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Environmental Health and safety office
hseoffice@ivmchemicals.com

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8.30 17.30 0039 038 425 441

: 0039 0384 254491

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· 2.1

() 1272/2008



Flam. Liq. 2 H225



Resp. Sens. 1 H334

Repr. 2 H361d



Eye Irrit. 2 H319

Skin Sens. 1 H317

STOT SE 3 H336

· 2.2

(EC) 1272/2008

(CLP).



GHS02



GHS07



GHS08

: 21.10.2017

: 12.10.2017

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(1)

Polyisocyanate HDI / TDI
n-butyl acetate
toluene
m-tolylidene diisocyanate
Homopolymers of HDI
hexamethylene diisocyanate

H225
H319
H334

H317
H361d
H336

P210 / / / ..

P241 /

P303+P361+P353 ():

P305+P351+P338 /

P405
P501 /

EUH204

2.3

PBT () vPvB

PBT:
vPvB:

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3.2

CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-XXXX	n-butyl acetate Flam. Liq. 3, H226 STOT SE 3, H336	40-49,99%
CAS: 26426-91-5	Polyisocyanate HDI / TDI Eye Irrit. 2, H319; Skin Sens. 1, H317	20-<25%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-XXXX	ethyl acetate Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	10-14,99%

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CAS: 28182-81-2 NLP: 500-060-2	Homopolymers of HDI ⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	10-14,99% ²⁾
CAS: 108-88-3 EINECS: 203-625-9 Reg.nr.: 01-2119471310-51-XXXX	toluene ⚠ Flam. Liq. 2, H225 ⚠ Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H336 Aquatic Chronic 3, H412	2,5-4,99%
CAS: 108-94-1 EINECS: 203-631-1 Reg.nr.: 01-2119453616-35-XXXX	cyclohexanone ⚠ Flam. Liq. 3, H226 ⚠ Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	1-2,499%
CAS: 822-06-0 EINECS: 212-485-8 Reg.nr.: 01-2119457571-37-XXXX	hexamethylene diisocyanate ⚠ Acute Tox. 1, H330 ⚠ Resp. Sens. 1, H334 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≥0,1-<0,5%
CAS: 26471-62-5 EINECS: 247-722-4 Reg.nr.: 01-2119454791-34-XXXX	m-tolyldene diisocyanate ⚠ Acute Tox. 2, H330 ⚠ Resp. Sens. 1, H334; Carc. 2, H351 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 Aquatic Chronic 3, H412	≥0,1-<0,5%

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123-86-4 n-butyl acetate	
PDK	: 200 /m ³ : 50 /m ³
141-78-6 ethyl acetate	
PDK	: 200 /m ³ : 50 /m ³
108-88-3 toluene	
PDK	: 150 /m ³ : 50 /m ³
108-94-1 cyclohexanone	
PDK	: 30 /m ³ : 10 /m ³
822-06-0 hexamethylene diisocyanate	
PDK	: 0,05 /m ³

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DNEL

123-86-4 n-butyl acetate

()	DNEL acuto/agudo/ostre/aigu/acute/akut	960 /mc ()
	DNEL	859,7 /mc (popolazione) 480 /mc () 102,34 /mc (popolazione)

141-78-6 ethyl acetate

()	DNEL	4,5 / bw / d (popolazione)
()	DNEL acuto/agudo/ostre/aigu/acute/akut	1.468 /mc ()
	DNEL	734 /mc (popolazione) 734 /mc () 367 /mc (popolazione)
	DNEL	6,3 / bw / d () 37 / bw/d (popolazione)

28182-81-2 Homopolymers of HDI

()	DNEL acuto/agudo/ostre/aigu/acute/akut	1 /mc ()
	DNEL	0,5 /mc ()

108-88-3 toluene

()	DNEL acuto/agudo/ostre/aigu/acute/akut	384 /mc ()
	DNEL	192 /mc ()

108-94-1 cyclohexanone

()	DNEL	40 /mc ()
	DNEL	4 / bw/d ()

822-06-0 hexamethylene diisocyanate

()	DNEL acuto/agudo/ostre/aigu/acute/akut	0,07 /mc ()
	DNEL	35 /mc ()

26471-62-5 m-tolyldiene diisocyanate

()	DNEL acuto/agudo/ostre/aigu/acute/akut	0,14 /mc ()
	DNEL	35 /mc ()

PNEC

123-86-4 n-butyl acetate

PNEC Acqua dolce/water/woda słodka/eau/agua	0,18 /L ()
PNEC Suolo/earth/suelo/sol/gleba/	0,0903 / ()

141-78-6 ethyl acetate

PNEC Acqua dolce/water/woda słodka/eau/agua	0,26 /L ()
PNEC Suolo/earth/suelo/sol/gleba/	0,24 / ()

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28182-81-2 Homopolymers of HDI		(6)
PNEC Acqua dolce/water/woda słodka/eau/agua	127	/L ()
108-88-3 toluene		
PNEC Acqua dolce/water/woda słodka/eau/agua	0,68	/L ()
PNEC Suolo/earth/suelo/sol/gleba/	2,89	/ ()
108-94-1 cyclohexanone		
PNEC Acqua dolce/water/woda słodka/eau/agua	0,033	/L ()
822-06-0 hexamethylene diisocyanate		
PNEC Acqua dolce/water/woda słodka/eau/agua	75	/L ()
PNEC Suolo/earth/suelo/sol/gleba/	0,0027	/ ()
26471-62-5 m-tolylidene diisocyanate		
PNEC Acqua dolce/water/woda słodka/eau/agua	13	/L ()
PNEC Suolo/earth/suelo/sol/gleba/	1,1	/ ()

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EN 374

89/686/

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pH:

77°C

-4°C

370°C

1,2 %
11,5 %

20°C: 97

20°C: 0,991 /cm³

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(8)
· 20°C:	29 s (ISO 3 mm)
· VOC (EC)	65,21 % 646,3 /
· 9.2	34,6 %

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- 10.2

- 10.3

- 10.4

- 10.5

- 10.6

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LD/LC50 (/),
123-86-4 n-butyl acetate
() LD50 10.760 / (rat/szczur/mouse/souris/Maus/rat n)
() LD50 14.000 / (rabbit/kr lik/Kaninchen/conejo/lapin)
() LC50/4 21,1 / (rat/szczur/mouse/souris/Maus/rat n)
26426-91-5 Polyisocyanate HDI / TDI
() LD50 5.001 / (rat/szczur/mouse/souris/Maus/rat n)

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141-78-6 ethyl acetate

()	LD50	4.934 / (rabbit/kr lik/Kaninchen/conejo/lapin)
()	LD50	20.001 / (rabbit/kr lik/Kaninchen/conejo/lapin)
()	LC50/4	1.600 / (rat/szczur/mouse/souris/Maus/rat n)
	LC0	22,6 ppm (mouse)

28182-81-2 Homopolymers of HDI

()	LD50	2.501 / (rat/szczur/mouse/souris/Maus/rat n)
()	LD50	2.001 / (rabbit/kr lik/Kaninchen/conejo/lapin)

108-88-3 toluene

()	LD50	5.000 / (rat/szczur/mouse/souris/Maus/rat n)
()	LD50	12.124 / (rabbit/kr lik/Kaninchen/conejo/lapin)
()	LC50/4	25,7 / (rat/szczur/mouse/souris/Maus/rat n)

108-94-1 cyclohexanone

()	LD50	1.890 / (rat/szczur/mouse/souris/Maus/rat n)
()	LD50	1.100 / (rabbit/kr lik/Kaninchen/conejo/lapin)
()	LC50/4	6,3 / (rat/szczur/mouse/souris/Maus/rat n)

822-06-0 hexamethylene diisocyanate

()	LD50	738 / (rat/szczur/mouse/souris/Maus/rat n)
()	LD50	7.000 / (rat/szczur/mouse/souris/Maus/rat n)
()	LC50/4	124 / (rat/szczur/mouse/souris/Maus/rat n)

26471-62-5 m-tolylidene diisocyanate

()	LD50	5.110 / (rat/szczur/mouse/souris/Maus/rat n)
()	LD50	9.401 / (rabbit/kr lik/Kaninchen/conejo/lapin)
()	LC50/4	107 / (rat/szczur/mouse/souris/Maus/rat n)

OECD TG 429

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12.1

123-86-4 <i>n</i> -butyl acetate	
EC50	648 / () (72 .)
	44 / (daphnia) (48 .)
LC50 (96 .)	18 / ()
141-78-6 ethyl acetate	
EC50	165 / (daphnia) (48 .)
LC50 (96 .)	230 / ()
28182-81-2 Homopolymers of HDI	
EC50	1.001 / () (72 .)
	127 / (daphnia) (48 .)
LC50 (96 .)	100 / ()
108-88-3 toluene	
EC50	134 / () (96 .)
	3,78 / (daphnia) (48 .)
LC50 (96 .)	5,5 / ()
108-94-1 cyclohexanone	
EC50	101 / () (72 .)
	101 / (daphnia)
LC50 (96 .)	527 / ()
822-06-0 hexamethylene diisocyanate	
EC50	77,5 / () (72 .)
	89,2 / (daphnia) (48 .)
LC50 (96 .)	82,9 / ()
26471-62-5 <i>m</i> -tolylidene diisocyanate	
EC50	12,5 / (daphnia) (48 .)
LC50 (96 .)	133 / (Leuciscus idus melanotus)

12.2

123-86-4	<i>n</i> -butyl acetate	.
141-78-6	ethyl acetate	.
108-88-3	toluene	.
108-94-1	cyclohexanone	.

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12.4

(12)

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· 12.5

PBT (

) vPvB (

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· **PBT:**

· **vPvB:**

· 12.6

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080111

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· 14.1

UN

· **ADR, IMDG, IATA**

UN1263

· 14.2

· **ADR**

UN1263

640D

· **IMDG, IATA**

PAINT

· 14.3

· **ADR, IMDG, IATA**



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· 14.4

· **ADR, IMDG, IATA**

II

· 14.5

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· 14.6

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33

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· **EMS:** F-E,S-E
· **Stowage Category** B

· 14.7

II

MARPOL73/78 (

) IBC Code (

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· **ADR**

(LQ)

5L

(EQ)

: E2

: 30

: 500

2

D/E

· **IMDG**

· Limited quantities (LQ)

· Excepted quantities (EQ)

5L

Code: E2

Maximum net quantity per inner packaging: 30

Maximum net quantity per outer packaging: 500

· **UN "Model Regulation":**

UN 1263

640D, 3, II

15

· 15.1

1907/2006 1272/2008
2012/18/EU

1: 5000

2: 50000

· P

· 15.2

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H225

(14)

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H226
H302
H304
H312
H315
H317
H318
H319
H330
H332
H334

H335
H336
H351
H361d
H373

H412

: IVM Chemicals Srl

: Carlo Porta

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids . Category 2

Flam. Liq. 3: Flammable liquids . Category 3

Acute Tox. 1: Acute toxicity . Category 1

Acute Tox. 2: Acute toxicity . Category 2

Acute Tox. 4: Acute toxicity . Category 4

Skin Irrit. 2: Skin corrosion/irritation . Category 2

Eye Dam. 1: Serious eye damage/eye irritation . Category 1

Eye Irrit. 2: Serious eye damage/eye irritation . Category 2

Resp. Sens. 1: Respiratory sensitisation . Category 1

Skin Sens. 1: Skin sensitisation . Category 1

Carc. 2: Carcinogenicity . Category 2

Repr. 2: Reproductive toxicity . Category 2

STOT SE 3: Specific target organ toxicity (single exposure) . Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) . Category 2

Asp. Tox. 1: Aspiration hazard . Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard . Category 3

1272/2008/EC

ECHA -

INRS Fiche Toxicologique

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