PACELINE
ADVANCED MEDICAL SOLUTIONS

Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date: 11-Jul-2024 **Version** 1

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

1.1. Product identifier

SDS # PACE-001-EU
Product Name TOP-TIER ADHESIVE Part A ISOCYANATE

Other means of identification

Pure substance/mixture Mixture

Contains Methylenediphenyl diisocyanate; 4,4- methylenediphenyl diisocyanate (MDI)

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

Recommended Use Aromatic isocyanate for adhesives for industrial or professional use

Uses Advised Against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
Paceline, INC.
10737 Independence Pointe Parkway
Matthews, NC 28105
www.paceline.com

For further information, please contact
Contact Point 800-443-1827
(8:00 AM - 5:00 PM Eastern Time)
Email Address info@paceline.com

1.4. Emergency telephone number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

Emergency Telephone Number - §45 - (EC)1272/2008	
Europe	**112**

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Respiratory sensitisation	Category 1 - (H334)
Skin sensitisation	Category 1 - (H317)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity — single exposure	Category 3 - (H335)
Category 3 Respiratory irritation	

Specific target organ toxicity — repeated exposure	Category 2 - (H373)
Chronic aquatic toxicity	Category 4 - (H413)

2.2. Label elements

Contains Methylenediphenyl diisocyanate; 4,4- methylenediphenyl diisocyanate (MDI)

Signal word

Danger

Hazard statements

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure
H413 - May cause long lasting harmful effects to aquatic life

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P285 - In case of inadequate ventilation wear respiratory protection
P309 + P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P273 - Avoid release to the environment

Unknown acute toxicity

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Additional information
This product requires tactile warnings if supplied to the general public.

2.3. Other hazards
No information available.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances
Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Methylenediphenyl diisocyanate 26447-40-5	25-35	No data available	(615-005-00-9) 247-714-0	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373)	Eye Irrit. 2 :: C>=5% Resp. Sens. 1 :: C>=0.1% Skin Irrit. 2 :: C>=5% STOT SE 3 :: C>=5%	-	-
4,4-methylenediphenyl diisocyanate (MDI) 101-68-8	15-25	No data available	(615-005-00-9) 202-966-0	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373)	Eye Irrit. 2 :: C>=5% Resp. Sens. 1 :: C>=0.1% Skin Irrit. 2 :: C>=5% STOT SE 3 :: C>=5%	-	-

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

Acute Toxicity Estimate
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Methylenediphenyl diisocyanate 26447-40-5	10000	10000	Inhalation LC50 Rat 490 mg/m^3 4 h (aerosol, Source: OECD_SIDS)	490	Inhalation LC50 Rat 490 mg/m^3 4 h (aerosol, Source: OECD_SIDS)
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	31600	No data available	Inhalation LC50 Rat 369 mg/m^3 4 h (Source: NZ_CCID) 0.369	369	Inhalation LC50 Rat 369 mg/m^3 4 h (Source: NZ_CCID)

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Inhalation May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.

Ingestion May produce an allergic reaction. Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapours or mists.

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

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation. Difficulty in breathing.

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

Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Product is or contains a sensitiser. May cause sensitisation by inhalation. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapours or mists.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear

suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Remove contaminated clothing and shoes. Avoid breathing vapours or mists.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

Storage class (TRGS 510) LGK 10.

7.3. Specific end use(s)

Specific Use(s)
Aromatic isocyanate for adhesives for industrial or professional use.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Methylenediphenyl diisocyanate 26447-40-5	-	STEL 0.01 ppm STEL 0.1 mg/m^3 Sa+ Sh+	-	STEL: 0.07 mg/m^3 TWA: 0.05 mg/m^3	TWA: 0.02 mg/m^3 STEL: 0.07 mg/m^3
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	TWA: 0.005 ppm TWA: 0.05 mg/m^3 STEL 0.01 ppm STEL 0.1 mg/m^3 Sa+ Sh+	TWA: 0.005 ppm TWA: 0.052 mg/m^3	-	TWA: 0.02 mg/m^3 STEL: 0.07 mg/m^3

Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Methylenediphenyl diisocyanate 26447-40-5	-	-	-	S+ TWA: 0.005 ppm STEL: 0.01 ppm	STEL: 0.035 mg/m^3
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	TWA: 0.05 mg/m^3 Ceiling: 0.1 mg/m^3 S+	TWA: 0.005 ppm TWA: 0.05 mg/m^3	S+ TWA: 0.005 ppm TWA: 0.05 mg/m^3 STEL: 0.01 ppm STEL: 0.1 mg/m^3	STEL: 0.035 mg/m^3

Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Methylenediphenyl diisocyanate 26447-40-5	-	-	-	TWA: 0.02 ppm TWA: 0.2 mg/m^3 STEL: 0.02 ppm STEL: 0.2 mg/m^3	-
4,4- methylenediphenyl diisocyanate (MDI)	TWA: 0.01 ppm TWA: 0.1 mg/m^3	TWA: 0.05 mg/m^3 Sa+	TWA: 0.05 mg/m^3 Peak: 0.05 mg/m^3	-	TWA: 0.05 mg/m^3 sz+

101-68-8	STEL: 0.02 ppm STEL: 0.2 mg/m^3 AR+	Sh+ H*	* respiratory and skin sensitizer inhalable fraction		STEL: 0.05 mg/m^3

Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Methylenediphenyl diisocyanate 26447-40-5	TWA: 0.02 mg/m^3 STEL: 0.07 mg/m^3 Sens+	-	-	-	TWA: 0.005 ppm TWA: 0.05 mg/m^3 Ceiling: 0.01 ppm Ceiling: 0.1 mg/m^3 J+
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	TWA: 0.005 ppm STEL: 0.015 ppm Sens+	-	TWA: 0.005 ppm TWA: 0.051 mg/m^3	-	TWA: 0.005 ppm TWA: 0.05 mg/m^3 Ceiling: 0.01 ppm Ceiling: 0.1 mg/m^3 J+

Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Methylenediphenyl diisocyanate 26447-40-5	-	-	-	TWA: 0.005 ppm A+ STEL: 0.01 ppm	STEL: 0.09 mg/m^3 TWA: 0.03 mg/m^3
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	-	-	TWA: 0.005 ppm TWA: 0.05 mg/m^3 A+ STEL: 0.01 ppm	STEL: 0.09 mg/m^3 TWA: 0.03 mg/m^3

Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	TWA: 0.005 ppm	STEL: 0.15 mg/m^3	TWA: 0.002 mg/m^3 TWA: 0.03 mg/m^3 S+	TWA: 0.05 mg/m^3 TWA: 0.005 ppm STEL: 0.05 mg/m^3 STEL: 0.005 ppm K*	TWA: 0.005 ppm TWA: 0.052 mg/m^3 Sen+

Chemical name	Sweden	Switzerland	United Kingdom
Methylenediphenyl diisocyanate 26447-40-5	: NGV: 0.002 ppm S+	S+ TWA: 0.02 mg/m^3 STEL: 0.02 mg/m^3	TWA: 0.02 mg/m^3 STEL: 0.07 mg/m^3 Sen+
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	NGV: 0.002 ppm NGV: 0.03 mg/m^3 Bindande KGV: 0.005 ppm Bindande KGV: 0.05 mg/m^3 S+	S+ TWA: 0.02 mg/m^3 STEL: 0.02 mg/m^3 H*	TWA: 0.02 mg/m^3 STEL: 0.07 mg/m^3 Sen+

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Methylenediphenyl diisocyanate 26447-40-5	-	10 µg/g Creatinine (urine - 4,4'-Diaminodiphenylmethane after end of work day, at the end of a work week/end of the shift) (-)	-	-	-
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	10 µg/g Creatinine (urine - 4,4'-Diaminodiphenylmethane after end of work day, at the end of a work week/end of the shift)	-	-	-

		(-)			
Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	-	-	10 µg/L - BLW (end of exposure or end of shift) urine	-

Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII
Methylenediphenyl diisocyanate 26447-40-5	-	1 µmol/mol Creatinine (urine - urinary Diamine post task)	-	-
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	0.01 mg/L (urine - MDA (after hydrolysis) end of shift) 0.05 µmol/L (urine - MDA (after hydrolysis) end of shift)	1 µmol/mol Creatinine (urine - urinary Diamine post task)	-	-

Chemical name	Slovenia	Spain	Switzerland	United Kingdom
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	-	10 µg/g creatinine (urine - 4,4'-Diaminodiphenylmethane end of shift) 5 nmol/mmol creatinine (urine - 4,4'-Diaminodiphenylmethane end of shift)	1 mmol isocyanate-derived diamine/mol creatinine - urine () - end of the period of exposure

Derived No Effect Level (DNEL) - Workers No information available

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls No information available.

Personal Protective Equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear to pale yellow liquid
Colour	Clear to pale yellow
Odour	Faint aromatic odor.
Odour Threshold	No information available

Property	**Values**	**Remarks • Method**
Melting point / freezing point	0 °C	
Initial boiling point and boiling range	208 °C	
Flammability (Solid, Gas)	No data available	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	>93.34	Pensky-Martens Closed Cup (PMCC)
Autoignition temperature	No data available	
Decomposition temperature		
pH	No data available	
pH (as aqueous solution)	No data available	
Kinematic viscosity	No data available	
Dynamic Viscosity	No data available	
Water solubility	Insoluble in water	
Solubility(ies)	No data available	
Partition Coefficient	No data available	
Vapour Pressure	< 0.001 mmHg at 25°C	
Relative Density	1.12 g/cm3 at 25°C (77° F)	
Bulk Density	No data available	
Liquid Density	No data available	
Vapour Density	No data available	
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion Data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause sensitisation in susceptible persons. (based on components). May cause irritation of respiratory tract. Harmful by inhalation.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). May cause sensitisation by skin contact. Causes skin irritation.

Ingestion Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation". Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	10,486.70 mg/kg
ATEmix (dermal)	5,714.30 mg/kg

Unknown acute toxicity
Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methylenediphenyl diisocyanate	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	= 490 mg/m^3 (Rat) 4 h
4,4- methylenediphenyl diisocyanate (MDI)	= 31600 mg/kg (Rat)	-	= 369 mg/m^3 (Rat) 4 h

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation. May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity Not classified.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Methylenediphenyl diisocyanate	Carc. 2
4,4- methylenediphenyl diisocyanate (MDI)	Carc. 2

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients.

STOT - single exposure May cause respiratory irritation.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not classified.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other Adverse Effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity May cause long lasting harmful effects to aquatic life.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence/Degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Methylenediphenyl diisocyanate	4.5
4,4- methylenediphenyl diisocyanate (MDI)	4.51

12.4. Mobility in soil

Mobility in Soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
4,4- methylenediphenyl diisocyanate (MDI)	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IMDG
14.2 Proper Shipping Name Not regulated

RID
14.2 Proper Shipping Name Not regulated

ADR
14.2 Proper Shipping Name Not regulated

IATA
14.2 Proper Shipping Name Not regulated

SECTION 15: Regulatory information

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

National regulations

France
Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Methylenediphenyl diisocyanate 26447-40-5	RG 62
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	RG 62

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Methylenediphenyl diisocyanate - 26447-40-5	56. 75.	-
4,4- methylenediphenyl diisocyanate (MDI) - 101-68-8	56[a]. 75.	-

Persistent Organic Pollutants
Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	PICCS	ENCS	IECSC	AIIC	KECL
Methylenediphenyl diisocyanate 26447-40-5 (25-35)	X	X	X	X	X	X	X	X
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8 (15-25)	X	X	X	X	X	X	X	X

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure

Legend
SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	On basis of test data
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	On basis of test data
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision Date: 11-Jul-2024

Revision Note: New

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
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End of Safety Data Sheet