adhere existing laws and regulations.

Issued by: Maria Manuel Santos/ INDASA Pt Contact: indasa@indasa.pt