



SAFETY DATA SHEET

Regulation (EC) nr. 1907/2006

22th of March 2018, SP04.00373 Rev. 1

1. NATURE OF THE MATERIALS AND MANUFACTURING COMPANY

IDENTIFICATION OF THE PRODUCT: DIRECT GLAZING SEALANT

USE OF THE PRODUCT: One component adhesive for the automotive industry.

PRODUCT REGISTRATION NUMBER Not available.

COMPANY IDENTIFICATION: **INDASA – Indústria de Abrasivos, S. A.**
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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.
Skin sensitization, category 1	H317 – May cause an allergic skin reaction.

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.
H317 – May cause an allergic skin reaction.
EUH204 – Contains isocyanates. May produce an allergic reaction.
- Precautionary statements:** P261 - Avoid breathing dust / fume / gas / mist / vapours / spray.
P280 – Wear protective gloves / protective clothing / eye protection / face protection.
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 / . . .
P362+P364 - Take off contaminated clothing and wash it before reuse.



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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%.

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
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER	4,5 – 5	CAS:	28182-81-2	Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317	-
		INDEX:	-		
		EC:	931-274-8		
		REACH:	01-2119485796-17		
DIPHENYLMETHAN E-4,4'-DIISOCYANATE	0,89 - 1	CAS:	101-68-8	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, Note 2 C	-
		INDEX:	615-005-00-9		
		EC:	202-966-0		
		REACH:	01-2119457014-47-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.

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.



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5. FIRE-FIGHTING MEASURES

- 5.1 Extinguishing media** Suitable extinguishing equipment: should be of the conventional kind: carbon dioxide, foam, powder and water spray.
- Unsuitable extinguishing equipment: None in particular.
- 5.2 Special hazards arising from the substance or mixture** Hazards caused by exposure in the event of fire – Do not breathe combustion products.
- 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** Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.
- 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.



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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 Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
	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			

DIPHENYLMETHANE-4,4'-DIISOCYANATE						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/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	0,03		0,09		
MAK	SWE	0,03	0,002	0,05 (C)	0,005 (C)	
TLV - ACGIH		0,005	0,005			

Legend:

(C) = CEILING; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

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. Provide an emergency shower with face and eye wash station.

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).



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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: black

Odour: characteristic

Odour threshold: Not available.

pH: Not available.

Melting point / freezing point: Not available.

Initial boiling point: Not available.

Boiling range: Not available.

Flash point: > 100 °C.

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

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: 1,36 Kg/l

Solubility: Not available.

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

Auto-ignition temperature: Not available.



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Decomposition temperature: Not available.

Viscosity: 250000 - 350000 cps

Explosive properties: Not available.

Oxidising properties: Not available.

9.2. Other information:

VOC (Directive 2010/75/EC): 0

VOC (volatile carbon): 0

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.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

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.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythema's, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythema's, edemas and exudative phenomena prevail during the acute phase. Scurvy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

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 solvent-containing 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.



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- **HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER**

LD50 (Oral): > 2500 mg/kg Rattus sp.

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

12. ECOLOGICAL INFORMATION

12.1. Toxicity

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

EC50 - for Algae / Aquatic Plants. > 1000 mg/l/72h Scenedesmus sp.

Chronic NOEC for Fish. > 100 mg/l Danio rerio

Chronic NOEC for Crustacea. > 100 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

12.2. Persistence and degradability:

DIPHENYLMETHANE-4,4'-DIISOCYANATE

Solubility in water. mg/l 0,1 - 100

NOT rapidly biodegradable.

12.3. Bio accumulative potential:

DIPHENYLMETHANE-4,4'-DIISOCYANATE

Partition coefficient: n-octanol/water. 4,51

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%.

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.



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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-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:

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 1: Low hazard to waters

15.2. Chemical safety assessment

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



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16. OTHER INFORMATION

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

Carc. 2 - Carcinogenicity, category 2
Acute Tox. 4 - Acute toxicity, category 4
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
Resp. Sens. 1 - Respiratory sensitization, category 1
Skin Sens. 1 - Skin sensitization, category 1
H351 - Suspected of causing cancer.
H332 - Harmful if inhaled.
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.
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
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



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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.

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.

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