

SDS KX44 pages 2-20

SDS KX45, KX46 pages 21-37

according to Regulation (EC) No. 1907/2006



KX44

Version 1.0 MSDS Number: H51432 Revision Date: 13.03.2015

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

1.1 Product identifier

Trade name : KX44

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

Use of the Sub-

stance/Mixture

: Curing chemical

Recommended restrictions

: For use in industrial installations or professional treatment

on use

only.

1.3 Details of the supplier of the safety data sheet

Company : Roberlo s.a.

Ctra. Nacional II, Km. 706,5 17457 Riudellots de la Selva

Spain

Telephone : +34972478060

Telefax : +34972477394

E-mail address of person responsible for the SDS

: msds@roberlo.com

1.4 Emergency telephone number

+34 972 478060 (8:00-12:45 / 14:15-17:30 h) ROBERLO (Spain) (GMT + 1:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Acute toxicity, Category 4 H332: Harmful if inhaled.

Skin irritation, Category 2 H315: Causes skin irritation.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Specific target organ toxicity - single ex-

posure, Category 3, Central nervous

system

H336: May cause drowsiness or dizziness.

Specific target organ toxicity - single ex-H335: May cause respiratory irritation.

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posure, Category 3, Respiratory system

Specific target organ toxicity - repeated

exposure, Category 2

H373: May cause damage to organs through pro-

longed or repeated exposure if inhaled.

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting ef-

fects.

Classification (67/548/EEC, 1999/45/EC)

Flammable R10: Flammable.

Harmful R20: Also harmful by inhalation.

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Irritant R37: Irritating to respiratory system.

R38: Irritating to skin.

R43: May cause sensitisation by skin contact.

R67: Vapours may cause drowsiness and dizzi-

ness.

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause

long-term adverse effects in the aquatic environ-

ment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms







Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

H412

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through

May cause damage to organs through prolonged or repeated exposure if inhaled.

Harmful to aquatic life with long lasting ef-

fects.

Precautionary statements : Prevention:

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P210 Keep away from heat/sparks/open

flames/hot surfaces. - No smoking.

P280 Wear protective gloves/ protective clothing/

eye protection/ face protection.

P260 Do not breathe vapours. P260 Do not breathe spray.

Response:

P362 + P364 Take off contaminated clothing and wash it

before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical

or alcohol-resistant foam to extinguish.

Storage:

P403 Store in a well-ventilated place.

Disposal:

P501 Dispose of contents/ container to an ap-

proved waste disposal plant.

Hazardous components which must be listed on the label:

HDI oligomers, isocyanurate

xylene (mixture of isomers)

Additional Labelling:

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Paint

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
HDI oligomers, isocy- anurate	28182-81-2 500-060-2 01- 2119485796-17	Xn-Xi; R20-R37- R43	Acute Tox.4; H332 Skin Sens.1; H317 STOT SE3; H335	>= 50 - < 70
Solvent naphtha (petro-leum), light arom.	64742-95-6 265-199-0 01-	Xn; R65 Xi; R37 N; R51/53	Flam. Liq.3; H226 Asp. Tox.1; H304 STOT SE3; H335,	>= 15 - < 20

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	2119455851-35	R10 R66 R67	H336 Aquatic Chronic2; H411	
xylene (mixture of isomers)	1330-20-7 215-535-7 01- 2119488216-32	R10 Xn; R20/21 Xi; R38	Flam. Liq.3; H226 Acute Tox.4; H332 Acute Tox.4; H312 Skin Irrit.2; H315 Eye Irrit.2; H319 STOT SE3; H335 STOT RE2; H373 Asp. Tox.1; H304	>= 5 - < 10
n-butyl acetate	123-86-4 204-658-1 01- 2119485493-29	R10 R66 R67	Flam. Liq.3; H226 STOT SE3; H336	>= 1 - < 10
ethylbenzene	100-41-4 202-849-4	F; R11 Xn; R20	Flam. Liq.2; H225 Acute Tox.4; H332 STOT RE2; H373 Asp. Tox.1; H304	>= 1 - < 10
Substances with a work	place exposure lim	it:		
2-methoxy-1- methylethyl acetate	108-65-6 203-603-9 01- 2119475791-29	R10	Flam. Liq.3; H226	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water. If symptoms persist, call a physician.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Do NOT induce vomiting.

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Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Inhalation may provoke the following symptoms:

> Headache Vertigo **Fatigue**

Skin contact may provoke the following symptoms:

Redness

Ingestion may provoke the following symptoms:

Abdominal pain

Vomiting Diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : In case of ingestion, the stomach should be emptied by gastric

lavage under qualified medical supervision.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: Do not use a solid water stream as it may scatter and spread

fire.

ucts

Hazardous combustion prod- : No hazardous combustion products are known

5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

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 sepa-

rately in closed containments.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water

courses.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For contact information in case of emergency, see section 1. For information on safe handling, see section 7. For exposure controls and personal protection measures, see section 8. For subsequent waste disposal, follow the recommendations in section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see

section 8).

For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

: Avoid formation of aerosol. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of

electrostatic charge.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: No smoking. Keep container tightly closed in a dry and well-

ventilated place.

Storage period : 12 Months

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : For the use of this product do not exist particular recommen-

dations apart from that already indicated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis				
LIDI allarana ana	00400 04 0	· ' '	0.00 == == == 0	OD ELIAO				
HDI oligomers,	28182-81-2	TWA	0.02 mg/m3	GB EH40				
isocyanurate			(as -NCO)					
Further information			ational asthma (also known a					
			duce a state of specific airwa					
		Ŭ	ical, irritant or other mechani					
			onsive, further exposure to th					
			may cause respiratory symp					
			om a runny nose to asthma.					
			ill become hyper-responsive					
			se who are likely to become					
			an cause occupational asthm					
			ich may trigger the symptom					
			per-responsiveness, but which					
			e latter substances are not cl					
			sers., Wherever it is reasonal cause occupational asthma s					
	vented. Where this is not possible, the primary aim is to apply adequate							
	standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that expo-							
	sure be reduced as low as is reasonably practicable. Activities giving rise to							
	short-term peak concentrations should receive particular attention when risk							
	management is being considered. Health surveillance is appropriate for all							
	employees exposed or liable to be exposed to a substance which may cause							
		occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveil-						
		lance., Capable of causing occupational asthma. The identified substances						
			ne risk phrase 'R42: May cau					
			use sensitisation by inhalation					
			HSE publication 'Asthmagen					
			ents implicated in occupation					
			other substance which the ris					
	upaatea from	time to time, or any	other substance which the ris	sk assessment				

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	has shown to	he a notential cause	of occupational asthma. Th	e 'Sen' notation	
	has shown to be a potential cause of occupational asthma., The 'Sen' notation in the list of WELs has been assigned only to those substances which may				
	cause occupational asthma.				
HDI oligomers,	28182-81-2	STEL	0.07 mg/m3	GB EH40	
isocyanurate			(as -NCO)		
Further information	Substances th	nat can cause occup	ational asthma (also known a	as asthmagens	
			duce a state of specific airwa		
			ical, irritant or other mechani		
			onsive, further exposure to th		
			may cause respiratory symp		
			om a runny nose to asthma.		
			ill become hyper-responsive se who are likely to become		
			an cause occupational asthm		
			ich may trigger the symptom		
			per-responsiveness, but which		
			e latter substances are not cl		
			sers., Wherever it is reasonal		
	•		ause occupational asthma s	•	
			, the primary aim is to apply a		
			rkers from becoming hyper-r ational asthma, COSHH requ		
			onably practicable. Activities		
			ould receive particular attent		
	•		Health surveillance is appro		
	employees ex	posed or liable to be	exposed to a substance wh	ich may cause	
			ould be appropriate consulta		
	occupational health professional over the degree of risk and level of surveil-lance., Capable of causing occupational asthma. The identified substances are those which: - are assigned the risk phrase 'R42: May cause sensitisation by inhalation'; or 'R42/43: May cause sensitisation by inhalation and skin contact' or - are listed in section C of HSE publication 'Asthmagen? Critical as-				
			ents implicated in occupation		
			other substance which the ris		
	has shown to be a potential cause of occupational asthma., The 'Sen' notation				
	in the list of WELs has been assigned only to those substances which may				
		tional asthma.			
2-methoxy-1-	108-65-6	TWA	50 ppm	2000/39/EC	
methylethyl ace-			275 mg/m3		
tate Further information	Identifies the	noosibility of significa	 	ndiaativa	
Further information 2-methoxy-1-	108-65-6	STEL	ant uptake through the skin, I	2000/39/EC	
methylethyl ace-	100-03-0	JILL	100 ppm 550 mg/m3	2000/38/EC	
tate			555 mg/m6		
Further information	Identifies the	possibility of significa	ant uptake through the skin, I	ndicative	
2-methoxy-1-	108-65-6	TWA	50 ppm	GB EH40	
methylethyl ace-			274 mg/m3		
tate					
Further information					
	there are concerns that dermal absorption will lead to systemic toxicity.				
2-methoxy-1-	108-65-6	STEL	100 ppm	GB EH40	
methylethyl ace-			548 mg/m3		

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tate					
Further information	Can be absorbed through skin. The assigned substances are those for which				
	there are concerns that dermal absorption will lead to systemic toxicity.				
xylene (mixture of	1330-20-7	TWA	50 ppm	GB EH40	
isomers)			220 mg/m3		
Further information			ne assigned substances are t		
			sorption will lead to systemic		
xylene (mixture of	1330-20-7	STEL	100 ppm	GB EH40	
isomers)			441 mg/m3		
Further information			ne assigned substances are t		
			sorption will lead to systemic		
xylene (mixture of	1330-20-7	TWA	50 ppm	2000/39/EC	
isomers)			221 mg/m3		
Further information			ant uptake through the skin, I		
xylene (mixture of	1330-20-7	STEL	100 ppm	2000/39/EC	
isomers)			442 mg/m3		
Further information			ant uptake through the skin, I		
n-butyl acetate	123-86-4	TWA	150 ppm	GB EH40	
			724 mg/m3		
n-butyl acetate	123-86-4	STEL	200 ppm	GB EH40	
			966 mg/m3		
ethylbenzene	100-41-4	TWA	100 ppm	2000/39/EC	
			442 mg/m3		
Further information			ant uptake through the skin, I		
ethylbenzene	100-41-4	STEL	200 ppm	2000/39/EC	
			884 mg/m3		
Further information	Identifies the possibility of significant uptake through the skin, Indicative				
ethylbenzene	100-41-4	TWA	100 ppm	GB EH40	
			441 mg/m3		
Further information					
	there are concerns that dermal absorption will lead to systemic toxicity.				
ethylbenzene	100-41-4	STEL	125 ppm	GB EH40	
			552 mg/m3		
Further information			ne assigned substances are t		
	there are concerns that dermal absorption will lead to systemic toxicity.				

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Low boiling point naphtha - : End Use: Workers

unspecified Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 608 mg/m3

xylene : End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 77 mg/m3

n-butyl acetate : End Use: Workers

ethylbenzene

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 480 mg/m3 : End Use: Workers

. End Osc. Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

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Value: 77 mg/m3

2-methoxy-1-methylethyl ace-

: End Use: Workers tate

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 275 mg/m3

8.2 Exposure controls

Personal protective equipment

Eye protection Eye wash bottle with pure water

Tightly fitting safety goggles

Hand protection

Remarks : Solvent-resistant gloves The selected protective gloves have

> to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves

clean them with soap and water.

Skin and body protection : impervious clothing

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an ap-

proved filter.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour colourless

Odour characteristic

pН Not applicable

Melting point/range Not applicable

: 126.3 °C Boiling point/boiling range

(7.6 hPa)

Flash point 37 °C

Method: ISO 1523, closed cup

Setaflash

: No data available Upper explosion limit

Lower explosion limit : No data available

Vapour pressure : 3.6 hPa (20 °C)

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27 hPa (50 °C)

Density : 1.028 g/cm3 (20 °C)

Method: ISO 2811-1

Solubility(ies)

Water solubility : immiscible

Auto-ignition temperature : not determined

Viscosity

Viscosity, dynamic : 29 mPa.s (20 °C)

Method: ISO 2555

Viscosity, kinematic : > 20.5 mm2/s (40 °C)

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if used as directed.

Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

Strong acids and strong bases

10.6 Hazardous decomposition products

Hazardous decomposition

products

: Isocyanates

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute inhalation toxicity : Acute toxicity estimate : 18.21 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 2,000 mg/kg

Method: Calculation method

Components:

HDI oligomers, isocyanurate:

Acute oral toxicity : LD50 Oral (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 0.543 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Solvent naphtha (petroleum), light arom.:

Acute oral toxicity : LD50 Oral (Rat): 3,592 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 20 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 3,160 mg/kg

Method: OECD Test Guideline 402

xylene (mixture of isomers):

Acute oral toxicity : LD50 Oral (Rat): 4,300 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 22.08 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

Acute dermal toxicity : Acute toxicity estimate : 1,100 mg/kg

Method: Converted acute toxicity point estimate

n-butyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 10,768 mg/kg

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Method: OECD Test Guideline 401

: LC50 (Rat): 23.4 mg/l Acute inhalation toxicity

Exposure time: 4 h

Method: OECD Test Guideline 403

: LD50 (Rabbit): 17,600 mg/kg Acute dermal toxicity

Method: OECD Test Guideline 402

ethylbenzene:

: LD50 Oral (Rat): 3,500 mg/kg Acute oral toxicity

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 17.4 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

: LD50 (Rabbit): 15,400 mg/kg Acute dermal toxicity

Method: OECD Test Guideline 402

2-methoxy-1-methylethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 8,532 mg/kg

Method: OECD Test Guideline 401

: LC50 (Rat): 35.7 mg/l Acute inhalation toxicity

Exposure time: 4 h

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): 5,000 mg/kg

Method: OECD Test Guideline 402

Skin corrosion/irritation

Product:

Result: Skin irritation

Serious eye damage/eye irritation

Product:

Remarks: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Result: May cause sensitisation by skin contact.

Germ cell mutagenicity

Product:

Germ cell mutagenicity- As-

sessment

: Based on available data, the classification criteria are not met.

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Carcinogenicity

Product:

Carcinogenicity - Assess-

ment

: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product:

Reproductive toxicity - As-

sessment

: Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT - repeated exposure

Product:

Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Aspiration toxicity

Product:

Based on available data, the classification criteria are not met.

Further information

Product:

Remarks: Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity

Components:

HDI oligomers, isocyanurate:

Toxicity to algae : EC50 (Algae): 370 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Solvent naphtha (petroleum), light arom.:

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Toxicity to fish : LC50 (Fish): 9.2 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 3.2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

: EC50 (Algae): 2.9 mg/l Toxicity to algae

Exposure time: 72 h

Method: OECD Test Guideline 201

xylene (mixture of isomers):

Toxicity to fish : LC50 (Fish): 14 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 16 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

n-butyl acetate:

Toxicity to fish : LC50 (Fish): 18 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 32 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

: EC50 (Algae): 675 mg/l Toxicity to algae

Exposure time: 72 h

Method: OECD Test Guideline 201

ethylbenzene:

Toxicity to fish : LC50 (Fish): 12 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 1.8 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Algae): 33 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

2-methoxy-1-methylethyl acetate:

Toxicity to fish : LC50 (Fish): 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

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Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 408 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Algae): 1,000 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

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.

12.6 Other adverse effects

Product:

Additional ecological infor-

mation

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Offer surplus and non-recyclable solutions to a licensed dis-

posal company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

according to Regulation (EC) No. 1907/2006



KX44

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SECTION 14: Transport information

14.1 UN number

 ADR
 : UN 1263

 IMDG
 : UN 1263

 IATA
 : UN 1263

14.2 UN proper shipping name

ADR : PAINT RELATED MATERIAL IMDG : PAINT RELATED MATERIAL

IATA : Paint related material

14.3 Transport hazard class(es)

ADR : 3
IMDG : 3
IATA : 3

14.4 Packing group

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IMDG

Packing group : III
Labels : 3
EmS Code : F-E, S-E

IATA

Packing instruction (cargo : 366

aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

Not applicable

according to Regulation (EC) No. 1907/2006



KX44

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P5c	FLAMMABLE LIQUIDS	Quantity 1 5,000 t	Quantity 2 50,000 t
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams)	2,500 t	25,000 t

Other regulations : The product is classified and labelled in accordance with EC

directives or respective national laws.

15.2 Chemical Safety Assessment

Not applicable

SECTION 16: Other information

Full text of R-Phrases

R10	Flammable.
R11	Highly flammable.
R20	Harmful by inhalation.
R20/21	Harmful by inhalation and in contact with skin.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

according to Regulation (EC) No. 1907/2006



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H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
H373	May cause damage to organs through if inhaled.	prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting e	ffects.

Further information

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.

according to Regulation (EC) No. 1907/2006



KX45, KX46

Version 1.0 MSDS Number: H51402 Revision Date: 13.03.2015

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

1.1 Product identifier

Trade name : KX45, KX46

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

Use of the Sub-

stance/Mixture

: Curing chemical

Recommended restrictions

: For use in industrial installations or professional treatment

on use

only.

1.3 Details of the supplier of the safety data sheet

Company : Roberlo s.a.

Ctra. Nacional II, Km. 706,5 17457 Riudellots de la Selva

Spain

Telephone : +34972478060

Telefax : +34972477394

E-mail address of person responsible for the SDS

: msds@roberlo.com

1.4 Emergency telephone number

+34 972 478060 (8:00-12:45 / 14:15-17:30 h) ROBERLO (Spain) (GMT + 1:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Acute toxicity, Category 4 H332: Harmful if inhaled.

Specific target organ toxicity - single ex-

posure, Category 3, Central nervous

system

H336: May cause drowsiness or dizziness.

Specific target organ toxicity - single exposure, Category 3, Respiratory system

H335: May cause respiratory irritation.

according to Regulation (EC) No. 1907/2006



KX45, KX46

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Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting ef-

fects.

Classification (67/548/EEC, 1999/45/EC)

Flammable R10: Flammable.

Harmful R20: Harmful by inhalation.

Irritant R37: Irritating to respiratory system.

R43: May cause sensitisation by skin contact.

R66: Repeated exposure may cause skin dryness

or cracking.

R67: Vapours may cause drowsiness and dizzi-

ness.

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause

long-term adverse effects in the aquatic environ-

ment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H412 Harmful to aquatic life with long lasting ef-

fects.

Supplemental Hazard

Statements

EUH066 Repeated exposure may cause skin dry-

ness or cracking.

Precautionary statements : **Prevention:**

P210 Keep away from heat/sparks/open

flames/hot surfaces. - No smoking.

P280 Wear protective gloves/ protective clothing/

eye protection/ face protection.

P260 Do not breathe vapours. P260 Do not breathe spray.

Response:

according to Regulation (EC) No. 1907/2006



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P362 + P364 Take off contaminated clothing and wash it

before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical

or alcohol-resistant foam to extinguish.

Storage:

P403 Store in a well-ventilated place.

Disposal:

P501 Dispose of contents/ container to an ap-

proved waste disposal plant.

Hazardous components which must be listed on the label:

HDI oligomers, isocyanurate

n-butyl acetate

Solvent naphtha (petroleum), light arom.

Additional Labelling:

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Paint

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
HDI oligomers, isocy- anurate	28182-81-2 500-060-2 01- 2119485796-17	Xn-Xi; R20-R37- R43	Acute Tox.4; H332 Skin Sens.1; H317 STOT SE3; H335	>= 50 - < 70
n-butyl acetate	123-86-4 204-658-1 01- 2119485493-29	R10 R66 R67	Flam. Liq.3; H226 STOT SE3; H336	>= 20 - < 30
Solvent naphtha (petro- leum), light arom.	64742-95-6 265-199-0	Xn; R65 Xi; R37	Flam. Liq.3; H226 Asp. Tox.1; H304	>= 2.5 - < 5

according to Regulation (EC) No. 1907/2006



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	01- 2119455851-35	N; R51/53 R10 R66 R67	STOT SE3; H335, H336 Aquatic Chronic2; H411	
Substances with a workp	lace exposure lim	nit:		
2-methoxy-1- methylethyl acetate	108-65-6 203-603-9 01- 2119475791-29	R10	Flam. Liq.3; H226	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water. If symptoms persist, call a physician.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Do NOT induce vomiting.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Inhalation may provoke the following symptoms:

Headache Vertigo Fatigue

Skin contact may provoke the following symptoms:

Redness

Ingestion may provoke the following symptoms:

Abdominal pain

Vomiting Diarrhoea

according to Regulation (EC) No. 1907/2006



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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : In case of ingestion, the stomach should be emptied by gastric

lavage under qualified medical supervision.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam

Dry chemical

5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod-

ucts

: No hazardous combustion products are known

5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

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 sepa-

rately in closed containments.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water

courses.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

according to Regulation (EC) No. 1907/2006



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6.4 Reference to other sections

For contact information in case of emergency, see section 1. For information on safe handling, see section 7. For exposure controls and personal protection measures, see section 8. For subsequent waste disposal, follow the recommendations in section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see

section 8).

For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

Avoid formation of aerosol. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of

electrostatic charge.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: No smoking. Keep in a well-ventilated place.

Storage period : 12 Months

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : For the use of this product do not exist particular recommen-

dations apart from that already indicated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		

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HDI oligomers,	28182-81-2	TWA	0.02 mg/m3	GB EH40
HDI oligomers, isocyanurate Further information	Substances the and respirator responsivene airways have sometimes exponsible to idresponsive. It distinguished people with public clude the diseasthmagens of exposure to suppose the substant of the substant	nat can cause occury sensitisers) can service an immunol become hyper-resident to tiny quantities are range in severity sed to a sensitiser entify in advance the from substances that from substances were existing airway are themselves. To respiratory sensubstances that can ethis is not possible.	upational asthma (also known induce a state of specific air ogical, irritant or other mechal oponsive, further exposure to es, may cause respiratory syrfrom a runny nose to asthmatical will become hyper-responsive to can cause occupational asthwhich may trigger the symptothyper-responsiveness, but which may trigger the symptothyper-responsiveness, but which elatter substances are not itisers., Wherever it is reason to cause occupational asthmatile, the primary aim is to application.	n as asthmagens way hyper- anism. Once the the substance, mptoms. These a. Not all workers we and it is im- e hyper- nma should be ms of asthma in hich do not inclassified hably practicable, a should be pre- y adequate
	substances the sure be reduce short-term per management employees expected occupational control occupational lance., Capata are those which by inhalation sessments of updated from that shown to in the list of V	nat can cause occured as low as is reall as low as is reall as concentrations is being considered posed or liable to asthma and there health professionable of causing occurs are assigned or 'R42/43: May consisted in section C the evidence for a time to time, or are be a potential cause.	workers from becoming hyper pational asthma, COSHH re- asonably practicable. Activities should receive particular attendary and the ed. Health surveillance is apply be exposed to a substance with should be appropriate consult over the degree of risk and apational asthma. The identificational asthma. The identification by inhalating the publication by inhalating the publication in occupation of HSE publication in occupation of the secondary other substance which the secondary to those substance substance which the secondary of the substance substance is a substance which the secondary of the substance substance substance which the secondary of the substance substance which the secondary of the substance substance which the secondary of the substance which t	quires that expo- es giving rise to ention when risk ropriate for all which may cause tation with an level of surveil- ed substances ause sensitisation ion and skin con- en? Critical as- onal asthma' as risk assessment The 'Sen' notation
HDI oligomers, isocyanurate	28182-81-2	STEL	0.07 mg/m3 (as -NCO)	GB EH40
Further information	and respiratoresponsiveners airways have sometimes exponsives awho are exponsible to iddresponsive. It distinguished people with pure clude the diseasthmagens of exposure to suppose the standards of the standar	ry sensitisers) can ss via an immunol become hyper-reserven to tiny quantition range in severity sed to a sensitiser entify in advance the S4 Substances that from substances were-existing airway asse themselves. To respiratory sensubstances that can be this is not possible control to prevent were series as the series as th	upational asthma (also known induce a state of specific airwogical, irritant or other mechasponsive, further exposure to es, may cause respiratory synfrom a runny nose to asthma will become hyper-responsive hose who are likely to become to can cause occupational asthwhich may trigger the symptohyper-responsiveness, but workers., Wherever it is reason a cause occupational asthmatile, the primary aim is to applyworkers from becoming hyperpational asthma, COSHH responsiveness are not grant to applyworkers from becoming hyperpational asthma, COSHH responsiveness are not grant to applyworkers from becoming hyperpational asthma, COSHH responsiveness.	way hyper- anism. Once the the substance, mptoms. These a. Not all workers we and it is im- e hyper- ma should be ms of asthma in hich do not in- classified ably practicable, a should be pre- y adequate r-responsive. For

according to Regulation (EC) No. 1907/2006



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	short-term permanagement employees expected occupational lance., Capabare those which by inhalation'; tact' or - are lassements of updated from has shown to in the list of Walliam cause occupation occupation.	ak concentrations shis being considered. sposed or liable to be asthma and there ship health professional cole of causing occupates: - are assigned the or 'R42/43: May causted in section C of the evidence for age time to time, or any be a potential cause /ELs has been assigntional asthma.	onably practicable. Activities ould receive particular attent Health surveillance is appropered exposed to a substance whould be appropriate consultational asthma. The identified he risk phrase 'R42: May cause sensitisation by inhalation HSE publication 'Asthmagenets implicated in occupational of occupational asthma. The of occupational asthma. The ned only to those substances	ion when risk priate for all ich may cause tion with an wel of surveill substances se sensitisation and skin congression and stinces al asthma' as sk assessment e 'Sen' notation is which may
n-butyl acetate	123-86-4	TWA	150 ppm 724 mg/m3	GB EH40
n-butyl acetate	123-86-4	STEL	200 ppm 966 mg/m3	GB EH40
2-methoxy-1- methylethyl ace- tate	108-65-6	TWA	50 ppm 275 mg/m3	2000/39/EC
Further information	Identifies the	possibility of significa	ant uptake through the skin, I	ndicative
2-methoxy-1- methylethyl ace- tate	108-65-6	STEL	100 ppm 550 mg/m3	2000/39/EC
Further information		possibility of significa	ant uptake through the skin, I	ndicative
2-methoxy-1- methylethyl ace- tate	108-65-6	TWA	50 ppm 274 mg/m3	GB EH40
Further information			e assigned substances are t	
		there are concerns that dermal absorption will lead to systemic toxicity.		
2-methoxy-1- methylethyl ace- tate	108-65-6	STEL	100 ppm 548 mg/m3	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

: End Use: Workers n-butyl acetate

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 480 mg/m3 : End Use: Workers

Low boiling point naphtha -

unspecified

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 608 mg/m3 : End Use: Workers

2-methoxy-1-methylethyl ace-

tate

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 275 mg/m3

according to Regulation (EC) No. 1907/2006



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8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Hand protection

Remarks : Solvent-resistant gloves The selected protective gloves have

to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves

clean them with soap and water.

Skin and body protection : impervious clothing

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an ap-

proved filter.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : characteristic

pH : Not applicable

Melting point/range : Not applicable

Boiling point/boiling range : 126.3 °C

(7.6 hPa)

Flash point : 30 °C

Method: ISO 1523, closed cup

Setaflash

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 6.7 hPa (20 °C)

46 hPa (50 °C)

Density : 1.03 g/cm3 (20 °C)

according to Regulation (EC) No. 1907/2006



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Method: ISO 2811-1

Solubility(ies)

Water solubility : immiscible

Auto-ignition temperature : not determined

Viscosity

Viscosity, dynamic : 28 mPa.s (20 °C)

Method: ISO 2555

Oxidizing properties : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if used as directed.

Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

Strong acids and strong bases

10.6 Hazardous decomposition products

Hazardous decomposition

products

: Isocyanates

according to Regulation (EC) No. 1907/2006



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute inhalation toxicity : Acute toxicity estimate : 10 - 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:

HDI oligomers, isocyanurate:

Acute oral toxicity : LD50 Oral (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 0.543 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

n-butyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 10,768 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 23.4 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): 17,600 mg/kg

Method: OECD Test Guideline 402

Solvent naphtha (petroleum), light arom.:

Acute oral toxicity : LD50 Oral (Rat): 3,592 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 20 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 3,160 mg/kg

Method: OECD Test Guideline 402

2-methoxy-1-methylethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 8,532 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 35.7 mg/l

Exposure time: 4 h

according to Regulation (EC) No. 1907/2006



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Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): 5,000 mg/kg

Method: OECD Test Guideline 402

Skin corrosion/irritation

Product:

Remarks: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Remarks: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Assessment: May cause sensitisation by skin contact.

Germ cell mutagenicity

Product:

Germ cell mutagenicity- As-

sessment

: Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Carcinogenicity - Assess-

ment

: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product:

Reproductive toxicity - As-

sessment

: Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: The substance or mixture is classified as specific target organ toxicant, single ex-

posure, category 3 with narcotic effects.

STOT - repeated exposure

Product:

according to Regulation (EC) No. 1907/2006



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Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Product:

Based on available data, the classification criteria are not met.

Further information

Product:

Remarks: Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity

Components:

HDI oligomers, isocyanurate:

Toxicity to algae EC50 (Algae): 370 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

n-butyl acetate:

Toxicity to fish : LC50 (Fish): 18 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 32 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Algae): 675 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Solvent naphtha (petroleum), light arom.:

Toxicity to fish : LC50 (Fish): 9.2 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 3.2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Algae): 2.9 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

according to Regulation (EC) No. 1907/2006



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2-methoxy-1-methylethyl acetate:

Toxicity to fish : LC50 (Fish): 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 408 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Algae): 1,000 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

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.

12.6 Other adverse effects

Product:

Environmental fate and

pathways

: No data available

Additional ecological infor-

mation

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic or-

ganisms, may cause long-term adverse effects in the aquatic

environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Offer surplus and non-recyclable solutions to a licensed dis-

posal company.

according to Regulation (EC) No. 1907/2006



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Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

14.1 UN number

ADR : UN 1263 IMDG : UN 1263 IATA : UN 1263

14.2 UN proper shipping name

ADR : PAINT RELATED MATERIAL IMDG : PAINT RELATED MATERIAL

IATA : Paint related material

14.3 Transport hazard class(es)

ADR : 3
IMDG : 3
IATA : 3

14.4 Packing group

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

IMDG

Packing group : III
Labels : 3
EmS Code : F-E, S-E

IATA

Packing instruction (cargo : 366

aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no



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14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P5c	FLAMMABLE LIQUIDS	Quantity 1 5,000 t	Quantity 2 50,000 t
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams)	2,500 t	25,000 t

Other regulations : The product is classified and labelled in accordance with EC

directives or respective national laws.

15.2 Chemical Safety Assessment

Not applicable

SECTION 16: Other information

Full text of R-Phrases

R10	Flammable.
R20	Harmful by inhalation.
R37	Irritating to respiratory system.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Full text of H-Statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006



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Further information

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.