

**Toluene (Commercial Grade)**

Version 1.3

Revision Date 2015-10-26

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

Product Name : Toluene (Commercial Grade)
Material : 1084611, 1037620, 1037616, 1037615

Company : Saudi Chevron Phillips Company
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Chevron Phillips Chemicals International N.V.
Brusselsesteenweg 355
B-3090 Overijse
Belgium

SDS Requests: (800) 852-5530
Technical Information: (832) 813-4862
Responsible Party: Product Safety Group
Email:sds@cpchem.com

Emergency telephone:**Health:**

866.442.9628 (North America)
1.832.813.4984 (International)

Transport:

CHEMTREC 1.800.424.9300 (within USA and Canada) or 703.527.3887 (outside USA and Canada)
Asia: +800 CHEMCALL (+800 2436 2255) China:+86-21-22157316
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group
E-mail address : SDS@CPChem.com
Website : www.CPChem.com

SECTION 2: Hazards identification**Classification of the substance or mixture
REGULATION (EC) No 1272/2008**

Flammable liquids, Category 2	H225: Highly flammable liquid and vapor.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Germ cell mutagenicity, Category 1B	H340: May cause genetic defects.
Carcinogenicity, Category 1A	H350:

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Reproductive toxicity, Category 2

Specific target organ systemic toxicity -
single exposure, Category 3 , Central
nervous systemSpecific target organ systemic toxicity -
repeated exposure, Category 2

Aspiration hazard, Category 1

Chronic aquatic toxicity, Category 3

May cause cancer.

H361d:

Suspected of damaging the unborn child.

H336:

May cause drowsiness or dizziness.

H373:

May cause damage to organs through prolonged or
repeated exposure.

H304:

May be fatal if swallowed and enters airways.

H412:

Harmful to aquatic life with long lasting effects.

Label elements**Labeling (REGULATION (EC) No 1272/2008)**

Hazard pictograms

:



Signal Word

:

Danger

Hazard Statements

:

H225

Highly flammable liquid and vapor.

H304

May be fatal if swallowed and enters
airways.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H336

May cause drowsiness or dizziness.

H340

May cause genetic defects.

H350

May cause cancer.

H361d

Suspected of damaging the unborn child.

H373

May cause damage to organs through
prolonged or repeated exposure.

H412

Harmful to aquatic life with long lasting
effects.

Precautionary Statements

:

Prevention:

P201

Obtain special instructions before use.

P210

Keep away from heat, hot surfaces, sparks,
open flames and other ignition sources. No
smoking.

P260

Do not breathe
dust/fume/gas/mist/vapor/spray.

P280

Wear protective gloves/ protective clothing/
eye protection/ face protection.**Response:**

P301 + P310

IF SWALLOWED: Immediately call a
POISON CENTER or doctor/ physician.

P308 + P313

IF exposed or concerned: Get medical
advice/ attention.

P331

Do NOT induce vomiting.

P370 + P378

In case of fire: Use dry sand, dry chemical
or alcohol-resistant foam to extinguish.

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Hazardous ingredients which must be listed on the label:

- 108-88-3 Toluene
- 71-43-2 Benzene

Additional Labeling:

Restricted to professional users.

SECTION 3: Composition/information on ingredients

Synonyms : Methylbenzene
Toluene
Benzene, methyl-

Molecular formula : C₇H₈

Mixtures**Hazardous ingredients**

Chemical Name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
Toluene	108-88-3 203-625-9 601-021-00-3	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 2; H361d STOT SE 3; H336 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	97 - 100
Benzene	71-43-2 200-753-7 601-020-00-8	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Muta. 1B; H340 Carc. 1A; H350 Aquatic Chronic 3; H412 STOT RE 1; H372 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	0 - 2,5
Ethylbenzene	100-41-4 202-849-4 601-023-00-4	Flam. Liq. 2; H225 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	0,1 - 2

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

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- | | | |
|-------------------------|---|--|
| General advice | : | Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited. |
| If inhaled | : | Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice. |
| In case of skin contact | : | If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes. |
| In case of eye contact | : | Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | : | Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. |

SECTION 5: Firefighting measures

- | | | |
|--|---|--|
| Flash point | : | 4,4 °C (39,9 °F) |
| Autoignition temperature | : | 528,8 °C (983,8 °F) |
| Suitable extinguishing media | : | Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemical. |
| Unsuitable extinguishing media | : | High volume water jet. |
| Specific hazards during fire fighting | : | Do not allow run-off from fire fighting to enter drains or water courses. |
| Special protective equipment for fire-fighters | : | Wear self-contained breathing apparatus for firefighting if necessary. |
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers. |
| Fire and explosion protection | : | Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. |

SECTION 6: Accidental release measures

- | | | |
|----------------------|---|--|
| Personal precautions | : | Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low |
|----------------------|---|--|

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areas.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage**Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****SK**

Zložka	Podstata	Hodnota	Kontrolné parametre	Poznámka
Toluene	SK OEL	NPEL priemerný	50 ppm, 192 mg/m ³	K,
	SK OEL	NPEL krátkodobý	100 ppm, 384 mg/m ³	K,
Benzene	SK OEL	TSH	1 ppm, 3,25 mg/m ³	1, 2, +,
Ethylbenzene	SK OEL	NPEL priemerný	100 ppm, 442 mg/m ³	K,
	SK OEL	NPEL krátkodobý	200 ppm, 884 mg/m ³	K,

+ Prienik cez pokožku: Niektoré látky môžu prenikat' ľahko cez pokožku a spôsobovat' smrteľné otravy, často bez varovných príznakov (napr. anilín, nitrobenzén, nitroglykol, fenoly a pod.).

1 Kategória 1: Dokázaný karcinogén pre ľuď

2 Kategória 2: Pravdepodobný mutagén

K Znamená, že faktor môže byt' ľahko absorbovaný kožou. Niektoré faktory, ktoré ľahko prenikajú kožou, môžu spôsobovat' až smrteľné otravy, často bez varovných príznakov (napr. anilín, nitrobenzén, nitroglykol, fenoly a pod.). Pri látkach s významným prienikom cez kožu, či už v podobe kvapalín alebo pár, je osobitne dôležité zabrániť kožnému kontaktu.

SI

Komponente	Osnova	Vrednost	Parametri nadzora	Pripomba
Toluene	SI OEL	MV	50 ppm, 192 mg/m ³	K, EU, BAT,

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Benzene	SI OEL	MV	1 ppm, 3,25 mg/m3	K, R1, EKA, EU, BAT, TDK,
Ethylbenzene	SI OEL	MV	100 ppm, 442 mg/m3	K, EU, BAT,
BAT	Biološka mejna vrednost - določena je biološka mejna vrednost, ki pomeni opozorilno raven nevarne kemične snovi in njenih metabolitov v tkivih, telesnih tekočinah ali izdihanjem zraku, ne glede na to, ali je nevarna kemična snov vnesena v organizem z vdihavanjem, zaužitjem ali skozi kožo			
EKA	Zveza med koncentracijo rakotvornih snovi v zraku na delovnem mestu in količino snovi in/ali njenih metabolitov v organizmu - podana za rakotvorne snovi (rakotvorne snovi)			
EU	European Union - mejna vednost določena na ravni Evropske unije			
K	Lastnost lažjega prehajanja snovi v organizem skozi kožo			
R1	Rakotvorno R1 - lahko povzroči raka. Številke 1, 2 in 3 pomenijo skupino rakotvornosti ali mutagenosti po EU razvrstitvi rakotvornih ali mutagenih snovi. Rakotvorne ali mutagene snovi se v EU razvršča v posamezne skupine, glede na izpolnjevanje kriterijev, določenih v EU direktivi 67/548/EEC.			
TDK	Tehnično dosegljiva koncentracija - je podana za rakotvorne snovi in pomeni koncentracijo snovi v zraku na delovnem mestu, ki je dosegljiva s stanjem tehnike			

SE

Beståndsdelar	Grundval	Värde	Kontrollparametrar	Anmärkning
Toluene	SE AFS	NGV	50 ppm, 192 mg/m3	B, H,
	SE AFS	KTV	100 ppm, 384 mg/m3	B, H,
Benzene	SE AFS	NGV	0,5 ppm, 1,5 mg/m3	H, C,
	SE AFS	KTV	3 ppm, 9 mg/m3	H, C,
Ethylbenzene	SE AFS	NGV	50 ppm, 200 mg/m3	
	SE AFS	KTV	100 ppm, 450 mg/m3	
B	Exponering för vissa kemiska ämnen nära befintligt yrkeshygieniskt gränsvärde och samtidig exponering för buller nära insatsvärdet 80 dB kan orsaka hörselskada.			
C	Ämnet är cancerframkallande.			
H	Ämnet kan lätt upptas genom huden.			

RU

Компоненты	Основа	Величина	Параметры контроля	Заметка
Toluene	RU OEL	ПДК	50 mg/m3	3,
	RU OEL	ПДК разовая	150 mg/m3	3,
Benzene	RU OEL	ПДК	5 mg/m3	+, 2, K,
	RU OEL	ПДК разовая	15 mg/m3	+, 2, K,
Ethylbenzene	RU OEL	ПДК	50 mg/m3	4, пары и/или газы
	RU OEL	ПДК разовая	150 mg/m3	4, пары и/или газы
+	соединения, при работе с которыми требуется специальная защита кожи и глаз; символ проставлен вслед за наименованием вещества			
2	2 класс - высокоопасные			
3	3 класс - опасные			
4	4 класс - умеренно опасные			
K	канцерогены			

RS

Компоненты	Основа	Величина	Параметры контроля	Заметка
Toluene	RS OEL	GVI	50 ppm, 192 mg/m3	K, EU**,
	RS OEL	KGVI	100 ppm, 384 mg/m3	K, EU**,
Benzene	RS OEL	GVI	1 ppm, 3,25 mg/m3	EU0,
Ethylbenzene	RS OEL	GVI	100 ppm, 442 mg/m3	K, EU*,
	RS OEL	KGVI	200 ppm, 884 mg/m3	K, EU*,
EU*	Substance mentioned in indicative exposure limit values in Directive 2000/39 / EC (first list)			
EU**	Substance mentioned in indicative exposure limit values in Directive 2006/15 / EC (second list)			
EU0	Substance mentioned in indicative exposure limit values in Directive 99/38/EC and Directive 98/24/EC			
K	This chemical substance can adversely affect the skin.			

RO

Componente	Bază	Valoare	Parametri de control	Notă
Toluene	RO OEL	TWA	50 ppm, 192 mg/m3	P,
	RO OEL	STEL	100 ppm, 384 mg/m3	P,
Benzene	RO OEL	TWA	1 ppm, 3,25 mg/m3	P, C,
Ethylbenzene	RO OEL	TWA	100 ppm, 442 mg/m3	P,
	RO OEL	STEL	200 ppm, 884 mg/m3	P,
C	Substanțele cu indicativul C au acțiune cancerigenă.			
P	Substanțele cu indicativul P (piele) pot pătrunde în organism prin pielea sau mucoasele intacte. Indicativul P nu se referă la substanțele care au numai o acțiune locală de tip iritativ.			

PT

Componentes	Bases	Valor	Parâmetros de controlo	Nota
Toluene	PT OEL	VLE-MP	50 ppm,	(1), P, A4, IBE, (),
	PT DL 305/2007	oito horas	50 ppm, 192 mg/m3	Cutânea,
	PT DL 305/2007	curta duração	100 ppm, 384 mg/m3	Cutânea,
Benzene	PT OEL	VLE-MP	0,5 ppm,	(1), P, A1, IBE,
	PT OEL	VLE_CD	2,5 ppm,	(1), P, A1, IBE,
Ethylbenzene	PT OEL	VLE-MP	100 ppm,	(1), A3, IBE,
	PT OEL	VLE_CD	125 ppm,	(1), A3, IBE,
	PT DL 305/2007	oito horas	100 ppm, 442 mg/m3	Cutânea,
	PT DL 305/2007	curta duração	200 ppm, 884 mg/m3	Cutânea,

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- () Os valores ou características encontram-se propostos para alteração
 (1) Abrangido por legislação nacional específica ou por legislação comunitária não transposta
 A1 Agente carcinogénico confirmado no Homem.
 A3 Agente carcinogénico confirmado nos animais de laboratório com relevância desconhecida no Homem.
 A4 Agente não classificável como carcinogénico no Homem.
 Cutânea Uma notação cutânea atribuída ao valor limite de exposição profissional assinala a possibilidade de absorção significativa através de pele.
 IBE Identifica substâncias para as quais existem índices de exposição biológicos. Estes podem ser de dois tipos: IBE A referentes a pesticidas inibidores da acetilcolinesterase e IBE M indutores de metahemoglobina.
 P Perigo de absorção cutânea

PL

Składniki	Podstawa	Wartość	Parametry dotyczące kontroli	Uwaga
Toluene	PL NDS	NDS	100 mg/m3	
	PL NDS	NDSch	200 mg/m3	
Benzene	PL NDS	NDS	1,6 mg/m3	
Ethylbenzene	PL NDS	NDS	200 mg/m3	
	PL NDS	NDSch	400 mg/m3	

NO

Komponenter	Grunnlag	Verdi	Kontrollparametere	Nota
Toluene	FOR-2011-12-06-1358	TWA	25 ppm, 94 mg/m3	H,
Benzene	FOR-2011-12-06-1358	T	1 ppm, 3 mg/m3	G, K, H,
Ethylbenzene	FOR-2011-12-06-1358	TWA	5 ppm, 20 mg/m3	K, H,

- G Maksimum grenseverdier for forurensning i pustesonen i forhold til en fastsatt referanseperiode på 8 timer.
 H En del av stoffene kan i stor grad trenge gjennom huden selv om denne er uskadet, og således tas opp i kroppen.
 K Stoffer som skal betraktes som kreftfremkallende

NL

Bestanddelen	Basis	Waarde	Controleparameters	Opmerking
Toluene	NL MAC	TGG-8 uur	150 mg/m3	
	NL MAC	TGG-15 min	384 mg/m3	
Benzene	NL MAC	TGG-8 uur	3,25 mg/m3	H,
Ethylbenzene	NL MAC	TGG-8 uur	215 mg/m3	H,
	NL MAC	TGG-15 min	430 mg/m3	H,

H Huidopname

MT

Ingredients	Basis	Value	Control parameters	Note
Toluene	MT OEL	TWA	50 ppm, 192 mg/m3	Skin,
	MT OEL	STEL	100 ppm, 384 mg/m3	Skin,
Ethylbenzene	MT OEL	TWA	100 ppm, 442 mg/m3	Skin,
	MT OEL	STEL	200 ppm, 884 mg/m3	Skin,

Skin A skin notation assigned to the OEL identifies the possibility of significant uptake through the skin.

MK

Компоненти	Основа	Стойност	Параметри на контрол	Бележка
Toluene	MK OEL	MV	50 ppm, 192 mg/m3	BAT, EU, K,
Benzene	MK OEL	MV	1 ppm, 3,25 mg/m3	R1, BAT, EKA, EU, K, TDK,
Ethylbenzene	MK OEL	MV	100 ppm, 442 mg/m3	BAT, EU, K,

BAT Biological limit value - the biological limit value is set, which means a warning level of dangerous chemical substance and its metabolites in the cell tissues, body liquids or expired air, not depending on the route of entering the body, inhalation, oral or dermal

EKA The relation of concentration of carcinogenic substances in air at workplace and the quantity of the substance and/or its metabolites in the organism - given for carcinogenic substances

EU European Union - limit (threshold) value set at the level of European Union

K The properties of easier transport of substances into organism through (via) the skin

R1 Carcinogenic R1 - may cause cancer. Numbers 1, 2 and 3 indicate the class of carcinogenicity or mutagenicity according to the EU classification of carcinogenic or mutagenic substances. Carcinogenic or mutagenic substances are in EU classified in separate groups, according to the fulfilling of criteria, set in the EU directive 67/548/EEC.

TDK Technically achievable concentration - is given for carcinogenic substances and it means the concentration of the substance in the air at workplace, which is achievable at the level of technique available.

LV

Sastāvdaļas	Bāze	Vērtība	Pārvaldības parametri	Piezīme
Toluene	LV OEL	AER 8 st	14 ppm, 50 mg/m3	Āda,
	LV OEL	AER īslaicīgā	40 ppm, 150 mg/m3	Āda,
Benzene	LV OEL	AER 8 st	1 ppm, 3,25 mg/m3	Āda,
Ethylbenzene	LV OEL	AER 8 st	100 ppm, 442 mg/m3	Āda,
	LV OEL	AER īslaicīgā	200 ppm, 884 mg/m3	Āda,

MSDS Number:100000068486

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Ada Ada				
LU				
Composants	Base	Valeur	Paramètres de contrôle	Note
Toluene	LU OEL	TWA	50 ppm, 192 mg/m3	Peau,
	LU OEL	STEL	100 ppm, 384 mg/m3	Peau,
Benzene	LU OEL	TWA	1 ppm, 3,25 mg/m3	
Ethylbenzene	LU OEL	TWA	100 ppm, 442 mg/m3	Peau,
	LU OEL	STEL	200 ppm, 884 mg/m3	Peau,

Peau Une pénétration cutanée s'ajoutant à l'inhalation réglementée est possible

LT				
Komponentai	Pagrindas, bazė	Vertė	Kontrolės parametrai	Pastaba
Toluene	LT OEL	IPRD	50 ppm, 192 mg/m3	O,
	LT OEL	TPRD	100 ppm, 384 mg/m3	O,
Benzene	LT OEL	IPRD	1 ppm, 3,25 mg/m3	O,
	LT OEL	TPRD	6 ppm, 19 mg/m3	O,
Ethylbenzene	LT OEL	IPRD	100 ppm, 442 mg/m3	O,
	LT OEL	TPRD	200 ppm, 884 mg/m3	O,

O Oksiduojanti

IT				
Componenti	Base	Valore	Parametri di controllo	Nota
Toluene	IT OEL	TWA	50 ppm, 192 mg/m3	Pelle,
Benzene	IT OEL	TWA	1 ppm, 3,25 mg/m3	Pelle,
	IT OEL	TWA	0,5 ppm,	
	IT OEL	TPRD	2,5 ppm,	
Ethylbenzene	IT OEL	TWA	100 ppm, 442 mg/m3	Pelle,
	IT OEL	STEL	200 ppm, 884 mg/m3	Pelle,

Pelle La notazione 'Pelle' attribuita ai valori limite di esposizione indica possibilità di assorbimento significativo attraverso la pelle.

IS				
Komponenter	Grunnlag	Verdi	Kontrollparametere	Nota
Toluene	IS OEL	TWA	25 ppm, 94 mg/m3	H,
	IS OEL	STEL	50 ppm, 188 mg/m3	H,
Benzene	IS OEL	TWA	0,5 ppm, 1,6 mg/m3	H, K,
Ethylbenzene	IS OEL	TWA	50 ppm, 200 mg/m3	H,
	IS OEL	STEL	200 ppm, 884 mg/m3	H,

H Skin notation
K Carcinogenic substances

IE				
Ingredients	Basis	Value	Control parameters	Note
Toluene	IE OEL	OELV - 8 hrs (TWA)	50 ppm, 192 mg/m3	Sk, IOELV,
	IE OEL	OELV - 15 min (STEL)	100 ppm, 384 mg/m3	Sk, IOELV,
Benzene	IE OEL	OELV - 8 hrs (TWA)	1 ppm, 3 mg/m3	BOELV, Sk, Carc 1A,
Ethylbenzene	IE OEL	OELV - 8 hrs (TWA)	100 ppm, 442 mg/m3	Sk, IOELV,
	IE OEL	OELV - 15 min (STEL)	200 ppm, 884 mg/m3	Sk, IOELV,

BOELV Binding Occupational Exposure Limit Value
Carc 1A Carc 1A - Substances known to have carcinogenic potential for humans
IOELV Indicative Occupational Exposure Limit Value
Sk Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body

HU				
Komponensek	Bázis	Érték	Határérték	Megjegyzés
Toluene	HU OEL	AK-érték	190 mg/m3	b, EU2, i,
	HU OEL	CK-érték	380 mg/m3	b, EU2, i,
Benzene	HU OEL	MK-érték	3 mg/m3	b, k, i,
Ethylbenzene	HU OEL	AK-érték	442 mg/m3	b, EU1, i,
	HU OEL	CK-érték	884 mg/m3	b, EU1, i,

b Bőrön át is felszívódik. Az AK-értékek a veszélyes anyagoknak ezt a tulajdonságát, illetve az ebből származó expozíciót csak a levegőben megengedett koncentrációjuk mértékének megfelelően veszik figyelembe
EU1 91/322/EGK irányelvben közölt érték
EU2 96/94/EK irányelvben közölt érték
i Ingerlő anyag (izgatja a bőrt, nyálkahártyát, szemet vagy mindhármat)
k Rákkeltő

HR				
Sastojci	Temelj	Vrijednost	Nadzorni parametri	Bilješka
Toluene	HR OEL	GVI	50 ppm, 192 mg/m3	K, 3, EU**, Xn, F,
	HR OEL	STEL	100 ppm, 384 mg/m3	K, 3, EU**, Xn, F,
Benzene	HR OEL	GVI	1 ppm, 3,25 mg/m3	K, 1, 2, EU0, T, F,
Ethylbenzene	HR OEL	GVI	100 ppm, 442 mg/m3	K, EU*, Xn, F,
	HR OEL	STEL	200 ppm, 884 mg/m3	K, EU*, Xn, F,

1 Karc. kat. 1: tvari za koje je dokazano da su karcinogene za ljude
2 Muta. kat. 2: tvari koje su vjerojatno mutagene za ljude

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- 3 Repr. kat. 3: tvari za koje se pretpostavlja da bi mogle smanjiti plodnost kod ljudi i/ili tvari za koje se pretpostavlja da bi mogle iskazati razvojnu otrovnost kod ljudi
- EU* Naznaka da se radi o tvarima za koje su utvrđene indikativne granične vrijednosti izloženosti prema Direktivi 2000/39/ EC (prva lista)
- EU** Naznaka da se radi o tvarima za koje su utvrđene indikativne granične vrijednosti izloženosti prema Direktivi 2006/15/ EC (druga lista)
- EU0 Naznaka da se radi o tvarima za koje su utvrđene obvezujuće granične vrijednosti izloženosti prema Direktivi 2003/18/ EC, Direktivi 99/38/EC i Direktivi 98/24/EC
- F Lako zapaljivo
- K naznaka da tvar može štetno djelovati kroz kožu
- T Otrovno
- Xn Štetno za zdravlje

GR

Συστατικά	Βάση	Τιμή	Παράμετροι ελέγχου	Σημείωση
Toluene	GR OEL	TWA	50 ppm, 192 mg/m3	Δ,
	GR OEL	STEL	100 ppm, 384 mg/m3	Δ,
Benzene	GR OEL	TWA	1 ppm, 3,19 mg/m3	Δ,
Ethylbenzene	GR OEL	TWA	100 ppm, 435 mg/m3	
	GR OEL	STEL	125 ppm, 545 mg/m3	

Δ Η ένδειξη 'δέρμα' (Δ), η οποία επισημαίνει ορισμένους χημικούς παράγοντες του πίνακα της παρ. 1 του άρθρου 3, υπονοεί την πιθανή συμβολή στην συνολική έκθεση του εργαζόμενου και της ποσότητας αυτών των χημικών παραγόντων που απορροφάται διαμέσου του δέρματος κατά την άμεση επαφή μαζί τους.

GB

Ingredients	Basis	Value	Control parameters	Note
Toluene	GB EH40	TWA	50 ppm, 191 mg/m3	Sk,
	GB EH40	STEL	100 ppm, 384 mg/m3	Sk,
Benzene	GB EH40	TWA	1 ppm,	Sk, Carc, 2,
Ethylbenzene	GB EH40	TWA	100 ppm, 441 mg/m3	Sk,
	GB EH40	STEL	125 ppm, 552 mg/m3	Sk,

- 2 Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used
- Carc Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH.
- Sk Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

FR

Composants	Base	Valeur	Paramètres de contrôle	Note
Toluene	FR VLE	VME	20 ppm, 76,8 mg/m3	R2, *, noir,
	FR VLE	VLCT (VLE)	100 ppm, 384 mg/m3	R2, *, noir,
Benzene	FR VLE	VME	1 ppm, 3,25 mg/m3	C1A, M1B, *, noir,
Ethylbenzene	FR VLE	VME	20 ppm, 88,4 mg/m3	*, noir,
	FR VLE	VLCT (VLE)	100 ppm, 442 mg/m3	*, noir,

- * Risque de pénétration percutanée
- C1A Substances que l'on sait être cancérogènes chez l'homme
- M1B Substances devant être assimilées à des substances pour l'homme
- noir Valeurs limites réglementaires contraignantes
- R2 Substances préoccupantes en raison d'effets toxiques pour la reproduction possibles

FI

Aineosat	Peruste	Arvo	Valvontaa koskevat muuttujat	Huomautus
Toluene	FI OEL	HTP-arvot 8h	25 ppm, 81 mg/m3	iho,
	FI OEL	HTP-arvot 15 min	100 ppm, 380 mg/m3	iho,
Ethylbenzene	FI OEL	HTP-arvot 8h	50 ppm, 220 mg/m3	iho,
	FI OEL	HTP-arvot 15 min	200 ppm, 880 mg/m3	iho,

iho Ihon läpi imeytyvien aineiden elimistöön joutuvia määriä ja elimistöön joutuneesta aineesta aiheutuvaa vaaraa ei voida näin ollen arvioida pelkästään ilmapitoisuuksien avulla. Tämän vuoksi näiden aineiden HTP-arvojen yhteyteen on huomautussarakkeeseen otettu ihon läpi imeytymisen osoittamiseksi merkintä 'iho'. Monet aineet, varsinkin voimakkaat hapot tai emäkset, voivat aiheuttaa iholle jouduttuaan ihon ärsyntyntymistä tai syöpymistä.

ES

Componentes	Base	Valor	Parámetros de control	Nota
Toluene	ES VLA	VLA-ED	50 ppm, 192 mg/m3	vía dérmica, r, VLB®, VLI,
	ES VLA	VLA-EC	100 ppm, 384 mg/m3	vía dérmica, r, VLB®, VLI,
Benzene	ES VLA	VLA-ED	1 ppm, 3,25 mg/m3	M1B, vía dérmica, r, v, VLB®, C1A,
Ethylbenzene	ES VLA	VLA-ED	100 ppm, 441 mg/m3	vía dérmica, VLB®, VLI,
	ES VLA	VLA-EC	200 ppm, 884 mg/m3	vía dérmica, VLB®, VLI,

- C1A Carcinógenos o supuestos carcinógenos para el hombre - en base a la existencia de pruebas en humanos
- M1B Sustancias de las que se sabe o se considera que inducen mutaciones hereditarias en las células germinales humanas. La clasificación en la categoría 1B se basa en: - Resultados positivos de ensayos de mutagenicidad hereditaria en células germinales de mamífero in vivo; o - Resultados positivos de ensayos de mutagenicidad en células somáticas de mamífero in vivo, junto con alguna prueba que haga suponer que la sustancia puede causar mutaciones en células germinales. Esta información complementaria puede proceder de ensayos de mutagenicidad/genotoxicidad en células germinales de mamífero in vivo, o de la

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demonstración de que la sustancia o sus metabolitos son capaces de interactuar con el material genético de las células germinales; o - Resultados positivos de ensayos que muestran efectos mutagénicos en células germinales de personas, sin que esté demostrada la transmisión a los descendientes; por ejemplo, un incremento de la frecuencia de aneuploidía en los espermatozoides de los varones expuestos.

- r Esta sustancia tiene establecidas restricciones a la fabricación, la comercialización o el uso en los términos especificados en el 'Reglamento CE 1907/2006 sobre Registro, Evaluación, Autorización y Restricción de sustancias y preparados químicos' (REACH) de 18 de diciembre de 2006 (DOUE L 369 de 30 de diciembre de 2006). Las restricciones de una sustancia pueden aplicarse a todos los usos o sólo a usos concretos. El anexo XVII del Reglamento REACH contiene la lista de todas las sustancias restringidas y especifica los usos que se han restringido.

- v Real Decreto 1124/2000, de 16 de junio (BOE nº 145 de 17 de junio de 2000), por el que se modifica el Real Decreto 665/1997, de 12 de mayo, sobre la protección de los trabajadores contra los riesgos relacionados con la exposición a agentes cancerígenos durante el trabajo.

vía dérmica Vía dérmica

VLB® Agente químico que tiene Valor Límite Biológico específico en este documento.

VLI Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su trasposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.

EE

Komponendid, osad	Alused	Väärtus	Kontrolliparameetrid	Märkused
Toluene	EE OEL	Piirnorm	50 ppm, 192 mg/m ³	A,
	EE OEL	Lühiajalise kokkupuute piirnorm	100 ppm, 384 mg/m ³	A,
Benzene	EE OEL	Piirnorm	0,5 ppm, 1,5 mg/m ³	A, C,
	EE OEL	Lühiajalise kokkupuute piirnorm	3 ppm, 9 mg/m ³	A, C,
Ethylbenzene	EE OEL	Piirnorm	100 ppm, 442 mg/m ³	A, S,
	EE OEL	Lühiajalise kokkupuute piirnorm	200 ppm, 884 mg/m ³	A, S,

A Naha kaudu kergesti absorbeeruvad ained

C Kantserogeensed ained

S Sensibiliseerivad ained

DK

Komponenter	Basis	Værdi	Kontrolparametre	Note
Toluene	DK OEL	GV	25 ppm, 94 mg/m ³	H, E,
Benzene	DK OEL	GV	0,5 ppm, 1,6 mg/m ³	H, K, E,
Ethylbenzene	DK OEL	GV	50 ppm, 217 mg/m ³	H, K, E,

E At stoffet har en EF-grænseværdi

H Betyder, at stoffet kan optages gennem huden.

K Betyder, at stoffet er optaget på listen over stoffer, der anses for at være kræftfremkaldende.

DE

Inhaltsstoffe	Grundlage	Wert	Zu überwachende Parameter	Bemerkung
Toluene	DE TRGS 900	AGW	50 ppm, 190 mg/m ³	DFG, EU, H, Y,
Ethylbenzene	DE TRGS 900	AGW	20 ppm, 88 mg/m ³	DFG, H, Y,
	DE TRGS 900	AGW	200 mg/m ³	Gruppen-AGW, AGS,

AGS Ausschuss für Gefahrstoffe

DFG Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission)

EU Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich.)

Gruppen-AGW Gruppengrenzwert für Kohlenwasserstoff-Lösemittelgemische

H Hautresorptiv

Y Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden

CZ

Složky	Základ	Hodnota	Kontrolní parametry	Poznámka
Toluene	CZ OEL	PEL	200 mg/m ³	I, D,
	CZ OEL	NPK-P	500 mg/m ³	I, D,
Benzene	CZ OEL	PEL	3 mg/m ³	I, D, P,
	CZ OEL	NPK-P	10 mg/m ³	I, D, P,
Ethylbenzene	CZ OEL	PEL	200 mg/m ³	D,
	CZ OEL	NPK-P	500 mg/m ³	D,

D Při expozici se významně uplatňuje pronikání látky kůží

I dráždí sliznice (oči, dýchací cesty) resp. kůži

P U látky nelze vyloučit závažné pozdní účinky

CY

Συστατικά	Βάση	Τιμή	Παράμετροι ελέγχου	Σημείωση
Toluene	CY OEL	TWA	50 ppm, 192 mg/m ³	
	CY OEL	STEL	100 ppm, 384 mg/m ³	
Benzene	CY OEL 2	M.E.Σ.	10 ppm, 30 mg/m ³	
Ethylbenzene	CY OEL	TWA	100 ppm, 442 mg/m ³	
	CY OEL	STEL	200 ppm, 884 mg/m ³	

CH

Inhaltsstoffe	Grundlage	Wert	Zu überwachende	Bemerkung
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			Parameter	
Toluene	CH SUVA	MAK-Wert	50 ppm, 190 mg/m3	H, RE3, NIOSH, DFG, INRS, HSE, SSc,
	CH SUVA	KZGW	200 ppm, 760 mg/m3	H, RE3, NIOSH, DFG, INRS, HSE, SSc,
Benzene	CH SUVA	MAK-Wert	0,5 ppm, 1,6 mg/m3	H, Carc.Cat.1, M2, NIOSH, DFG, HSE, BG,
Ethylbenzene	CH SUVA	MAK-Wert	50 ppm, 220 mg/m3	OL, H, NIOSH,
	CH SUVA	KZGW	50 ppm, 220 mg/m3	#, OL, H, NIOSH,

- # Bei Konzentrationen <10 ppm ist nicht mit einer fruchtschädigenden Wirkung zu rechnen
- BG BG
- Carc.Cat.1 Krebserzeugende Stoffe Kategorie 1
- DFG Deutsche Forschungsgemeinschaft
- H Vergiftung durch Hautresorption möglich; Bei Stoffen, welche die Haut leicht zu durchdringen vermögen, kann durch die zusätzliche Hautresorption die innere Belastung wesentlich höher werden als bei alleiniger Aufnahme durch die Atemwege.
- HSE Health and Safety Executive (Occupational Medicine and Hygiene Laboratory)
- INRS Institut National de Recherche et de Sécurité pour la prévention des accidents du travail et des maladies professionnelles
- M2 Umfasst Stoffe, die als erbgutverändernd für den Menschen angesehen werden sollten. Es bestehen hinreichende Anhaltspunkte zu der begründeten Annahme, dass die Exposition eines Menschen gegenüber dem Stoff zu vererbaren Schäden führen kann.
- NIOSH National Institute for Occupational Safety and Health
- OL lärmverstärkende Ototoxizität
- RE3 Umfasst Stoffe, die wegen möglicher fruchtschädigender (entwicklungsschädigender) Wirkungen beim Menschen zu Besorgnis Anlass geben.
- SSc Eine Schädigung der Leibesfrucht braucht bei Einhaltung des MAK-Wertes nicht befürchtet zu werden.

BG

Компоненти	Основа	Стойност	Параметри на контрол	Бележка
Toluene	BG OEL	TWA	50 ppm, 192 mg/m3	-,
	BG OEL	STEL	100 ppm, 384 mg/m3	-,
Benzene	BG OEL	TWA	3,25 mg/m3	-,
Ethylbenzene	BG OEL	TWA	435 mg/m3	-,
	BG OEL	STEL	545 mg/m3	-,

- Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност. Граничните стойности на тези химични агенти във въздуха на работната среда, определени с наредбата, са съобразени със съответните стойности, приети за Европейската общност, като могат да бъдат равни или по-ниски от тях.

BE

Bestanddelen	Basis	Waarde	Controleparameters	Opmerking
Toluene	BE OEL	TGG 8 hr	20 ppm, 77 mg/m3	D,
	BE OEL	TGG 15 min	100 ppm, 384 mg/m3	D,
Benzene	BE OEL	TGG 8 hr	1 ppm, 3,25 mg/m3	D, C,
Ethylbenzene	BE OEL	TGG 8 hr	100 ppm, 442 mg/m3	D,
	BE OEL	TGG 15 min	125 ppm, 551 mg/m3	D,

- C De betrokken stof valt onder het toepassingsgebied van het koninklijk besluit van 2 december 1993 betreffende de bescherming van de werknemers tegen de risico's van blootstelling aan kankerverwekkende en mutagene agentia op het werk.
- D Opname van het agens via de huid, de slijmvliezen of de ogen vormt een belangrijk deel van de totale blootstelling. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.

AT

Inhaltsstoffe	Grundlage	Wert	Zu überwachende Parameter	Bemerkung
Toluene	AT OEL	TMW	50 ppm, 190 mg/m3	H,
	AT OEL	KZW	100 ppm, 380 mg/m3	H,
Benzene	AT TRK	TMW	1 ppm, 3,2 mg/m3	H,
	AT TRK	KZW	4 ppm, 12,8 mg/m3	H,
Ethylbenzene	AT OEL	TMW	100 ppm, 440 mg/m3	H,
	AT OEL	KZW	200 ppm, 880 mg/m3	H,

H Besondere Gefahr der Hautresorption

Biological exposure indices**SK**

Názov látky	Č. CAS	Kontrolné parametre	Doba odberu vzorky	Aktualizácia
Toluene	108-88-3	toluén: 600 µg/l (Krv)	koniec vystavenia alebo pracovnej zmeny	2011-11-23
		toluén: 6.517 µmol.l-1 (Krv)	koniec vystavenia alebo pracovnej zmeny	2011-11-23
		kyselina hippurová: 2.401 mg/l (moč)	koniec vystavenia alebo pracovnej zmeny	2011-11-23

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		kyselina hippurová: 13399 $\mu\text{mol.l-1}$ (moč)	koniec vystavenia alebo pracovnej zmeny	2011-11-23
		kyselina hippurová: 1600 mg/g kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny	2011-11-23
		kyselina hippurová: 1010 $\mu\text{mol/mmol}$ kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny	2011-11-23
		o-krezol: 14.3 $\mu\text{mol.l-1}$ (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		o-krezol: 1.03 mg/g kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		o-krezol: 1.08 $\mu\text{mol/mmol}$ kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		o-krezol: 1,5 mg/l (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
Ethylbenzene	100-41-4	2- a 4-etylphenol: 12 mg/l (Krv)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		kyselina mandľová a kyselina fenyglyoxylová: 1.600 mg/l (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		2- a 4-etylphenol: 98.6 $\mu\text{mol.l-1}$ (Krv)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		kyselina mandľová a kyselina fenyglyoxylová: 10590 $\mu\text{mol.l-1}$ (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23

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		kyselina mandl'ová a kyselina fenyglyoxylová: 1067 mg/g kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		kyselina mandl'ová a kyselina fenyglyoxylová: 799 µmol/mmol kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		2- a 4-etylfenol: 8.03 mg/g kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23
		2- a 4-etylfenol: 7.44 µmol/mmol kreatinínu (moč)	koniec vystavenia alebo pracovnej zmeny pri dlhodobom vystavení: po viacerých pracovných zmenách	2011-11-23

SI

Ime snovi	Št. CAS	Parametri nadzora	Čas vzorčenia	Sprememba
Toluene	108-88-3	toluen: 1 mg/l (Kri)	Ob koncu delovne izmene	2001-12-11
		hipurna kislina: 1.58 mol/mol kreatinina (Urin)	Ob koncu delovne izmene	2001-12-11
		o-krezol: 1.05 mol/mol kreatinina (Urin)	Ob koncu delovne izmene	2001-12-11
		toluen: 10.85 µmol/l (Kri)	Ob koncu delovne izmene	2001-12-11
		toluen: 0.83 µmol/l (Zadnji izdihani zrak)	V času izpostavljenosti	2001-12-11
		hipurna kislina: 2.5 kreatinin (Urin)	Ob koncu delovne izmene	2001-12-11
		o-krezol: 1 mg/g kreatinina (Urin)	Ob koncu delovne izmene	2001-12-11
		toluen: 20 ppm (Zadnji izdihani zrak)	V času izpostavljenosti	2001-12-11
Benzene	71-43-2	fenol: 18 mmol/mol kreatinina (Urin)	Ob koncu delovne izmene	2001-12-11
		benzen: 4.99 mmol/l (Zadnji izdihani zrak)	16 Ur po končanem delu	2001-12-11
		fenol: 15 mg/g kreatinina (Urin)	Ob koncu delovne izmene	2001-12-11
		benzen: 0.12 ppm (Zadnji izdihani zrak)	16 Ur po končanem delu	2001-12-11
Ethylbenzene	100-41-4	etilbenzen: 1,5 mg/l (Kri)	V času izpostavljenosti	2001-12-11
		mandljeva kislina: 1.12 mol/mol kreatinina (Urin)	Ob koncu delovne izmene in ob koncu delovnega tedna	2001-12-11
		etilbenzen: 4.13 µmol/l (Kri)	V času izpostavljenosti	2001-12-11
		etilbenzen: 83.2 µmol/l (Zadnji izdihani zrak)	16 Ur po končanem delu	2001-12-11
		mandljeva kislina: 1.5 kreatinin (Urin)	Ob koncu delovne izmene in ob koncu delovnega tedna	2001-12-11

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		etilbenzen: 2 ppm (Zadnji izdihani zrak)	16 Ur po končanem delu	2001-12-11
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RO

Numele substanței	Nr. CAS	Parametri de control	Timp de prelevare a probei	Adus la zi
Toluene	108-88-3	acid hipuric o-cresol: 3 mg/l (Urină)	Sfârșit schimb	2002-11-25
		acid hipuric o-cresol: 2 g/l (Urină)	Sfârșit schimb	2002-11-25
Benzene	71-43-2	fenol total: 50 mg/l (Urină)	Sfârșit schimb	2006-10-13
		acid S-fenil-mercapturic: 25 µg/g creatinină (Urină)	Sfârșit schimb	2006-10-13
Ethylbenzene	100-41-4	acid mandelic: 1.5 g/g creatinină (Urină)	Sfârșit săptămână	2002-11-25

LV

Vielas nosaukums	CAS Nr.	Pārvaldības parametri	Parauga ņemšanas laiks	Precizējums
Toluene	108-88-3	toluolu: 0,05 mg/l (Asinis)	maiņas beigās nosaka	2007-05-18
		hipurskābi: 1.6 g/g kreatinīns (Urīns)	maiņas beigās nosaka	2007-05-18
Benzene	71-43-2	fenolu: 25 µg/g kreatinīna (Urīns)	maiņas beigās nosaka	2007-05-18

IT

Denominazione della sostanza	N. CAS	Parametri di controllo	Tempo di campionamento	Aggiornamento
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HU

Az anyag megnevezése	CAS szám	Határérték	Mintavétel időpontja	Aktualizálás
Toluene	108-88-3	o-krezol: 1 mg/g kreatinin (húgyhólyag)	műszak után	2002-11-28
		o-krezol: 1.05 mikromol/mmol kreatinin (kerekített értékek) (húgyhólyag)	műszak után	2002-11-28
Benzene	71-43-2	t,t-mukonsav: 1.2 mikromol/mmol kreatinin (kerekített értékek) (húgyhólyag)	műszak után	2002-11-28
		t,t-mukonsav: 1.5 mg/g kreatinin (húgyhólyag)	műszak után	2002-11-28
Ethylbenzene	100-41-4	mandulasav: 1500 mg/g kreatinin (húgyhólyag)	műszak után munkahét végén	2002-11-28
		mandulasav: 1110 mikromol/mmol kreatinin (kerekített értékek) (húgyhólyag)	műszak után munkahét végén	2002-11-28

HR

Naziv tvari	CAS-br.	Nadzorni parametri	Vrijeme uzorkovanja	Ažurirati
Toluene	108-88-3	toluen: 10.85 µmol/l (Krv)	na kraju radne smjene	2009-01-30
		toluen: 1 mg/l (Krv)	na kraju radne smjene	2009-01-30
		toluen: 0.83 µmol/l (krajnje izdahnuti zrak)	za vrijeme izloženosti	2009-01-30
		toluen: 20 ppm (krajnje izdahnuti zrak)	za vrijeme izloženosti	2009-01-30
		hipurna kiselina: 1.58 mol/mol kreatinina (Urin)	na kraju radne smjene	2009-01-30
		hipurna kiselina: 2.5 g/g kreatinin (Urin)	na kraju radne smjene	2009-01-30
		o-krezol: 1.05 mmol/mol kreatinina (Urin)	na kraju radne smjene	2009-01-30
		o-krezol: 1 mg/g kreatinina (Urin)	na kraju radne smjene	2009-01-30

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Benzene	71-43-2	Benzen: 4.99 mmol/l (krajnje izdahnuti zrak)	oko 16 sati nakon završetka radne smjene	2009-01-30
		Benzen: 0.12 ppm (krajnje izdahnuti zrak)	oko 16 sati nakon završetka radne smjene	2009-01-30
		fenol: 54.09 mmol/mol kreatinina (Urin)	na kraju radne smjene	2009-01-30
		fenol: 45 mg/g kreatinina (Urin)	na kraju radne smjene	2009-01-30
Ethylbenzene	100-41-4	etilbenzen: 14.13 µmol/l (Krv)	za vrijeme izloženosti	2009-01-30
		etilbenzen: 1,5 mg/l (Krv)	za vrijeme izloženosti	2009-01-30
		etilbenzen: 83.2 nmol/l (krajnje izdahnuti zrak)	oko 16 sati nakon završetka radne smjene	2009-01-30
		etilbenzen: 2 ppm (krajnje izdahnuti zrak)	oko 16 sati nakon završetka radne smjene	2009-01-30
		bademova kiselina: 1.12 mol/mol kreatinina (Urin)	na kraju radne smjene i na kraju radnog tjedna	2009-01-30
		bademova kiselina: 1.5 g/g kreatinin (Urin)	na kraju radne smjene i na kraju radnog tjedna	2009-01-30

FI

Aineen nimi	CAS-Nro.	Valvontaa koskevat muuttujat	Näytteenottoaika	Päivämäärä
Toluene	108-88-3	tolueenipitoisuus: 500 nmol/l (Veri)	Työpäivän jälkeinen aamu	2009-07-01
Ethylbenzene	100-41-4	mantelihiappo: 5.2 mmol/l (Virtsa)	Työvuoron päätyttyä työviikon tai altistumisjakson loputtua	2009-07-01

ES

Nombre de la sustancia	No. CAS	Parámetros de control	Hora de muestreo	Puesto al día
Toluene	108-88-3	o-cresol: 0,5 mg/l (Orina)	final de la jornada laboral	2011-03-03
		tolueno: 0,05 mg/l (Sangre)	principio de la última jornada de la semana laboral	2011-03-03
		ácido hipúrico: 1.6 g/g creatinina (Orina)	final de la jornada laboral	2011-03-03
Benzene	71-43-2	ácido t,t-mucónico: 2 mg/l (Orina)	final de la jornada laboral	2011-03-03
		ácido S-fenilmercaptúrico: 0.045 mg/g creatinina (Orina)	final de la jornada laboral	2011-03-03
		benceno total: 5 µg/l (Sangre)	final de la jornada laboral	2011-03-03
Ethylbenzene	100-41-4	suma del ácido mandélico y el ácido fenilgloxílico: 700 mg/g creatinina (Orina)	final de la semana laboral	2011-03-03

DE

Stoffname	CAS-Nr.	Zu überwachende Parameter	Probennahmezeit punkt	Stand
Toluene	108-88-3	Toluol: 1 mg/l (Blut)	Expositionsende, bzw. Schichtende	2004-08-01
		o-Kresol: 3 mg/l (Urin)	Expositionsende, bzw. Schichtende bei Langzeitexposition: nach mehreren vorangegangenen Schichten	2004-08-01
Ethylbenzene	100-41-4	Mandelsäure + Phenylglyoxylsäure: 300 mg/l (Urin)	Expositionsende, bzw. Schichtende	2013-04-04

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CZ

Název látky	Č. CAS	Kontrolní parametry	Doba odběru vzorku	Aktualizace
Toluene	108-88-3	Hippurová kyselina: 1600 mg/g kreatininu (moč)	Konec směny	2003-12-15
		Hippurová kyselina: 1000 μ mol/mmol kreatininu (moč)	Konec směny	2003-12-15
		o-Kresol: 0,5 mg/l (moč)	Konec směny	2003-12-15
		o-Kresol: 4.6 μ mol/l (moč)	Konec směny	2003-12-15
Benzene	71-43-2	S- Fenylmerkapturová kyselina: 0.05 mg/g kreatininu (moč)	Konec směny	2003-12-15
		S- Fenylmerkapturová kyselina: 0.024 μ mol/mmol kreatininu (moč)	Konec směny	2003-12-15
Ethylbenzene	100-41-4	Mandlová kyselina: 1500 mg/g kreatininu (moč)	Konec směny	2003-12-15
		Mandlová kyselina: 1100 μ mol/mmol kreatininu (moč)	Konec směny	2003-12-15

CH

Stoffname	CAS-Nr.	Zu überwachende Parameter	Probennahmezeit punkt	Stand
Toluene	108-88-3	o-Kresol: 0,5 mg/l (Urin)	Expositionsende, bzw. Schichtende bei Langzeitexposition: nach mehreren vorangegangenen Schichten	2011-01-01
		Hippursäure: 2 g/g Kreatinin (Urin)	Expositionsende, bzw. Schichtende bei Langzeitexposition: nach mehreren vorangegangenen Schichten	2011-01-01
		Toluol: 6.48 μ mol/l (Blut)	Expositionsende, bzw. Schichtende	2011-01-01
		Hippursäure: 1.26 μ mol/mmol Kreatinin (Urin)	Expositionsende, bzw. Schichtende bei Langzeitexposition: nach mehreren vorangegangenen Schichten	2011-01-01
		o-Kresol: 4.62 μ mol/l (Urin)	Expositionsende, bzw. Schichtende bei Langzeitexposition: nach mehreren vorangegangenen Schichten	2011-01-01
		Toluol: 600 μ g/l (Blut)	Expositionsende, bzw. Schichtende	2011-01-01
Benzene	71-43-2	S-Phenylmerkaptursäure: 25 μ g/g Kreatinin (Urin)	Expositionsende, bzw. Schichtende	2009-01-01
		S-Phenylmerkaptursäure: 0.011 μ mol/mmol Kreatinin (Urin)	Expositionsende, bzw. Schichtende	2009-01-01
		t,t-Mukonsäure: 500 μ g/g Kreatinin (Urin)	Expositionsende, bzw. Schichtende	2009-01-01
		t,t-Mukonsäure: 0.398 μ mol/mmol Kreatinin (Urin)	Expositionsende, bzw. Schichtende	2009-01-01
Ethylbenzene	100-41-4	Ethylbenzol: 1,5 mg/l (Blut)	Expositionsende, bzw. Schichtende	2005-01-01
		Ethylbenzol: 14.1 μ mol/l (Blut)	Expositionsende, bzw. Schichtende	2005-01-01
		Mandelsäure plus Phenylglyoxylsäure: 2 g/g Kreatinin (Urin)	Expositionsende, bzw. Schichtende	2005-01-01

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BG

Наименование на веществото	CAS номер	Параметри на контрол	Време на взимане на пробата	Нова Информация
Toluene	108-88-3	хипурова киселина: 1.6 mmol/mmol креатинин (Урина)	В края на експозицията или в края на работната смяна	2007-08-17
Benzene	71-43-2	Trans, trans -муконова киселина: 2 mg/l (Урина)	В края на експозицията или в края на работната смяна	2007-08-17
		S-фенилмеркаптурова киселина: 0.045 mg/g креатинин (Урина)	В края на експозицията или в края на работната смяна	2007-08-17
Ethylbenzene	100-41-4	бадемена киселина и фенилглиоксалова киселина - сумарно: 2000 mg/g креатинин (Урина)	В края на експозицията или в края на работната смяна	2007-08-17

DMEL**Benzene**

: End Use: Workers

Routes of exposure: Skin contact

Potential health effects: Chronic effects, Systemic effects

Value: 234 mg/kg

End Use: Workers

Routes of exposure: Inhalation

Potential health effects: Chronic effects, Systemic effects

Value: 3,25 mg/m3

End Use: Consumers

Routes of exposure: Skin contact

Potential health effects: Chronic effects, Systemic effects

Value: 0,234 mg/kg

End Use: Consumers

Routes of exposure: Inhalation

Potential health effects: Chronic effects, Systemic effects

Value: 0,00325 mg/m3

Derived minimal effect level

End Use: Consumer use

Routes of exposure: Ingestion

Potential health effects: Chronic effects, Systemic effects

Value: 0,00014 mg/kg

Derived minimal effect level

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to

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maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Complete head face and neck protection. Rubber apron. Footwear protecting against chemicals.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

- Form : Non-viscous
- Physical state : Liquid
- Color : clear
- Odor : Strong gasoline

Safety data

- Flash point : 4,4 °C (39,9 °F)
- Lower explosion limit : 1,2 %(V)
- Upper explosion limit : 7,1 %(V)
- Oxidizing properties : no
- Autoignition temperature : 528,8 °C (983,8 °F)
- Molecular formula : C₇H₈
- Molecular weight : 92,15 g/mol
- pH : Not applicable
- Freezing point : -94,44 °C (-137,99 °F)

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Pour point	No data available
Boiling point/boiling range	: 110,56 °C (231,01 °F)
Vapor pressure	: 1,03 PSI at 37,8 °C (100,0 °F)
Relative density	: 0,87
Density	: 0,9 g/cm ³
Water solubility	: Soluble in alcohol, benzene, and ether; insoluble in water.
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: < 1,138 cSt at 37,8 °C (100,0 °F)
Relative vapor density	: 2,8 (Air = 1.0)
Evaporation rate	: 4,5

Other information

Conductivity	: 8 pSm at 20 °C
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SECTION 10: Stability and reactivity

Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
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Possibility of hazardous reactions

Conditions to avoid	: Heat, flames and sparks.
Other data	: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**Toluene (Commercial Grade)**

Acute oral toxicity	: LD50 Oral: > 5.000 mg/kg Species: Rat Method: Acute toxicity estimate
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Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

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Acute dermal toxicity : LD50 Dermal: > 5.000 mg/kg
Species: Rabbit
Method: Acute toxicity estimate

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Skin irritation : May cause skin irritation in susceptible persons.

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Eye irritation : May irritate eyes.

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Sensitization : Did not cause sensitization on laboratory animals. Estimated based on individual component values.

Repeated dose toxicity

Toluene : Species: Rat
Application Route: Inhalation
Dose: 0, 100, 625, 1250, 3000 ppm
Exposure time: 15 wk
Number of exposures: 6.5 h/d, 5 d/wk
NOEL: 625 ppm

Species: Mouse
Application Route: Inhalation
Dose: 0, 100, 625, 1250, 3000 ppm
Exposure time: 14 wk
Number of exposures: 6.5 h/d, 5 d/wk
NOEL: 100 ppm

Benzene

Species: Rat, female
Sex: female
Application Route: oral gavage
Dose: 0, 25, 50, 100 mg/kg
Exposure time: 103 wk
Number of exposures: 5 d/wk
NOEL: < 25 mg/kg
Lowest observable effect level: 25 mg/kg

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Ethylbenzene

Species: Rat, male
Sex: male
Application Route: oral gavage
Dose: 0, 50, 100, 200 mg/kg
Exposure time: 103 wk
Number of exposures: 5 d/wk
NOEL: < 50 mg/kg
Lowest observable effect level: 50 mg/kg

Species: Mouse
Application Route: oral gavage
Dose: 0, 25, 50, 100 mg/kg
Exposure time: 103 wk
NOEL: < 25 mg/kg

Species: Rat, male
Sex: male
Application Route: Inhalation
Dose: 200, 400, 600, 800 ppm
Exposure time: 13 weeks
Number of exposures: 6 hours/day, 6 days/week
NOEL: 200 ppm
Test substance: yes
Target Organs: Ototoxicity

Carcinogenicity

Toluene

: Species: Rat
Dose: 0, 600, 1200 ppm
Exposure time: 2 yrs
Number of exposures: 6.5 h/d, 5 d/wk
Remarks: No evidence of carcinogenicity

Species: Mouse
Dose: 0, 600, 1200 ppm
Exposure time: 2 yrs
Number of exposures: 6.5 h/d, 5 d/wk
Remarks: No evidence of carcinogenicity

Benzene

Species: Rat
Sex: female
Dose: 0, 25, 50, 250 mg/kg
Exposure time: 103 wks
Number of exposures: daily, 5 days/week
Test substance: yes
Remarks: zymbal gland carcinomas, squamous cell papillomas

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Species: Rat
 Sex: male
 Dose: 0, 50, 100, 200 mg/kg
 Exposure time: 103 wks
 Number of exposures: daily, 5 days/week
 Test substance: yes
 Remarks: zymbal gland carcinomas, squamous cell papillomas

Species: Mouse
 Sex: male and female
 Dose: 25, 50, 100 mg/kg
 Exposure time: 103 wks
 Number of exposures: daily, 5 days/week
 Test substance: yes
 Remarks: Clear evidence of multiple organ carcinogenicity.

Reproductive toxicity

Toluene : Species: Rat
 Application Route: Inhalation
 Dose: 0, 100, 500, 2000 ppm
 Test period: 95 d
 NOAEL Parent: 2000 ppm

Developmental Toxicity

Toluene : Species: Rat
 Application Route: Inhalation
 Dose: 0, 100, 500, 2000 ppm
 Test period: 95 d
 NOAEL Teratogenicity: 400-750 ppm

Aspiration toxicity

Toluene : May be fatal if swallowed and enters airways.
 Benzene : May be fatal if swallowed and enters airways.
 Ethylbenzene : May be fatal if swallowed and enters airways.

CMR effects

Toluene : Carcinogenicity: Not classifiable as a human carcinogen.
 Mutagenicity: Animal testing did not show any mutagenic effects.
 Teratogenicity: Some evidence of adverse effects on development, based on animal experiments.
 Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Benzene : Carcinogenicity: Human carcinogen.
 Mutagenicity: In vivo tests showed mutagenic effects
 Teratogenicity: Did not show teratogenic effects in animal experiments.
 Reproductive toxicity: Animal testing did not show any effects on fertility.

Ethylbenzene : Mutagenicity: In vivo tests did not show mutagenic effects
 Teratogenicity: Did not show teratogenic effects in animal

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experiments.

Reproductive toxicity: No toxicity to reproduction

Toluene (Commercial Grade)**Further information**

: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: Ecological information**Toxicity to fish**

Toluene : LC50: 18 - 36 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

Benzene LC50: 5,3 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
flow-through test Test substance: yes
Method: OECD Test Guideline 203

Ethylbenzene LC50: 4,3 mg/l
Exposure time: 96 h
Species: Marone saxatilis (striped bass)

Toxicity to daphnia and other aquatic invertebrates

Toluene : EC50: 3,78 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Benzene EC50: 10 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Test substance: yes
Method: OECD Test Guideline 202

Ethylbenzene LC50: 2,6 mg/l
Exposure time: 96 h
Species: Mysidopsis bahia (mysid shrimp)

EC50: 2,2 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

Toxicity to algae

Toluene : EC50: 134 mg/l
Exposure time: 72 h
Species: Chlamydomonas angulosa (Green algae)

Benzene ErC50: 100 mg/l
Exposure time: 72 h

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Ethylbenzene

Species: *Pseudokirchneriella subcapitata* (green algae)
 Test substance: yes
 Method: OECD Test Guideline 201

ErC50: 5,0 mg/l
 Exposure time: 96 h
 Species: *Selenastrum capricornutum* (algae)

ErC50: 7,7 mg/l
 Exposure time: 72 h
 Species: *Skeletonema costatum* (Marine Algae)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Ethylbenzene : NOEC: 1 mg/l
 Exposure time: 7 d
 Species: *Daphnia pulex* (Water flea)
 semi-static test
 Analytical monitoring: yes

Elimination information (persistence and degradability)

Biodegradability : This material is expected to be readily biodegradable.

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life., Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting

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torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN1294, TOLUENE, 3, II

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1294, TOLUENE, 3, II, (4,4 °C)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1294, TOLUENE, 3, II

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN1294, TOLUENE, 3, II, (D/E)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

UN1294, TOLUENE, 3, II

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

UN1294, TOLUENE, 3, II

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information**National legislation**

Major Accident Hazard Legislation : 96/82/EC Update:
Highly flammable
7b
Quantity 1: 5.000 t
Quantity 2: 50.000 t

Water contaminating class : WGK 3 highly water endangering

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(Germany)**Notification status**

Europe REACH : This mixture contains only ingredients which have been subject to a pre-registration according to Regulation (EU) No. 1907/2006 (REACH).

Switzerland CH INV : On the inventory, or in compliance with the inventory

United States of America TSCA : On TSCA Inventory

Canada DSL : All components of this product are on the Canadian DSL.

Australia AICS : On the inventory, or in compliance with the inventory

New Zealand NZIoC : On the inventory, or in compliance with the inventory

Japan ENCS : On the inventory, or in compliance with the inventory

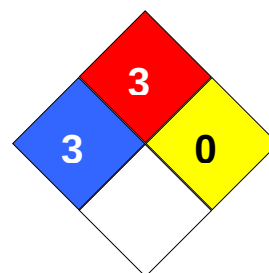
Korea KECI : On the inventory, or in compliance with the inventory

Philippines PICCS : On the inventory, or in compliance with the inventory

China IECSC : On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 3
Fire Hazard: 3
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : 2900

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of

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			Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.