

PU 201

SAFETY DATA SHEET

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

1.1. Product identifier

Product form : Mixture
Product name : PU WINDSHIELD ADHESIVE
Type of product : Adhesives, sealants

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

1.2.1. Relevant identified uses

Intended for general public

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ADROIT ENDÜSTRİYEL YAPIŞTIRICI VE KİMYA SAN. TİC. A. Ş.
Ayazağa Mah. Mimar Sinan Sok. Seba Ofis Bulvarı İş Merkezi No :21
D Blok 9.kat 64 Numaralı Ofis Sarıyer / İstanbul
TEL: 0212 269 36 65
info@adroit.com.tr - www.adroit.com.tr
E-mail address of competent person responsible for the SDS : satis@adroit.com.tr

1.4. Emergency telephone number

Emergency number : +902122693665

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Respiratory sensitisation, Category 1 H334
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Danger
Hazardous ingredients : 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate
Hazard statements (CLP) : H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary statements (CLP) : P102 - Keep out of reach of children.
P261 - Avoid breathing fume, dust, gas, mist, spray, vapours.
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 doctor, a POISON CENTER.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.



- Extra phrases : Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.
- Child-resistant fastening : Not applicable
- Tactile warning : Applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9 (REACH-no) 01-2119488216-32	1 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	(CAS-No.) 101-68-8 (EC-No.) 202-966-0 (EC Index-No.) 615-005-00-9 (REACH-no) 01-211945701447-0000	< 1	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317
Silane, trimethoxy[3-(oxiranylmethoxy)propyl]-	(CAS-No.) 2530-83-8 (EC-No.) 219-784-2 (REACH-no) 01-211937949916	< 1	Eye Dam. 1, H318

Specific concentration limits:

Name	Product identifier	Specific concentration limits
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	(CAS-No.) 101-68-8 (EC-No.) 202-966-0 (EC Index-No.) 615-005-00-9 (REACH-no) 01-211945701447-0000	(0.1 =<C <= 100) Resp. Sens. 1, H334 (5 =<C <= 100) Eye Irrit. 2, H319 (5 =<C <= 100) Skin Irrit. 2, H315 (5 =<C <= 100) STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : [REDACTED]
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.



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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PU WINDSHIELD ADHESIVE	
EU - Occupational Exposure Limits	
Local name	Xylene, mixed isomers, pure
IOELV TWA (mg/m ³)	221 mg/m ³
IOELV TWA (ppm)	50 ppm
IOELV STEL (mg/m ³)	442 mg/m ³
IOELV STEL (ppm)	100 ppm
Notes	Skin



Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Austria - Occupational Exposure Limits	
Local name	Diphenylmethan-4,4'-diisocyanat
MAK (mg/m ³)	0.05 mg/m ³
MAK (ppm)	0.005 ppm
MAK Short time value (mg/m ³)	0.1 mg/m ³
MAK Short time value (ppm)	0.01 ppm
Remark (AT)	Sah
Regulatory reference	BGBl. II Nr. 186/2015
Belgium - Occupational Exposure Limits	
Local name	4,4'-Diisocyanate de diphénylméthane (MDI) # Difenylmethaan-4,4'-di-isocyanat (MDI)
Limit value (mg/m ³)	0.052 mg/m ³
Limit value (ppm)	0.005 ppm
Short time value (mg/m ³)	442 mg/m ³
Short time value (ppm)	100 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 02/09/2018
Bulgaria - Occupational Exposure Limits	
Local name	Ксилен (смес от изомери), чист
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Notes	Кожа (възможна е значителна резорбция чрез кожата); • (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр.73 от 4 септември 2018 г.)
Croatia - Occupational Exposure Limits	
Local name	Ksilen (svi izomeri)
GVI (granična vrijednost izloženosti) (mg/m ³)	221 mg/m ³
GVI (granična vrijednost izloženosti) (ppm)	50 ppm
KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	442 mg/m ³
KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	100 ppm
Naznake (HR)	Direktiva: 2000/39/EZ. Napomena: Koža (razvrstana kao tvar koja nadražuje kožu (H315))
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 91/2018)
Croatia - Biological limit values	
Local name	Ksilen



Czech Republic - Occupational Exposure Limits	
Local name	Difenylnmethan-4,4'-diisokyanát (1,1'-Methylenbis(4-isokyanatobenzen))
Expoziční limity (PEL) (mg/m ³)	0.05 mg/m ³
Expoziční limity (PEL) (ppm)	0.005 ppm
Expoziční limity (NPK-P) (mg/m ³)	0.1 mg/m ³
Expoziční limity (NPK-P) (ppm)	0.01 ppm
Remark (CZ)	I (dráždí sliznice (oči, dýchací cesty) resp. kůži), S (látka má senzibilizační účinek)
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (zpracovány změny č. 246/2018 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Diphenylmethan-4,4'-diisocyanat (MDI; Methylenbis(phenylisocyanat))
Grænseværdie (langvarig) (mg/m ³)	0.05 mg/m ³
Grænseværdie (langvarig) (ppm)	0.005 ppm
Anmærkninger (DK)	E (betyder, at stoffet har en EF-grænseværdi); H (betyder, at stoffet kan optages gennem huden)
Regulatory reference	BEK nr 655 af 31/05/2018
Estonia - Occupational Exposure Limits	
Local name	4,4'-metüleendifenüül-diisotsüanaat (fenüülisotsüanaat)
OEL TWA (mg/m ³)	0.05 mg/m ³
OEL TWA (ppm)	0.005 ppm
OEL STEL (mg/m ³)	450 mg/m ³
OEL STEL (ppm)	100 ppm
OEL Ceiling (mg/m ³)	0.1 mg/m ³
OEL Ceiling (ppm)	0.01 ppm
Remark (ET)	S (Sensibiliseerivad ained), 2 (Arvutatud 5-minutisele kokkupuuteajale)
Regulatory reference	Vabariigi Valitsuse 18. septembri 2001. a määruse nr 293 (RT I, 30.11.2011, 5)
Finland - Occupational Exposure Limits	
Local name	Ksyleeni
HTP-arvo (8h) (mg/m ³)	220 mg/m ³
HTP-arvo (8h) (ppm)	50 ppm
HTP-arvo (15 min)	440 mg/m ³
HTP-arvo (15 min) (ppm)	100 ppm
Huomautus (FI)	iho
Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
Finland - Biological limit values	
Local name	Ksyleeni
Finland - BLV	5 mmol/l Parametri: Virtsan metyylhippuurihappo - Näytteenottoajankohta: Työvuoron päätyttyä
Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)



France - Occupational Exposure Limits	
Local name	4,4'-Diisocyanate de diphénylméthane
VME (mg/m ³)	0.1 mg/m ³
VME (ppm)	0.01 ppm
VLE (mg/m ³)	0.2 mg/m ³
VLE (ppm)	0.02 ppm
Note (FR)	Valeurs recommandées/admises; certaines ou toutes ces VLE s'entendent pour des concentrations mesurées sur une durée de 5 min; risque d'allergie respiratoire, substance classée cancérigène de catégorie 2
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
TRGS 900 Local name	4,4'-Methylendiphenyldiisocyanat
Occupational exposure limit value (mg/m ³)	0.05 mg/m ³ (E)
Occupational exposure limit value (ppm)	100 ppm
Limitation of exposure peaks	1;=2=(I)
TRGS 900 Remark	DFG;11;12;H;Sah;Y
TRGS 900 Regulatory reference	TRGS900
Germany - Biological limit values (TRGS 903)	
TRGS 903 Local name	Xylol (alle Isomere)
TRGS 903 Biological limit value	2000 mg/l Parameter: Methylhippur-(Tolur-) säure (alle Isomere) - Untersuchungsmaterial: U = Urin - Probenahmezeitpunkt: b) Expositionsende, bzw. Schichtende - Festlegung/Begründung: 11/2016 DFG
TRGS 903 Regulatory reference	TRGS 903
Gibraltar - Occupational Exposure Limits	
Name of agent	Xylene, mixed isomers, pure
Eight hours mg/m ³	221 mg/m ³
Eight hours ppm	50 ppm
Short-term mg/m ³	442 mg/m ³
Short-term ppm	100 ppm
Notation	Skin
Regulatory reference	Factories (Control of Chemical Agents at Work) Regulations 2003 (LN. 2018/181)
Greece - Occupational Exposure Limits	
Local name	Δισοκυανικός εστέρας του διφαινυλομεθάνιου (MDI)
OEL TWA (mg/m ³)	0.2 mg/m ³
OEL TWA (ppm)	0.02 ppm
OEL STEL (mg/m ³)	0.2 mg/m ³
OEL STEL (ppm)	0.02 ppm
Regulatory reference	Π.Δ. 90/1999
Hungary - Occupational Exposure Limits	
Local name	difenilmetán-4,4'-diizocianát (MDI)



AK-érték	0.05 mg/m ³
CK-érték	0.05 mg/m ³
Hungary - Biological limit values	
Local name	Xilol
Regulatory reference	25/2000. (IX. 30.) EüM–SZCSM együttes rendelet a munkahelyek kémiai biztonságáról
Ireland - Occupational Exposure Limits	
Local name	4,4'-Methylene-diphenyl diisocyanate (as —NCO)
OEL (8 hours ref) (mg/m ³)	221 mg/m ³
OEL (8 hours ref) (ppm)	0.005 ppm
OEL (15 min ref) (mg/m ³)	442 mg/m ³
OEL (15 min ref) (ppm)	100 ppm
Italy - Occupational Exposure Limits	
Local name	Xilene, isomeri misti, puro
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Notes	pelle
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Ksilols (o-,m-,p-ksilols, dimetilbenzols)
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	Ministru kabineta 2007.gada 15.maija noteikumiem Nr.325
Lithuania - Occupational Exposure Limits	
Local name	Metileno bisfenilizocianatas (MDI)
IPRV (mg/m ³)	0.05 mg/m ³
IPRV (ppm)	0.005 ppm
TPRV (mg/m ³)	442 mg/m ³
TPRV (ppm)	100 ppm
NRV (mg/m ³)	0.1 mg/m ³
NRV (ppm)	0.01 ppm
Remark (LT)	J (jautrinantis poveikis); Nustatytas 5 min. poveikio trukmės NRD. Tas pats RD, išreikštas ppm, taikomas izocianatams, kurių RD nenustatytas. Ši nuostata taikoma ir dulkių ar lašelių (aerozolių) pavidalo izocianatams, įskaitant prepolimerizuotus izocianatus (aduktus). Skirtingų medžiagų RD, išreikšti mg/m ³ , yra skirtingi.
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)



Luxembourg - Occupational Exposure Limits	
Local name	Xylène, isomères mixtes, purs
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	Mémorial A N° 684 de 2018
Malta - Occupational Exposure Limits	
Local name	Xylene, mixed isomers, pure # Xylene, Isomeri mhallta, puri
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	S.L.424.24 (L.N.57 of 2018)
Netherlands - Occupational Exposure Limits	
Local name	Xyleen, o-, m-, p-isomeren
Grenswaarde TGG 8H (mg/m ³)	210 mg/m ³
Grenswaarde TGG 15MIN (mg/m ³)	442 mg/m ³
Remark (MAC)	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2018
Poland - Occupational Exposure Limits	
Local name	Metylenobis(fenylizocyanian) (diizocyanian 4,4'-metylenodifenylu)
NDS (mg/m ³)	0.03 mg/m ³
NDSCh (mg/m ³)	0.09 mg/m ³
Remark (PL)	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową)
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Metilendifenilisocianato (MDI)
OEL TWA (ppm)	0.005 ppm
OEL STEL (ppm)	150 ppm
Regulatory reference	Norma Portuguesa NP 1796:2014
Portugal - Biological limit values	
Local name	Xilenos (graus técnico e comercial)
Portugal (BEI)	1.5 g/g creatinine Parâmetro: Ácidos (o, m, p)-metilhipúricos - Meio: urina - Momento da amostragem: Fim do turno
Regulatory reference	Norma Portuguesa NP 1796:2014



Romania - Occupational Exposure Limits	
Local name	4,4'-Metilendifenil diizocianat
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	0.15 mg/m ³
OEL STEL (ppm)	100 ppm
Regulatory reference	Hotărârea nr. 584/2018
Romania - Biological limit values	
Local name	Xilen
Romania - BLV	3 g/l Indicator biologic: Acid metilhipuric - Material biologic: urină - Momentul recoltării: sfârșit schimb
Regulatory reference	Hotărârea nr. 584/2018
Serbia - Occupational Exposure Limits	
Local name	ксилен, мешани изомери, чист
OEL TWA (mg/m ³)	221 mg/m ³
OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Notes	EU* – напомена да се ради о хемијским материјама за које су утврђене индикативне граничне вредности изложености према Директиви 2000/39/ЕЗ (прва листа); К – напомена да хемијска материја може штетно деловати на кожу
Regulatory reference	ПРАВИЛНИК о превентивним мерама за безбедан и здрав рад при излагању хемијским материјама („Службени гласник РС”, бр. 106/09 и 117/17)
Slovakia - Occupational Exposure Limits	
Local name	Izokyanáty: 4,4'-Metyléndifenyilizokyanát (MDI)
NPHV (priemerná) (mg/m ³)	0.03 mg/m ³
NPHV (priemerná) (ppm)	0.002 ppm
OEL STEL (mg/m ³)	442 mg/m ³
OEL STEL (ppm)	100 ppm
Upozornenie (SK)	S - znamená, že faktor môže spôsobiť senzibilizáciu
Regulatory reference	Nariadenie vlády č. 33/2018 Z.z.
Slovakia - Biological limit values	
Local name	Xylén (všetky izoméry)
Slovakia - BLV	1.5 mg/l Zisťovaný faktor: Xylén - Vyšetovaný materiál: krv - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny 2000 mg/l Zisťovaný faktor: Suma kyselín 2,3,4-metyl-hippurových - Vyšetovaný materiál: moč - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (Zmena: 471/2011 Z.z.)
Slovenia - Occupational Exposure Limits	
Local name	difenilmetan-4,4'-diizocianat (4,4'-metilendifenil diizocianat)
OEL TWA (mg/m ³)	0.05 mg/m ³ 0.005 mg/m ³



OEL TWA (ppm)	50 ppm
OEL STEL (mg/m ³)	0.05 mg/m ³
OEL STEL (ppm)	0.005 ppm
Remark (SI)	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in BAT vrednosti)
Regulatory reference	Uradni list RS, št. 78/2018 z dne 4.12.2018
Slovenia - Biological limit values	
Local name	ksilen (vse izomere)
Regulatory reference	Uradni list RS, št. 78/2018 z dne 4.12.2018
Spain - Occupational Exposure Limits	
Local name	Diisocianato de 4,4'-difenilmetano (MDI)
VLA-ED (mg/m ³)	0.052 mg/m ³
VLA-ED (ppm)	0.005 ppm
VLA-EC (mg/m ³)	442 mg/m ³
VLA-EC (ppm)	100 ppm
Spain - Biological limit values	
Local name	Xilenos, mezcla isómeros
Spain - BLV	1 g/g creatinine Parámetro: Ácidos metilhipúricos - Medio: Orina - Momento de muestreo: Final de la jornada laboral
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2019. INSHT
Sweden - Occupational Exposure Limits	
Local name	4,4'-Metylendifenyldiisocyanat (MDI)
nivågränsvärde (NVG) (mg/m ³)	0.03 mg/m ³
nivågränsvärde (NVG) (ppm)	0.002 ppm
kortidsvärde (KTV) (mg/m ³)	0.05 mg/m ³
kortidsvärde (KTV) (ppm)	0.005 ppm
United Kingdom - Occupational Exposure Limits	
Local name	Xylene
WEL TWA (mg/m ³)	220 mg/m ³ o-,m-,p- or mixed isomers
WEL TWA (ppm)	50 ppm o-,m-,p- or mixed isomers
WEL STEL (mg/m ³)	441 mg/m ³ o-,m-,p- or mixed isomers
WEL STEL (ppm)	100 ppm o-,m-,p- or mixed isomers
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Third edition, 2018). HSE
United Kingdom - Biological limit values	
Local name	Xylene, o-, m-, p- or mixed isomers
United Kingdom (BEI)	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Third edition, 2018). HSE



Iceland - Occupational Exposure Limits	
Local name	Metýlenbis(fenýlisósýanat) (dífenýlmetan-4,4'-díísósýanat, MDI)
OEL (8 hours ref) (mg/m ³)	0.05 mg/m ³
OEL (8 hours ref) (ppm)	0.005 ppm
OEL (15 min ref) (mg/m ³)	0.1 mg/m ³ Þakgildið er miðað við fimm mínútna tímabil
OEL (15 min ref) (ppm)	0.01 ppm Þakgildið er miðað við fimm mínútna tímabil
Notes (IS)	O (efnið er ofnæmisvaldandi)
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Dífenýlmetan-4,4'-díísocýanat (MDI; Metýlen-bis-fenýldíísocýanat)
Grænseverðier (AN) (mg/m ³)	0.05 mg/m ³
Grænseverðier (AN) (ppm)	0.005 ppm
Grænseverðier (Korttíðsverði) (ppm)	0.01 ppm
Merknader (NO)	A (Kjemikalier som skal betraktes som at de fremkaller allergi eller annen overfølsomhet i øynene eller luftveier, eller som skal betraktes som at de fremkaller allergi ved hudkontakt)
Regulatory reference	FOR-2018-08-21-1255
Switzerland - Occupational Exposure Limits	
Local name	Xylène (tous les isomères) / Xylol (alle Isomere)
MAK (mg/m ³)	435 mg/m ³
MAK (ppm)	100 ppm
KZGW (mg/m ³)	870 mg/m ³
KZGW (ppm)	200 ppm
Critical toxicity	VRS, SNC, Yeux, Vertige / OAW, ZNS, Auge, Schwindel
Notation	R, B / H, B
Remark	INRS, NIOSH
Regulatory reference	www.suva.ch, 01.07.2019
Turkey - Occupational Exposure Limits	
Local name	Ksilen
OEL TWA (mg/m ³)	221 mg/m ³ (karişım izomerleri, saf)
OEL TWA (ppm)	50 ppm (karişım izomerleri, saf)
OEL STEL (mg/m ³)	442 mg/m ³ (karişım izomerleri, saf)
OEL STEL (ppm)	100 ppm (karişım izomerleri, saf)
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete
USA - ACGIH - Occupational Exposure Limits	
Local name	Methylene bisphenyl isocyanate (MDI)
ACGIH TWA (ppm)	0.005 ppm
ACGIH STEL (ppm)	150 ppm



Remark (ACGIH)	TLV® Basis: Resp sens
Regulatory reference	ACGIH 2019

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. EN 14387

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Paste.
Colour	: Black.
Odour	: Characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.10 - 1.16 g/ml
Solubility	: No data available



Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

VOC content	: < 69 g/l
-------------	------------

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Silane, trimethoxy[3-(oxiranylmethoxy)propyl]- (2530-83-8)

LC50 inhalation rat (mg/l)	> 5.3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
----------------------------	---

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified



Silane, trimethoxy[3-(oxiranylmethoxy)propyl]- (2530-83-8)	
LC50 fish 1	55 mg/l Test organisms (species): Cyprinus carpio
LOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	>= 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable



14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on	Entry title or description
56.	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI)
56(a)	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : < 69 g/l

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

ABM category : B(4) - low hazard for aquatic organisms

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : xylene is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : xylene is listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4



Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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.

ADROIT SDS EU

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable

