

# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 1 of 17

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

# 1.1. Product identifier

Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

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

# Use of the substance/mixture

Foam

### Uses advised against

Any non-intended use.

# 1.3. Details of the supplier of the safety data sheet

Company name:	Lorencic GmbH Nfg. & Co KG		
Street:	Puchstraße 208		
Place:	A-8055 Graz		
Telephone:	+43 (0) 316 / 47 25 64 32	Telefax: +43 (0) 316 / 47 25 64 78	
Responsible Department:	Dr. Gans-Eichler	e-mail: info@tge-consult.de	
	Chemieberatung GmbH	Tel.: +49(0)2534 6441185	
	Otto-Hahn-Str. 36	www.tge-consult.de	
	D-48161 Münster		
1.4. Emergency telephone	Poison Control Centre Vienna: +43 (0) 1 406 43 43		

# 1.4. Emergency telephone

### number:

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

# GB CLP Regulation

CLP Regulation
Hazard categories:
Aerosol: Aerosol 1
Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Resp. Sens. 1
Respiratory or skin sensitisation: Skin Sens. 1
Carcinogenicity: Carc. 2
Reproductive toxicity: Lact.
Specific target organ toxicity - single exposure: STOT SE 3
Specific target organ toxicity - repeated exposure: STOT RE 2
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Harmful if swallowed.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause harm to breast-fed children.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 2 of 17

### 2.2. Label elements

# **GB CLP Regulation**

#### Hazard components for labelling

4,4'-methylenediphenyl diisocyanate, isomers and homologues Glycerol, propoxylated alkanes, C14-17, chloro; chlorinated paraffins, C14-17 Propane-1,2-diol, propoxylated

Signal word:

#### ord:

Pictograms:



#### **Hazard statements**

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H302+H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H362	May cause harm to breast-fed children.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

#### Precautionary statements

· · · · · · · · · · · · · · · · · · ·	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat. No Smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Special labelling of certain mixtures

Contains isocyanates. May produce an allergic reaction. Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

### 2.3. Other hazards

EUH204

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. The mixture contains the following substances fulfilling the PBT-/vPvB criteria according to REACH Annex XIII: Decamethylcyclopentasiloxane, Dodecamethylcyclohexasiloxane, Octamethylcyclotetrasiloxane

## **SECTION 3: Composition/information on ingredients**

# 3.2. Mixtures



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 3 of 17

## Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
9016-87-9	4,4'-methylenediphenyl diisocy	anate, isomers and homologu	es	40 - < 60 %
		615-005-01-6		
	Carc. 2, Acute Tox. 4, Skin Irrit RE 2; H351 H332 H315 H319		Skin Sens. 1, STOT SE 3, STOT	
25791-96-2	Glycerol, propoxylated			10 - < 20 %
	500-044-5			
	Acute Tox. 4; H302			
85535-85-9	alkanes, C14-17, chloro; chlorinated paraffins, C14-17			5 - < 10 %
	287-477-0	602-095-00-X	01-2119519269-33	
	Lact., Aquatic Acute 1, Aquatic			
115-10-6	dimethyl ether			5 - < 10 %
	204-065-8	603-019-00-8	01-2119472128-37	
	Flam. Gas 1, Liquefied gas; H2	20 H280		
25322-69-4	Propane-1,2-diol, propoxylated			5 - <10 %
	500-039-8			
	Acute Tox. 4; H302			
1244733-77-4	Reaction products of phosphoryl trichloride and 2-methyloxirane			2,5 - < 5 %
	807-935-0		01-2119486772-26	
	Acute Tox. 4; H302		-	

Full text of H and EUH statements: see section 16.

### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
9016-87-9		4,4'-methylenediphenyl diisocyanate, isomers and homologues	40 - < 60 %
		50 = 11 mg/l (vapours); inhalation:  ATE = 1,5 mg/l (dusts or mists); dermal:  LD50 y; oral:  LD50 = > 2000 mg/kg	
25791-96-2	500-044-5	Glycerol, propoxylated	10 - < 20 %
	oral: ATE = 500 mg/kg		
85535-85-9	287-477-0	alkanes, C14-17, chloro; chlorinated paraffins, C14-17	5 - < 10 %
	mg/kg M acute	inhalation: LC50 = > 48,17 mg/l (vapours); dermal: LD50 = > 2800 mg/kg; oral: LD50 = > 4000 mg/kg	
25322-69-4	500-039-8	Propane-1,2-diol, propoxylated	5 - <10 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = 1000-2000 mg/kg		
1244733-77-4	807-935-0	Reaction products of phosphoryl trichloride and 2-methyloxirane	2,5 - < 5 %
	inhalation: LC5	50 = > 7 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = 632 mg/kg	

#### **Further Information**

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 4 of 17

### **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

Apply cortisone spray at early stage.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

#### After ingestion

If swallowed, immediately drink: Water. Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Caution if victim vomits: Risk of aspiration! Call a physician immediately.

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

No information available.

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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

#### Unsuitable extinguishing media

High power water jet.

#### 5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Can be released in case of fire: Carbon dioxide (CO2). Carbon monoxide Nitrogen oxides (NOx). Hydrogen chloride (HCI). Phosphorus oxides.

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains. In case of fire and/or explosion do not breathe fumes.

### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

#### General measures

Ventilate affected area. Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

#### For non-emergency personnel

Wear personal protection equipment (refer to section 8).

#### For emergency responders

Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 5 of 17

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard. Eliminate leaks immediately. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

### 6.3. Methods and material for containment and cleaning up

#### For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

# 6.4. Reference to other sections

Safe handling: see section 7 Disposal: see section 13

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Use only in well-ventilated areas. Take precautionary measures against static discharges. Do not spray on naked flames or any incandescent material. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

Wear suitable protective clothing. (See section 8.)

#### Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Heating causes rise in pressure with risk of bursting.

#### Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Remove contaminated clothing immediatley and dispose off safely. Wash contaminated clothing prior to re-use. Used working clothes should not be worn outside the work area. Street clothing should be stored seperately from work clothing.

#### Further information on handling

General protection and hygiene measures: refer to chapter 8

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. - No smoking. Provide adequate ventilation.

#### Hints on joint storage

Do not store together with: Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. Self-reactive substances and mixtures. Organic peroxides. Radioactive substances.

Infectious substances.

#### Further information on storage conditions

Recommended storage temperature: 10-30°C. Do not store at temperatures over: 50°C Note: Storage requirements for flammable aerosols.

#### 7.3. Specific end use(s)

See section 1.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### Exposure limits (EH40)



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 6 of 17

	Cultertainee			filene e /mel	Catanami	Ortinia
CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL
-	Isocyanates, all (as -NCO) Except methyl isocyanate	-	0.02		TWA (8 h)	WEL
		-	0.07		STEL (15 min)	WEL

# **DNEL/DMEL** values

DNEL type		Exposure route	Effect	Value
9016-87-9	4,4'-methylenediphenyl diisocyanate, isor	·		Value
Consumer DN		inhalation	local	0,05 mg/m <sup>3</sup>
Consumer DN	EL, long-term	inhalation	local	0,0025 mg/m <sup>3</sup>
Worker DNEL	, acute	inhalation	local	0,1 mg/m³
Worker DNEL	, long-term	inhalation	local	0,05 mg/m³
85535-85-9	alkanes, C14-17, chloro; chlorinated parat	ffins, C14-17		
Worker DNEL	, long-term	inhalation	systemic	6,7 mg/m <sup>3</sup>
Worker DNEL	, long-term	dermal	systemic	47,9 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	2 mg/m³
Consumer DN	EL, long-term	dermal	systemic	28,75 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	0,58 mg/kg bw/day
115-10-6	dimethyl ether			
Consumer DN	EL, long-term	inhalation	systemic	471 mg/m <sup>3</sup>
Worker DNEL	, long-term	inhalation	systemic	1894 mg/m <sup>3</sup>
1244733-77- 4	Reaction products of phosphoryl trichlorid	e and 2-methyloxirane		
Worker DNEL	, long-term	inhalation	systemic	8,2 mg/m³
Worker DNEL	, acute	inhalation	systemic	22,6 mg/m <sup>3</sup>
Worker DNEL	, long-term	dermal	systemic	2,91 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	1,45 mg/m <sup>3</sup>
Consumer DN	EL, acute	inhalation	systemic	5,6 mg/m³
Consumer DNEL, long-term		dermal	systemic	1,04 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,52 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	2 mg/kg bw/day

CASINO		
Environmental compartment Value		
9016-87-9 4,4'-methylenediphenyl diisocyanate, isomers and homologues		
Freshwater 1 mg/l		1 mg/l
Freshwater (intermittent releases)		10 mg/l



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 7 of 17

		Ũ
Marine water		0,1 mg/l
Micro-organisms in sewage treatment plants (STP)		1 mg/l
Soil		1 mg/kg
85535-85-9	alkanes, C14-17, chloro; chlorinated paraffins, C14-17	
Freshwater		0,001 mg/l
Marine water		0,0002 mg/l
Freshwater see	diment	13 mg/kg
Marine sedime	nt	2,6 mg/kg
Secondary pois	soning	10 mg/kg
Micro-organisn	ns in sewage treatment plants (STP)	80 mg/l
Soil		11,9 mg/kg
115-10-6	dimethyl ether	
Freshwater		0,155 mg/l
Freshwater (intermittent releases)		1,549 mg/l
Marine water		0,016 mg/l
Freshwater see	diment	0,681 mg/kg
Marine sedime	nt	0,069 mg/kg
Micro-organisn	ns in sewage treatment plants (STP)	160 mg/l
Soil		0,045 mg/kg
1244733-77- 4	Reaction products of phosphoryl trichloride and 2-methyloxirane	
Freshwater		0,32 mg/l
Freshwater (int	ermittent releases)	0,51 mg/l
Marine water		0,032 mg/l
Freshwater sediment		11,5 mg/kg
Marine sediment		1,15 mg/kg
Secondary poisoning		11,6 mg/kg
Micro-organisms in sewage treatment plants (STP)		19,1 mg/l
Soil		0,34 mg/kg

#### 8.2. Exposure controls







### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Individual protection measures, such as personal protective equipment

# Eye/face protection

Wear eye/face protection. BS/EN 166

#### Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves. Suitable material: Butyl rubber. (0,5 mm)



according to UK REACH Regulation

# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 8 of 17

Breakthrough time >480 min

penetration time (maximum wearing period): >160 min

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### Skin protection

Protective clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Exceeding exposure limit values

Insufficient ventilation

Suitable respiratory protective equipment: Protective respiration apparatus not using surrounding air (breathing apparatus) (DIN EN 133).

Use only respiratory protection equipment with CE-symbol including four digit test number.

### **Environmental exposure controls**

Do not allow uncontrolled discharge of product into the environment.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state:	Aerosol	
Colour:	light yellow	
Odour:	characteristic	
Changes in the physical state		
Melting point/freezing point:		not determined
Boiling point or initial boiling point a boiling range:	nd	-12 °C
Sublimation point:		not determined
Softening point:		not determined
Flash point:		-83 °C
Flammability		
Gas:		not determined
Explosive properties In case of insufficient ventilatior	n and/or through use, explosive	e/highly flammable mixtures may develop.
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Auto-ignition temperature:		not determined
Self-ignition temperature Gas:		460 °C
Decomposition temperature:		not determined
Oxidizing properties none		
pH-Value:		not determined
Viscosity / dynamic:		not determined
Viscosity / kinematic:		not determined



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021	Product code: ZKR21GLO	Page 9 of 17
Flow time:	not determined	
Water solubility:	not determined	
Solubility in other solvents not determined		
Vapour pressure: (at 20 °C)	<3000 hPa	
Vapour pressure:	not determined	
Density (at 20 °C):	0,992 g/cm³	
Relative vapour density:	not determined	
9.2. Other information		
Other safety characteristics		
Solvent separation test:	not determined	
Solvent content:	not determined	
Solid content:	not determined	
Evaporation rate:	not determined	
Further Information		

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No information available.

# 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

# 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions. Refer to chapter 10.5.

### 10.4. Conditions to avoid

Keep away from heat. Ignition hazard. Heating causes rise in pressure with risk of bursting.

#### 10.5. Incompatible materials

Alcohol. amines. Ammonia. strong alkalis. Strong acid. Oxidizing agents, strong. Reducing agents, strong.

# 10.6. Hazardous decomposition products

Combustible. Vapours may form explosive mixtures with air. Can be released in case of fire: Carbon dioxide (CO2). Carbon monoxide Nitrogen oxides (NOx). Hydrogen chloride (HCI). Phosphorus oxides.

#### Further information

In use, may form flammable/explosive vapour-air mixture.

#### **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in GB CLP Regulation

### Toxicocinetics, metabolism and distribution

No information available.

# Acute toxicity

Harmful if swallowed. Harmful if inhaled.

# ATEmix calculated

ATE (oral) 1620,6 mg/kg; ATE (inhalation aerosol) 2,850 mg/l



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 10 of 17

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
9016-87-9	4,4´-methylenediphenyl diisocyanate, isomers and homologues							
	oral	LD50 mg/kg	> 2000					
	dermal	LD50 mg/kg	> 2000					
	inhalation (4 h) vapour	LC50	11 mg/l					
	inhalation aerosol	ATE	1,5 mg/l					
25791-96-2	Glycerol, propoxylated							
	oral	ATE mg/kg	500					
85535-85-9	alkanes, C14-17, chloro; chlorinated paraffins, C14-17							
	oral	LD50 mg/kg	> 4000	Rat	Toxicol. Appl. Pharmacol. 54: 514-525 (1	Groups of at least 3 male and/or female		
	dermal	LD50 mg/kg	> 2800	Rat	ECHA Dossier	standard acute method		
	inhalation (1 h) vapour	LC50 mg/l	> 48,17	Rat	ECHA Dossier	standard acute method		
25322-69-4	Propane-1,2-diol, propoxylated							
	oral	LD50 2000 mg/l	1000- <g< td=""><td>Rat</td><td>MSDS extern.</td><td></td></g<>	Rat	MSDS extern.			
	dermal	LD50 mg/kg	>2000	Rabbit	ECHA Dossier			
1244733-77- 4	Reaction products of pho	osphoryl tric	hloride and 2	-methyloxirane				
	oral	LD50 mg/kg	632	Rat	Study report (1996)	other: This study was conducted accordin		
	dermal	LD50 mg/kg	>2000	Rat	Study report (1973)	Method: other: undiluted TS was applied		
	inhalation (4 h) vapour	LC50	> 7 mg/l	Rat	Study report (1990)	other: Guideline study performed to GLP		

### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

# Sensitising effects

Contains isocyanates. May produce an allergic reaction.May cause allergy or asthma symptoms or breathing difficulties if inhaled. (4,4'-methylenediphenyl diisocyanate, isomers and homologues)

May cause an allergic skin reaction. (4,4'-methylenediphenyl diisocyanate, isomers and homologues) The product is: sensitizing.

People who suffer from skin sensitazion problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

# Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (4,4'-methylenediphenyl diisocyanate, isomers and homologues)

May cause harm to breast-fed children. (alkanes, C14-17, chloro; chlorinated paraffins, C14-17)

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

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

4,4'-methylenediphenyl diisocyanate, isomers and homologues

In vitro mutagenicity/genotoxicity: Method: EU Method B.13/14 (Mutagenicity - Reverse Mutation Test Using



according to UK REACH Regulation

# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 11 of 17

Bacteria) Result / evaluation: negative. ; In vivo mutagenicity/genotoxicity Method: OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test). Species: Rat. Result / evaluation: negative.; Carcinogenicity: Method: OECD 453. Species: Rat. Exposure duration: 2 years Result / evaluation: NOAEC = 0,2 mg/m<sup>3</sup> Air.; Developmental toxicity/teratogenicity: Method: OECD 414. Species: Rat. Result / evaluation: NOAEC = 4 mg/m<sup>3</sup> Air. Literature information: ECHA Dossier

#### alkanes, C14-17, chloro; chlorinated paraffins, C14-17:

In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test); Species: Rat; Result: NOAEL = 100 mg/kg; Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rat; Result: NOAEL = 5000 mg/kg; Literature information: ECHA Dossier

### STOT-single exposure

May cause respiratory irritation. (4,4'-methylenediphenyl diisocyanate, isomers and homologues)

# STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (4,4'-methylenediphenyl diisocyanate, isomers and homologues)

4,4'-methylenediphenyl diisocyanate, isomers and homologues

Chronic inhalation toxicity: Method: OECD 453. Species: Rat. Exposure duration: 2 years Result / evaluation: NOAEC = 0,2 mg/m<sup>3</sup> Air. Literature information: ECHA Dossier

alkanes, C14-17, chloro; chlorinated paraffins, C14-17: Subchronic oral toxicity: Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) Species: Rat Exposure duration: 90d Result: NOAEL = 100 mg/kg Literature information: ECHA Dossier

#### Aspiration hazard

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

#### Specific effects in experiment on an animal

No information available.

# 11.2. Information on other hazards

#### **Endocrine disrupting properties**

No information available.

#### **SECTION 12: Ecological information**

### 12.1. Toxicity

EC 50: 1000 mg/l (48h) Daphnia magna EC 50: 1000 mg/l (72h) Desmodesmus subspicatus Literature information : in analogy; MSDS extern.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
85535-85-9	alkanes, C14-17, chloro; o	chlorinated	paraffins, C14	1-17			
	Acute fish toxicity	LC50 mg/l	> 10000	96 h	Alburnus alburnus	Publication (1979)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 3,2		Pseudokirchneriella subcapitata	Study report (1997)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	0,008	48 h	Daphnia magna	Study report (1996)	OECD Guideline 202
	Fish toxicity	NOEC	5,6 mg/l	60 d	Oncorhynchus mykiss	Study report (1983)	OECD Guideline 204



# according to UK REACH Regulation

# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 12 of 17

	Crustacea toxicity	NOEC mg/l	0,01	21 d	Daphnia magna	Study report (1997)	other: OECD Guideline 202		
115-10-6	dimethyl ether								
	Acute fish toxicity	LC50 mg/l	> 4100	96 h	Poecilia reticulata	ECHA Dossier	NEN 6504 Water - Determination of		
	Acute algae toxicity	ErC50 mg/l	154,917	96 h	green algae	ECHA Dossier	Data generated using ECOSAR v1.00		
	Acute crustacea toxicity	EC50 mg/l	> 4400	48 h	Daphnia magna	ECHA Dossier	NEN6501: Water -Determination of		
25322-69-4	Propane-1,2-diol, propoxy	/lated							
	Acute fish toxicity	LC50 mg/l	>100	96 h	Danio rerio	ECHA Dossier			
	Acute algae toxicity	ErC50 mg/l	>100	72 h	Desmodesmus subspicatus	ECHA Dossier			
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna	ECHA Dossier			
	Crustacea toxicity	NOEC	(10) mg/l	21 d	Daphnia magna	ECHA Dossier			
1244733-77- 4	Reaction products of phosphoryl trichloride and 2-methyloxirane								
	Acute fish toxicity	LC50	(51) mg/l	96 h	Pimephales promelas	Study report (1985)	Static bioassay: method not specified		
	Acute algae toxicity	ErC50	(82) mg/l	72 h	Pseudokirchneriella subcapitata	Study report (2004)	OECD Guideline 201		
	Acute crustacea toxicity	EC50	131 mg/l	48 h	Daphnia magna	Study report (1985)	Static bioassay: method not specified		
	Crustacea toxicity	NOEC	32 mg/l	21 d	Daphnia magna	Study report (1995)	other: OECD Test Guideline 202		
	Acute bacteria toxicity	(784 mg	/I)	3 h	Activated sludge	Study report (1990)	ISO 8192		

# 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
9016-87-9	4,4'-methylenediphenyl diisocyanate, isomers and homologues			
	OECD 302	0%	28	
	Not easily bio-degradable (according to OECD-criteria).			
85535-85-9	alkanes, C14-17, chloro; chlorinated paraffins, C14-17			
	OECD Guideline 301 D	5%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
115-10-6	dimethyl ether			
	OECD 301D / EEC 92/69 annex V, C.4-E	5%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
25322-69-4	Propane-1,2-diol, propoxylated			
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	86,6%	28	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			
1244733-77- 4	Reaction products of phosphoryl trichloride and 2-methyloxirane			
	EU-method C.4 -D	14%	28	ECHA Dossier



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 13 of 17

Product is not easily biodegradable

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
85535-85-9	alkanes, C14-17, chloro; chlorinated paraffins, C14-17	>= 4,7
115-10-6	dimethyl ether	0,07
25322-69-4	Propane-1,2-diol, propoxylated	-0,68 - 0,01
1244733-77-4	Reaction products of phosphoryl trichloride and 2-methyloxirane	2,68

#### BCF

CAS No	Chemical name	BCF	Species	Source
85535-85-9	alkanes, C14-17, chloro; chlorinated paraffins, C14-17	1087	Oncorhynchus mykiss	Study report (2000)
1244733-77-4	Reaction products of phosphoryl trichloride and 2-methyloxirane	0,8 - 2,8	Cyprinus carpio	Japan Chemical Indus

#### 12.4. Mobility in soil

Reaction products of phosphoryl trichloride and 2-methyloxirane, Mobility/evaluation: Koc (20°C): 324,2

#### 12.5. Results of PBT and vPvB assessment

The mixture contains the following substances fulfilling the PBT-/vPvB criteria according to REACH Annex XIII: Decamethylcyclopentasiloxane, Dodecamethylcyclohexasiloxane, Octamethylcyclotetrasiloxane

#### 12.6. Endocrine disrupting properties

No information available.

# 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### **Disposal recommendations**

Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

# List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

#### List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

#### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 0	5.08.2021
------------------	-----------

Product code: ZKR21GLO

Page 14 of 17

# **SECTION 14: Transport information**

and transport (ADR/RID)	
14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity: Transport category:	E0 2
Tunnel restriction code:	D
land waterways transport (ADN)	
14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity: Excepted quantity:	1 L E0
arine transport (IMDG)	
14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
<u>14.3. Transport hazard class(es):</u>	2.1
14.4. Packing group:	-
Hazard label:	2.1
Marine pollutant:	NO
Special Provisions:	63, 190, 277, 327, 344, 381, 959
Limited quantity:	1000 mL
Excepted quantity: EmS:	E0 F-D, S-U
ir transport (ICAO-TI/IATA-DGR)	· -
14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, flammable



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml				
Revision date: 05.08.2021	Product code:	ZKR21GLO	Page 15 of 17	
14.3. Transport hazard class(es):	2.1			
14.4. Packing group:	-			
Hazard label:	2.1			
Special Provisions:	A145 A167 A802			
Limited quantity Passenger:	30 kg G			
Passenger LQ:	Y203			
Excepted quantity:	E0			
IATA-packing instructions - Passenger:		203		
IATA-max. quantity - Passenger:		75 kg		
IATA-packing instructions - Cargo:		203		
IATA-max. quantity - Cargo:		150 kg		
14.5. Environmental hazards				
ENVIRONMENTALLY HAZARDOUS:	No			
14.6. Special precautions for user				
Refer to section 6-8				
14.7. Maritime transport in bulk according to	IMO instruments			
not applicable				
SECTION 15: Regulatory information				
15.1. Safety, health and environmental regulation	ations/legislation spec	cific for the substance or mixture		
EU regulatory information				
Restrictions on use (REACH, annex XVII):				
Entry 3, Entry 56				
2010/75/EU (VOC):	15.85 %			
2004/42/EC (VOC):	157,23 kg/m <sup>3</sup> (157,23			
Information according to 2012/18/EU	P3a FLAMMABLE A	- ,		
(SEVESO III):				
Additional information				
Aerosol directive (75/324/EEC)				
UK REACH Appendix XVII, No (mixture	): 3, 28, 40, 56			
The mixture is classified as hazardous a		(EC) No 1272/2008 [CLP].		
National regulatory information				
Employment restrictions:	Observe restrictions t	o employment for juveniles according to the 'juve	enile	
		line' (94/33/EC). Observe employment restriction		
	under the Maternity P	Protection Directive (92/85/EEC) for expectant or		
	nursing mothers.			
Water hazard class (D):	3 - highly hazardous t	to water		
15.2. Chemical safety assessment				
For the following substances of this mix	ture a chemical safety	assessment has been carried out:		
dimethyl ether Reaction products of phosphoryl trichlor	ride and 2-methyloviror			
	nuo anu z-meuryiuxilai			

# **SECTION 16: Other information**

# Changes

Rev. 1.00; 02.06.2015, Initial release



according to UK REACH Regulation

# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 16 of 17

Rev. 2,0; 06.06.2018, Changes in chapter: 1-16. Rev. 3,0; 05.08.2021, Changes in chapter: 1-16. Abbreviations and acronyms ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) CAS: Chemical Abstracts Service CLP: Classification, Labelling and Packaging of substances and mixtures **DNEL: Derived No Effect Level** d: dav(s) EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances ECHA: European Chemicals Agency EWC: European Waste Catalogue IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) h: hour LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect concentration NLP: No-Longer Polymers N/A: not applicable OECD: Organisation for Economic Co-operation and Development PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) REACH: Registration, Evaluation, Authorisation of Chemicals SVHC: substance of very high concern TRGS: Technische Regeln für Gefahrstoffe UN: United Nations VOC: Volatile Organic Compounds



# Pistolen-Brunnenschaum LORENCIC LO-WELL-FOAM 1K 750ml

Revision date: 05.08.2021

Product code: ZKR21GLO

Page 17 of 17

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Acute Tox. 4; H302	Bridging principle "Aerosols"
Acute Tox. 4; H332	Bridging principle "Aerosols"
Skin Irrit. 2; H315	Bridging principle "Aerosols"
Eye Irrit. 2; H319	Bridging principle "Aerosols"
Resp. Sens. 1; H334	Bridging principle "Aerosols"
Skin Sens. 1; H317	Bridging principle "Aerosols"
Carc. 2; H351	Calculation method
Lact.; H362	Calculation method
STOT SE 3; H335	Bridging principle "Aerosols"
STOT RE 2; H373	Bridging principle "Aerosols"
Aquatic Chronic 2; H411	Calculation method
Skin Sens. 1; H317     Carc. 2; H351     Lact.; H362     STOT SE 3; H335     STOT RE 2; H373	Bridging principle "Aerosols"   Calculation method   Calculation method   Bridging principle "Aerosols"   Bridging principle "Aerosols"

#### Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.

### **Further Information**

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)