

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

Hand Held B2 Expanding Foam

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

1.1. Product identifier

Product name Registration number REACH Product type REACH : Hand Held B2 Expanding Foam : Not applicable (mixture) : Mixture

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

1.2.1 Relevant identified uses polyurethane

1.2.2 Uses advised against No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout **2** +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com

Manufacturer of the product

SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout T +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):

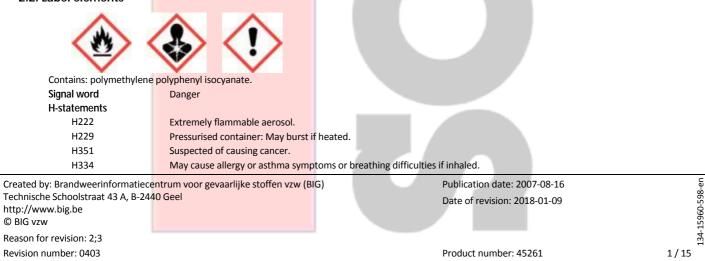
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dat	ngerous a <mark>ccording to</mark>	the criteria of Regulation (EC) No 1272/2008
Class	Category	Hazard statements
Aerosol	categ <mark>ory 1</mark>	H222: Extremely flammable aerosol.
Aerosol	categ <mark>ory 1</mark>	H229: Pressurised container: May burst if heated.
Carc.	categ <mark>ory 2</mark>	H351: Suspected of causing cancer.
Resp. Sens.	categ <mark>ory 1</mark>	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens.	categ <mark>ory 1</mark>	H317: May cause an allergic skin reaction.
Acute Tox.	categ <mark>ory 4</mark>	H332: Harmful if inhaled.
STOT RE	category 2	H373: May cause damage to organs through prolonged or repeated exposure if inhaled.
Skin Irrit.	category 2	H315: Causes skin irritation.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
STOT SE	categ <mark>ory 3</mark>	H335: May cause respiratory irritation.

2.2. Label elements



H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
P-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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
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 regulation.
Supplemental informati	o <mark>n</mark>
	- 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.

- 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

Gas/vapour spreads at floor level: ignition hazard

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No		CAS No EC No	Cond	c. (C)	Classification according to CLP	Note	Remark
polymethylene polyphenyl isoc	yanate	9016-87-9	C>2	5%	Carc. 2; H351 Resp. Sens. 1; H334 Skin Sens. 1; H317 Acute Tox. 4; H332 STOT RE 2; H373 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	(1)(2)(8)(10)(18)	Polymer
propane 01-2119486944-21		74-98-6 200-827-9	1%<	C<10%	Flam. Gas 1; H220 Press. Gas - Liquefied gas;	(1)(2)(10)	Propellant
isobutane 01-2119485395-27		75-28-5 200-857-2	1%<	C<10%	Flam. Gas 1; H220 Press. Gas - Liquefied gas;	(1)(2)(10)	Propellant
dimethyl ether 01-2119472128-37		115-10-6 204-065-8	1%<	C<10%	Flam. Gas 1; H220 Press. Gas - Liquefied gas;	(1)(2)(10)	Propellant
(1,3-butadiene, conc<0.1%)							
reaction mass of tris(2-chlorop tris(2-chloro-1-methylethyl) ph acid, bis(2-chloro-1-methylethy and phosphoric acid, 2-chloro- chloropropyl) ester 01-2119486772-26	osphate and phosphoric I) 2-chloropropyl ester		1%<	C<25%	Acute Tox. 4; H302	(1)(10)	Constituent

(1) For H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(8) Specific concentration limits, see heading 16

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

(18) Polymethylene polyphenyl isocyanate, contains > 0.1% MDI-isomers

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

If you feel unwell, seek m<mark>edical advice.</mark>

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

Reason for revision: 2;3

Publication date: 2007-08-16 Date of revision: 2018-01-09

Revision number: 0403

Product number: 45261

After skin contact:

Wash immediately with lots of water. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Consult a doctor/medical service if you feel

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

4.2.1 Acute symptoms After inhalation:

Dry/sore throat. Coughin<mark>g. Irritation of the respiratory tract. Irr</mark>itation of the nasal mucous membranes. Runny nose. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible inflammation of the respiratory tract. Risk of lung oedema. Respiratory difficulties.

After skin contact: Tingling/irritation of the skin. After eye contact: Irritation of the eye tissue. Lacrimation. After ingestion: No effects known.

- 4.2.2 Delayed symptoms
- No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher.

5.1.2 Unsuitable extinguishing media:

Small fire: Quick-acting CO2 extinguisher, Water (water can be used to control jet flame), Foam. Major fire: Water (water can be used to control jet flame), Foam.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (phosphorus oxides, nitrous vapours, hydrogen chloride, carbon monoxide - carbon dioxide). Pressurised container: May burst if heated. May polymerize on exposure to temperature rise. On heating: release of toxic/combustible gases/vapours (hydrogen cyanide).

5.3. Advice for firefighters

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistant risk of physical explosion. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective goggles. Head/neck protection. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.
- 6.1.1 Protective equipment for non-emergency personnel
 - See heading 8.2
- 6.1.2 Protective equipment for emergency responders
 - Gloves. Protective goggles. Head/neck protection. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Dam up the solid spill. Use appropriate containment to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Allow product to solidify and remove it by mechanical means. Carefully collect the spill/leftovers. Clean (treat) contaminated surfaces with acetone. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

Reason for revision: 2;3

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe very strict hygiene - avoid contact. Remove contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Store in a cool area. Keep out of direct sunlight. Ventilation at floor level. Fireproof storeroom. Unauthorized persons are not admitted. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources, ignition sources, (strong) acids, (strong) bases, amines.

- 7.2.3 Suitable packaging material:
- Aerosol.

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU			
Dimethylether		Time-weighted average exposure limit 8 h (Indicative occupational	1000 ppm
		exposure limit value)	
		Time-weighted average exposure limit 8 h (Indicative occupational	1920 mg/m³
		exposure limit value)	
Belgium			
4,4'-Diisocyanate de dipl	hénylméthane (MDI)	Time-weighted average exposure limit 8 h	0.005 ppm
		Time-weighted average exposure limit 8 h	0.052 mg/m ³
Hydrocarbures aliphatiqu C4)	es sous forme gazeuse : (Alcanes C1-	Time-weighted average exposure limit 8 h	1000 ppm
Oxyde de diméthyle		Time-weighted average exposure limit 8 h	1000 ppm
		Time-weighted average exposure limit 8 h	1920 mg/m³
The Netherlands			
Dimethylether		Time-weighted average exposure limit 8 h (Public occupational	496 ppm
,		exposure limit value)	
		Time-weighted average exposure limit 8 h (Public occupational	950 mg/m³
		exposure limit value)	
		Short time value (Public occupational exposure limit value)	783 ppm
		Short time value (Public occupational exposure limit value)	1500 mg/m ³
France			
4,4'-Diisocyanate de diph	énylméthane	Time-weighted average exposure limit 8 h (VL: Valeur non	0.01 ppm
,,	- ,	réglementaire indicative)	
		Time-weighted average exposure limit 8 h (VL: Valeur non	0.1 mg/m ³
		réglementaire indicative)	0.
		Short time value (VL: Valeur non réglementaire indicative)	0.02 ppm
		Short time value (VL: Valeur non réglementaire indicative)	0.2 mg/m³
Oxyde de diméthyle		Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1000 ppm
		Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1920 mg/m³
Germany			
4,4'-Methylendiphenyldiis	socvanat	Time-weighted average exposure limit 8 h (TRGS 900)	0.05 mg/m ³
Dimethylether		Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
		Time-weighted average exposure limit 8 h (TRGS 900)	1900 mg/m ³
Isobutan		Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
		Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m ³
pMDI (als MDI berechnet)	Time-weighted average exposure limit 8 h (TRGS 900)	0.05 mg/m ³
or revision: 2;3		Publication date: 2007-08-16	
		Date of revision: 2018-01-09	
number: 0403		Product number: 45261	4/
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Propan				rage exposure limit 8 h (TRGS 90 rage exposure limit 8 h (TRGS 90		1000 ppm 1800 mg/m ³			
					,				
UK Dimethyl ether			Time-weighted ave	rage exposure limit 8 h (Workpla	ce exposure limit	400 ppm			
			(EH40/2005))						
			Time-weighted ave (EH40/2005))	rage exposure limit 8 h (Workpla	ace exposure limit	766 mg/m³			
				/orkplace exposure limit (EH40/2		500 ppm 958 mg/m ³			
				Short time value (Workplace exposure limit (EH40/2005)) Time-weighted average exposure limit 8 h (Workplace exposure limit					
Isocyanates, all (as -NCO)	xcept methyl i	socyanate	(EH40/2005))	(EH40/2005))					
				Short time value (Workplace exposure limit (EH40/2005))					
USA (TLV-ACGIH)			Chart time	/ Adopted (alue)		1000			
Butane, all isomers Methylene bisphenyl isocya	anate (MDI)			LV - Adopted Value) rage exposure limit 8 h (TLV - Ad	onted Value)	1000 ppm 0.005 ppm			
b) National biological limit			inte weighted ave			19:000 ppm			
If limit values are applicable		these will be listed	below.						
8.1.2 Sampling methods									
Product name			Test	Number					
Isocyanates			NIOSH	5521					
Isocyanates	hon using the		NIOSH	5522					
B.1.3 Applicable limit values where the second seco									
8.1.4 DNEL/PNEC values		these will be listed	i below.						
DNEL/DMEL - Workers									
	ropronyl) nhos	sphate and tris(2-ch	loro-1-methylethyl) r	hosphate and phosphoric acid, b	is(2-chloro-1-meth	vlethvl) 2-chlo			
ester and phosphoric acid, 2				nespriate and priospriorie delu, b	STE CHIOTO I-INEUI	J.C.C.TYIJ Z-CIIIC			
Effect level (DNEL/DMEL)				Value	Remark				
DNEL	Lon	g-term systemic eff		5.82 mg/m ³					
		te systemic effects		22.4 mg/m ³					
		g-term systemic eff		2.08 mg/kg bw/day					
		te systemic effects	dermal	8 mg/kg bw/day					
DNEL/DMEL - General popu	ulation								
reaction mass of tris(2-chlor	ropropyl) phos	sphate and tris(2-ch	<mark>nlor</mark> o-1-methylethyl) p	hosphate and phosphoric acid, b	is(2-chloro-1-meth	ylethyl) 2-chlo			
ester and phosphoric acid, 2	2-chloro-1-met								
Effect level (DNEL/DMEL)) Тур	e		Value	Remark				
DNEL	Lon	g-term systemic eff	fects inhalation	1 16					
		0 /		1.46 mg/m ³					
	Acu	te systemic effects	inhalation	11.2 mg/m ³					
	Acu Lon	te systemic effects g-term systemic eff	inhalation fects dermal	11.2 mg/m³ 1.04 mg/kg bw/day					
	Acu Lon Acu	te systemic effects g-term systemic eff te systemic effects	inhalation fects dermal dermal	11.2 mg/m³ 1.04 mg/kg bw/day 4 mg/kg bw/day					
	Acu Lon Acu	te systemic effects g-term systemic eff	inhalation fects dermal dermal	11.2 mg/m³ 1.04 mg/kg bw/day					
PNEC	Acu Lon Acu Lon	te systemic effects g-term systemic eff te systemic effects g-term systemic eff	inhalation fects dermal dermal fects oral	11.2 mg/m ³ 1.04 mg/kg bw/day 4 mg/kg bw/day 0.52 mg/kg bw/day					
reaction mass of tris(2-chlor	Acu Lon Acu Lon	te systemic effects g-term systemic eff te systemic effects g-term systemic eff sphate and tris(2-ch	inhalation fects dermal dermal fects oral nloro-1-methylethyl) p	11.2 mg/m³ 1.04 mg/kg bw/day 4 mg/kg bw/day	is(2-chloro-1-meth	ylethyl) 2-chlc			
reaction mass of tris(2-chlor ester and phosphoric acid, 2	Acu Lon Acu Lon	te systemic effects g-term systemic eff te systemic effects g-term systemic eff sphate and tris(2-ch thylethyl bis(2-chlo	inhalation fects dermal dermal fects oral nloro-1-methylethyl) p	11.2 mg/m ³ 1.04 mg/kg bw/day 4 mg/kg bw/day 0.52 mg/kg bw/day hosphate and phosphoric acid, b		ylethyl) 2-chlc			
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reaction mass of tris(2-chlor ester and phosphoric acid, 2 Compartments Fresh water Aqua (intermittent release Marine water STP Fresh water sediment Marine water sediment Soil Oral 8.1.5 Control banding If applicable and available it	Acu Lon Acu Lon 2-chloro-1-me es)	te systemic effects g-term systemic eff te systemic effects g-term systemic eff sphate and tris(2-chlo Value 0.64 m 0.51 m 0.064 n 7.84 m 1.34 m 1.34 m 1.7 mg 11.6 m	inhalation fects dermal dermal fects oral noro-1-methylethyl) p ropropyl) ester ng/l ng/l ng/l ng/kg sediment dw ng/kg sediment dw g/kg soil dw	11.2 mg/m ³ 1.04 mg/kg bw/day 4 mg/kg bw/day 0.52 mg/kg bw/day hosphate and phosphoric acid, b		ylethyl) 2-chlc			
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Materials	Breakthrough time	Thickness	
LDPE (Low Density Poly Ethylene)	> 10 minutes	0.025 mm	
c) Eye protection:			-
Protective goggles.			
d) Skin protection:			
Head/neck protection. Protective clo	hing.		
8.2.3 Environmental exposure controls:			
See headings 6.2, 6.3 and 13			
ION 9: Physical and che	mical properties		
. Information on basic physical	and chemical properties		
Physical form	Aerosol		
Odour	Characteristic odour		
Odour threshold	No data available		
Colour	Variable in colour, depending on the o	composition	
Particle size	No data available		
Explosion limits	No data available		
Flammability	Extremely flammable aerosol.		
Log Kow	Not applicable (mixture)		
Dynamic viscosity	No data available		
Kinematic viscosity	No data available		
Melting point	No data available		
Boiling point	No data available		
Evaporation rate	No data available		
Relative vapour density	>1		
Vapour pressure	No data available		
Solubility	Water ; insoluble		
	Organic solvents ; soluble		
Relative density	0.9 ; 20 °C		
Decomposition temperature	No data available		
Auto-ignition temperature	No data available		
Flash point	No data available		
Explosive properties	No chemical group associated with ex		
Oxidising properties	No chemical group associated with ox	idising properties	
рН	No data available		
2. Other information			
Absolute density	<mark>963 kg/m³ ; 2</mark> 0 °C		

10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

May polymerize with many compounds e.g.: (strong) bases and amines. Reacts violently with (some) acids/bases.

10.4. Conditions to avoid

Precautionary measures

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

10.5. Incompatible materials

(strong) acids, (strong) bases, amines.

10.6. Hazardous decomposition products

On heating: release of toxic/combustible gases/vapours (hydrogen cyanide). On burning: release of toxic and corrosive gases/vapours (phosphorus oxides, nitrous vapours, hydrogen chloride, carbon monoxide - carbon dioxide).

Reason for revision: 2;3

Publication date: 2007-08-16 Date of revision: 2018-01-09

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СЕСТІ			Linformatio	10				
SECH	UN 11: TOX	icologica	l informatio	n			_	
	1. Information of 1.1.1 Test results	on toxi <mark>colog</mark>	ical effects					
Acute to	oxicity							
Hand	Held B2 Expanding F	oam						
No	(test)data on the m	ixture a <mark>vailable</mark>	2					
Cla	ssification is based of	on the r <mark>elevant</mark>	ingredients					
<u>po</u>	ymethylene polyph			hri	-		he i la	
	Route of exposure	Parameter	Method	Value	Exposure time	Species	Value R determination	emark
	Oral	LD50		> 10000 mg/kg		Rat	Literature study	
	Dermal	LD50		> 5000 mg/kg		Rabbit	Literature study	
	Inhalation (vapours	s) LD50		10 mg/l - 20 mg/l	4 h	Rat	Literature study	
	Inhalation			category 4			Literature study	
rea	ction mass of tris(2-	-chlorop <mark>ropyl)</mark>	phosphate and tris(2-	chloro-1-methyleth	phosphate and phosphate an	phosphoric acid, bis(2-	chloro-1-methylethyl)	2-chloropropyl
est			-methylethyl bis(2-ch	1	I=		h	
	Route of exposure			Value	Exposure time		determination	emark
	Oral	LD50	EU Method B.1 tris	632 mg/kg bw		Rat (female)	Experimental value	
	Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male/female)	Experimental value	
	Inhalation (aerosol) LC50	OECD 403	> 7 mg/l	4 h	Rat (male/female)	Experimental value	
Con	lusion	_						
	rmful if inhaled.							
	t classified as acute							
NO	t classified as acute		/eu					
Corrosio	on/irritation							
Hand	Held B2 Expanding F	aam						
	Telu dz Expanding r							
No	(test)data on the m		2					
	(test)data on the m ssification is based of	ixture a <mark>vailable</mark>						
Cla	. ,	iixture available	ingredients					
Cla po	ssification is based of	iixture available on the relevant enyl isocyanate	ingredients	Exposure time	Time point	Species	Value	Remark
Cla po	ssification is based o <u>ymethylene polyph</u> Route of exposure	ixture available on the relevant enyl isocyanate Result	ingredients	Exposure time	Time point	Species	determination	Remark
Cla po	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye	ixture available on the relevant <u>enyl isocyanate</u> Result Irritatin <mark>g;</mark>	ingredients	Exposure time	Time point	Species		Remark
Cla po	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye	ixture available on the relevant enyl isocyanate Result	ingredients	Exposure time	Time point	Species	determination	Remark
Cla po	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin	ixture available on the relevant <u>envl isocyanate</u> Result Irritating; category 2 Irritating; category 2	ingredients	Exposure time	Time point	Species	determination Literature study Literature study	Remark
Cla po	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin Inhalation	ixture available on the relevant envl isocyanate Result Irritating; category 2 Irritating; category 2 Irritating;	ingredients	Exposure time	Time point	Species	determination Literature study	Remark
Cla po	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin Inhalation	ixture available on the relevant envl isocyanate Result Irritating; category 2 Irritating; category 2 Irritating; STOT SE cat.3	ingredients Method				determination Literature study Literature study Literature study Literature study	
Cla po rea	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin Inhalation	ixture available on the relevant envl isocyanate Result Irritating; category 2 Irritating; category 2 Irritating; STOT SE cat.3 cchloropropyl) 1	Method	chloro-1-methyleth		Species	determination Literature study Literature study Literature study Literature study	
Cla po rea est	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin Inhalation Inhalation Into a soft tris(2- er and phosphoric a	ixture available on the relevant envl isocyanate Result Irritating; category 2 Irritating; category 2 Irritating; STOT SE cat.3 chloropropyl) j ccid, 2-chloro-1	ingredients Method	chloro-1-methyleth loropropyl) ester	I) phosphate and p	phosphoric acid, bis(2-	determination Literature study Literature study Literature study chloro-1-methylethyl)	
Cla po rea est	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin Inhalation Inhalation Inhalation Inhalation Route of exposure	ixture available on the relevant envl isocyanate Result Irritating; category 2 Irritating; category 2 Irritating; STOT SE cat.3 -chloropropyl) j cicid, 2-chloro-1 Result	ingredients Method phosphate and tris(2 methylethyl bis(2-ch	chloro-1-methyleth		phosphoric acid, bis(2-	determination Literature study Literature study Literature study Literature study	2-chloropropyl
Cla po rea est	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin Inhalation Inhalation Inhalation Inhalation Route of exposure	ixture available on the relevant envl isocyanate Result Irritating; category 2 Irritating; category 2 Irritating; STOT SE cat.3 chloropropyl) j ccid, 2-chloro-1	ingredients Method phosphate and tris(2 methylethyl bis(2-ch	chloro-1-methyleth loropropyl) ester	I) phosphate and p	phosphoric acid, bis(2-	determination Literature study Literature study Literature study Literature study chloro-1-methylethyl	2-chloropropyl Remark
Cla po rea est	ssification is based o <u>ymethylene polyph</u> Route of exposure Eye Skin Inhalation Inhalation Intion mass of tris(2- er and phosphoric a Route of exposure Eye	ixture available on the relevant envl isocyanate Result Irritating; category 2 Irritating; category 2 Irritating; STOT SE cat.3 -chloropropyl) j cicid, 2-chloro-1 Result	ingredients Method phosphate and tris(2- methylethyl bis(2-ch Method	chloro-1-methyleth loropropyl) ester Exposure time	I) phosphate and p Time point	phosphoric acid, bis(2-	determination Literature study Literature study Literature study Literature study Literature study Value determination	2-chloropropyl Remark
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polymethylene polyph	1				_			_		
						0	hard the second s	h		D
Route of exposure	Result	Method		Exposu	re time	Observation time point	Species	Value dete	rmination	Remark
	Sensitizin <mark>g;</mark> category 1							Literature s	tudy	
Inhalation	Sensitizin <mark>g;</mark> category 1							Literature s	tudy	
reaction mass of tris(2	2-chloropropy					phosphate and pho	sphoric acid, bis(2	2-chloro-1-m	ethylethyl	2-chloroprop
ester and phosphoric			ois(2-chloi				h .	h		
Route of exposure		Method		Exposu	retime	Observation time point	Species	Value dete		Remark
Skin onclusion	Not sens <mark>itizin</mark>	g OECD 429					Mouse (female)	Experiment	al value	
May cause an allergic May cause allergy or a ific target organ toxici	asthma sy <mark>mpt</mark>		g difficult	ies if inh	aled.					
nd Held B2 Expanding I										
o (test)data on the mi		e								
Classification is based										
polymethylene polyph					_					
Route of exposure	e Parameter	Method	Value		Organ	Effect	Exposure time	Specie	S	Value determinatio
Inhalation			STOT R							Literature stu
reaction mass of tris(2 ester and phosphoric a						phosphate and pho	osphoric acid, bis(2	2-chloro-1-m	ethylethyl	2-chloroprop
Route of exposure		Method	Value	οριοργ	Organ	Effect	Exposure time	Specie	s	Value determinatio
Oral (diet)	NOAEL	Subchronic toxicity test	171 mg bw/day			No effect	13 weeks (daily	ν) Rat (fe	male)	Experimental value
Oral (diet)	LOAEL	Subchronic toxicity test	52 mg/l bw/day	kg	Liver	Weight gain	13 weeks (daily	ν) Rat (m	ale)	Experimental value
Inhalation	Dose level	toxicity test	0.586 m			No effect		Mouse	(male)	Experimental
(vapours)			0.000						(marc)	value
Not classified as sub-c Not classified as sub-c	hronicall <mark>y tox</mark>		-	exposu	re if inhaled					
Not classified as sub-c Not classified as sub-c agenicity (in vitro) nd Held B2 Expanding I No (test)data on the n	hronically tox hronically tox <u>Foam</u> nixture availal	ic in contact wit ic if swallowed ble	h skin	·						
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Not classified as sub-c Not classified as sub-c agenicity (in vitro) Ind Held B2 Expanding I No (test)data on the n reaction mass of tris(2	hronically tox hronically tox <u>Foam</u> nixture availal <u>2-chloropropy</u> acid, 2-chloro	ic in contact wit ic if swallowed ble 1) phosphate and	h skin d tris(2-ch	loro-1-n	nethylethyl)	phosphate and pho) 2-chloroprop
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Not classified as sub-c Not classified as sub-c agenicity (in vitro) nd Held B2 Expanding I No (test)data on the n reaction mass of tris(2 ester and phosphoric a Result Negative with met activation, negative metabolic activatio metabolic activatio	hronically tox hronically tox <u>Foam</u> nixture availal <u>2-chloropropy</u> acid, 2-chloro kabolic re without on metabolic e with	ic in contact wit ic if swallowed ble <u>1) phosphate and</u> <u>-1-methylethyl t</u> Vethod DECD 482	h skin d tris(2-ch	loro-1-n opropy	<u>nethylethyl))) ester</u> Test substra Rat liver cel Mouse (lym	phosphate and pho ate [/alue dete Experimen	rmination tal value
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Not classified as sub-c Not classified as sub-c Not classified as sub-c agenicity (in vitro) nd Held B2 Expanding I No (test)data on the n reaction mass of tris(2 ester and phosphorics Result Negative with met activation, negative metabolic activation Negative without n activation, positive metabolic activation negenicity (in vivo) nd Held B2 Expanding I No (test)data on the n Judgement is based or reaction mass of tris(2 ester and phosphorics Result Negative Onclusion	hronically tox hronically tox hronically tox <u>Foam</u> nixture availal <u>2-chloropropy</u> <u>acid, 2-chloro</u> n tabolic re without on <u>Foam</u> nixture availal n the relevant <u>2-chloropropy</u> <u>acid, 2-chloro</u>	ic in contact wit ic if swallowed ble <u>1) phosphate and</u> <u>-1-methylethyl t</u> <u>Method</u> DECD 476 ble t ingredients <u>1) phosphate and</u> <u>-1-methylethyl t</u> <u>Method</u> OECD 476	d tris(2-ch ois(2-chlor	loro-1-n opropy	nethylethyl))) ester Test substra Rat liver cel Mouse (lym cells) nethylethyl)	phosphate and pho ate Is phoma L5178Y phosphate and pho	Effect	2-chloro-1-m	Value dete Experimen Experimen ethylethyl	rmination tal value tal value) 2-chloroprop ue determinat
Not classified as sub-c Not classified as sub-c Not classified as sub-c agenicity (in vitro) nd Held B2 Expanding I No (test)data on the n reaction mass of tris(2 ester and phosphorics Result Negative with met activation, negative metabolic activation Negative without n activation, negative metabolic activation negenicity (in vivo) nd Held B2 Expanding I No (test)data on the n Judgement is based on reaction mass of tris(2 ester and phosphorics Result Negative Onclusion Not classified for muta	hronically tox hronically tox hronically tox <u>Foam</u> nixture availal <u>2-chloropropy</u> <u>acid, 2-chloro</u> n tabolic re without on <u>Foam</u> nixture availal n the relevant <u>2-chloropropy</u> <u>acid, 2-chloro</u>	ic in contact wit ic if swallowed ble <u>1) phosphate and</u> <u>-1-methylethyl t</u> <u>Method</u> DECD 476 ble t ingredients <u>1) phosphate and</u> <u>-1-methylethyl t</u> <u>Method</u> OECD 476	d tris(2-ch ois(2-chlor	loro-1-n opropy	nethylethyl))) ester Test substra Rat liver cel Mouse (lym cells) nethylethyl)	phosphate and pho ate Is phoma L5178Y phosphate and pho	Effect	2-chloro-1-m	Value dete Experimen Experimen ethylethyl	rmination tal value tal value) 2-chloroprop ue determinat
Not classified as sub-c Not classified as sub-c Not classified as sub-c agenicity (in vitro) nd Held B2 Expanding I No (test)data on the m reaction mass of tris(2 ester and phosphoric a Result Negative with met activation, negativ metabolic activation Nogative without n activation, positive metabolic activation No (test)data on the m Judgement is based on reaction mass of tris(2 ester and phosphoric a Result Negative Onclusion Not classified for muta nogenicity and Held B2 Expanding I	hronically tox hronically tox hronically tox <u>Foam</u> nixture availal <u>2-chloropropy</u> acid, 2-chloro netabolic e without on <u>Foam</u> nixture availal n the relevant <u>2-chloropropy</u> acid, 2-chloro	ic in contact wit ic if swallowed ble <u>1) phosphate and</u> <u>-1-methylethyl t</u> Method DECD 482 DECD 476 ble t ingredients <u>1) phosphate and</u> <u>-1-methylethyl t</u> Method OECD 474 DECD 474	d tris(2-ch ois(2-chlor	loro-1-n opropy	nethylethyl))) ester Test substra Rat liver cel Mouse (lym cells) nethylethyl)	phosphate and pho ate Is phoma L5178Y phosphate and pho	Effect	2-chloro-1-m	Value dete Experimen Experimen ethylethyl	rmination tal value tal value) 2-chloroprop ue determinat
Not classified as sub-c Not classified as sub-c Agenicity (in vitro) additional and the sub-c not classified as sub-c agenicity (in vitro) not (test)data on the n reaction mass of tris(2 ester and phosphoric a Result Negative with met activation, negative metabolic activation Negative without n activation, negative metabolic activation metabolic activation agenicity (in vivo) not (test)data on the n Judgement is based on reaction mass of tris(2 ester and phosphoric a Result	hronically tox hronically tox hronically tox <u>Foam</u> nixture availal <u>2-chloropropy</u> acid, 2-chloro netabolic e without on <u>Foam</u> nixture availal n the relevant <u>2-chloropropy</u> acid, 2-chloro	ic in contact wit ic if swallowed ble <u>1) phosphate and</u> <u>-1-methylethyl t</u> Method DECD 482 DECD 476 ble t ingredients <u>1) phosphate and</u> <u>-1-methylethyl t</u> Method OECD 474 DECD 474	d tris(2-ch ois(2-chlor	loro-1-n opropy	nethylethyl))) ester Test substra Rat liver cel Mouse (lym cells) nethylethyl)	phosphate and pho ate Is phoma L5178Y phosphate and pho	Effect	2-chloro-1-m	Value dete Experimen Experimen ethylethyl	rmination tal value tal value) 2-chloroprop ue determinat
Not classified as sub-c Not classified as sub-c Not classified as sub-c Igenicity (in vitro) Ind Held B2 Expanding I No (test)data on the m reaction mass of tris(2 ester and phosphoric a Result Negative with met activation, negativ metabolic activation Negative without n activation, positive metabolic activation No (test)data on the m Judgement is based or reaction mass of tris(2 ester and phosphoric a Result Negative onclusion Not classified for muta nogenicity and Held B2 Expanding I	hronically tox hronically tox hronically tox <u>Foam</u> nixture availal <u>2-chloropropy</u> acid, 2-chloro netabolic e without on <u>Foam</u> nixture availal n the relevant <u>2-chloropropy</u> acid, 2-chloro	ic in contact wit ic if swallowed ble <u>1) phosphate and</u> <u>-1-methylethyl t</u> Method DECD 482 DECD 476 ble t ingredients <u>1) phosphate and</u> <u>-1-methylethyl t</u> Method OECD 474 DECD 474	d tris(2-ch ois(2-chlor	loro-1-n opropy	nethylethyl))) ester Test substra Rat liver cel Mouse (lym cells) nethylethyl)	phosphate and pho ate is phoma L5178Y phosphate and pho Test substra Mouse (ma	Effect	2-chloro-1-m gan ne marrow	Value dete Experimen Experimen ethylethyl	rmination tal value tal value) 2-chloroprop ue determinat

Clas	ssification is ba	sed on the i	elevant ingred	ents							
pol	<u>ymethylene po</u>	lyphenyl isc	<u>cyanate</u>								
	Route of	Parameter	Method	Value		Exposure	time S	pecies	Effect C	Organ	Value
	exposure										determination
	Unknown			category	2						Literature study
							yl) phosphate	e and phosphoric	acid, bis(2-chloro-1	-methylethyl)	2-chloropropyl
este				lethyl bis(2-chlo							
		Parameter	Method	Value		Exposure	time S	pecies	Effect C	Organ	Value
	exposure		-								determination
	Inhalation										Data waiving
	Dermal										Data waiving
	Oral										Data waiving
Conc	lusion										
Sus	pected of caus	ing cancer.									
Reprodu	ictive toxicity										
		· · · • • · · · ·									
-	<u>leld B2 Expand</u> (test)data on t		wailabla								
	(
	gement is base						N . I I				5
				ate and tris(2-ci lethyl bis(2-chlc			vi) phosphate	e and phosphoric	acid, bis(2-chloro-1	-metnyletnyl)	<u>2-chioropropyi</u>
este	er and priosprie		arameter	Method	Value		Exposure time	c. Crossies	Effect	Organ	Value
		r	arameter	Method	value		exposure tim	e species	Ellect	Organ	determination
	Developmenta	al toxicity	OAEL	OECD 416	99 mg/	ka	_	Rat (female)	Embryotoxicity		Experimental
	Developmenta		UALL	0100 410	bw/day			Nat (Ternale)			value
	Effects and faut	:1:4	OAEL	OECD 416			_	Rat	Weight changes	Famala	
	Effects on fert	liity L	UAEL	OECD 416	99 mg/ bw/day			(male/female)		reproductive	Experimental value
					Dw/uay			(Indie/Ternale		organ	value
Conc	lusion						-			organ	
	t classified for r	enrotoxic o	development	al toxicity							
		epi otonic o	acteropment								
Toxicity	other effects										

Hand Held B2 Expanding Foam No (test)data on the mixture available

Chronic effects from short and long-term exposure

Hand Held B2 Expanding Foam

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Feeling of weakness. Itching. Skin rash/inflammation. May stain the skin. Dry skin. Coughing. Possible inflammation of the respiratory tract. Respiratory difficulties.

SECTION 12: Ecological information

12.1. Toxicity

Hand Held B2 Expanding Foam

No (test)data on the mixture av<mark>ailable</mark>

Judgement of the mixture is based on the relevant ingredients

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinatio
Acute toxicity other aquatic organisms	LC50		> 1000 mg/l	96 h				Literature study
Toxicity aquatic micro- organisms	EC50	OECD 209	> 100 mg/l		Activated sludge			Literature study
n for revision: 2;3						n date: 2007-0 vision: 2018-0		
on number: 0403					Droduct p	umber: 45261		9/1

		Parameter	Method	ropropyl) este Value	Duration	Species	Test design	Fresh/salt water	Value determinat
Acute toxicity fishes	5	LC50	Other	56.2 mg/l	96 h	Brachydanio rerio	Static system		Experimental valu
Acute toxicity crust	acea	LC50		131 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental valu
Toxicity algae and o plants	ther aquati	ic ErC50	OECD 201	82 mg/l	72 h	Pseudokirchnerie lla subcapitata	Static system	Fresh water	Experimental valu
Long-term toxicity f	ish								Data waiving
Long-term toxicity a crustacea	aquatic	NOEC	OECD 202	32 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental valu GLP
Toxicity aquatic mic organisms	ro-	EC50	ISO 8192	784 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental valu GLP
Not classified as dang 12.2. Persistence a polymethylene polyp Biodegradation wa		adability	-	the criteria o					
Method			Value	_	Dura	ation		lue determina	
OECD 302C: Inher		radability:	< 60 %				Ex	perimental val	ue
Modified MITI Tes		mul) mhar chuit	and tric(2)		lothul) = h	to and the sector of	aid his/2 stil	1	aud) 2 abless
reaction mass of tris(2 ester and phosphoric						ate and phosphoric a	cia, bis(2-chlo	ro-1-methylet	iyi) 2-chloropropy
Biodegradation wa		no i metnyiet		opropyr/ este	<u>.</u>				
Method			Value		Dura	ation	Va	lue determina	tion
OECD 301E: Modi	fied OECD S	Screening Test	14 %; GLP		28 d	lay(s)	Ex	perimental val	ue
Phototransformation		5							
Method			Value		Con	c. OH-radicals	Va	lue determina	tion
AOPWIN v1.92			8.6 h		5000	000 /cm³	Ca	lculated value	
Biodegradation soil									
Method			Value		Dura	ation	Va	lue determina	tion
							Da	ta waiving	
Half-life water (t1/2	2 water)								
Method			Value		Prim degr	nary radation/mineralisa		lue determina	tion
EU Method C.7			> 1 year(s)		Prim	nary degradation	Exp	perimental val	ue
onclusion Contains non readily l	tive pote		t(s)						
nd Held B2 Expanding				h		Temperature	1	/alue determii	nation
nd Held B2 Expanding	Re	emark		Value		remperature	P P		
nd Held B2 Expanding og Kow		e mark ot applicable (i	nixture)	Value	_	Temperature			
nd Held B2 Expanding og Kow	N	ot applicable (i	mixture)	Value	-7				
nd Held B2 Expanding og Kow Method polymethylene polypi BCF fishes	henyl isocya	ot applicable (i			7				
nd Held B2 Expanding og Kow Method polymethylene polype BCF fishes Parameter	N	ot applicable (i		Duration	- F	ecies			etermination
nd Held B2 Expanding og Kow Method polymethylene polypl BCF fishes Parameter BCF	henyl isocya	ot applicable (i			- F				etermination re study
nd Held B2 Expanding og Kow Method polymethylene polyp BCF fishes Parameter BCF Log Kow	henyl isocya	ot applicable (r anate Vali 1		Duration	- F	ecies ices		Literatu	re study
nd Held B2 Expanding og Kow Method polymethylene polypl BCF fishes Parameter BCF	henyl isocya	ot applicable (r anate Vali 1 Remark	le		- F	ecies			re study
nd Held B2 Expanding og Kow Method polymethylene polypl BCF fishes Parameter BCF Log Kow Method	henyl isocya Method	ot applicable (i anate Vali 1 Remark No data avai	Je Jable	Duration	Pis	ecies sces Temperature		Literatu Value dete	re study rmination
nd Held B2 Expanding og Kow Method polymethylene polyp BCF fishes Parameter BCF Log Kow	Method	ot applicable (i anate Vali 1 Remark No data avai apyl) phosphate	Je Jable 2 and tris(2-ch	Duration Value	Pis Pis	ecies sces Temperature		Literatu Value dete	re study rmination
nd Held B2 Expanding og Kow Method polymethylene polypl BCF fishes Parameter BCF Log Kow Method reaction mass of tris(2	Method	ot applicable (i anate Vali 1 Remark No data avai pyl) phosphate pro-1-methylet	Je lable e and tris(2-ch hyl bis(2-chlo	Duration Value	Pis Pis	ecies sces Temperature		Literatu Value dete	re study rmination
polymethylene polyp BCF fishes Parameter BCF Log Kow Method reaction mass of tris(2 ester and phosphoric BCF fishes Parameter	Method	ot applicable (i anate Vali 1 Remark No data avai apyl) phosphate	Je lable e and tris(2-ch hyl bis(2-chlo	Duration Value	lethyl) phospha	ecies sces Temperature		Literatu	re study rmination
Ind Held B2 Expanding Og Kow Method polymethylene polypl BCF fishes Parameter BCF Log Kow Method reaction mass of tris(2 ester and phosphoric BCF fishes	Method 2-chloropro acid, 2-chlo	ot applicable (i anate Vali 1 Remark No data avai opyl) phosphate pro-1-methylet	Je lable e and tris(2-ch hyl bis(2-chlo	Value Iloro-1-methy ropropyl) este	lethyl) phospha r Sp	ecies ces Temperature ate and phosphoric a		Literatu	re study rmination nyl) 2-chloropropyl
nd Held B2 Expanding og Kow Method polymethylene polyp BCF fishes Parameter BCF Log Kow Method reaction mass of tris(2 ester and phosphoric BCF fishes Parameter BCF Log Kow	Method 2-chloropro acid, 2-chloropro Method	ot applicable (r anate 1 Remark No data avai opyl) phosphate pro-1-methylet Vali 5 0.8	Je lable 2 and tris(2-ch hyl bis(2-chlo Je	Duration Value Value iloro-1-methy ropropyl) ester Duration 6 week(s)	lethyl) phospha r Sp	ecies Temperature ate and phosphoric a ecies prinus carpio		Literatu Value deter ro-1-methyleti Value d Experim	re study mination nyl) 2-chloropropyl etermination ental value
nd Held B2 Expanding og Kow Method polymethylene polyp BCF fishes Parameter BCF Log Kow Method reaction mass of tris(2 ester and phosphoric BCF fishes Parameter BCF Log Kow Method	Method 2-chloropro acid, 2-chloropro Method	ot applicable (i anate Vali 1 Remark No data avai opyl) phosphate pro-1-methylet	iable and tris(2-ch hyl bis(2-chlo je	Duration Value Value iloro-1-methy ropropyl) ester Duration 6 week(s)	lethyl) phospha r Sp	ecies Temperature ate and phosphoric a ecies prinus carpio Temperature		Literatu Value deter ro-1-methyleti Value d Experim Value deter	re study mination hyl) 2-chloropropy etermination ental value mination
nd Held B2 Expanding og Kow Method polymethylene polyp BCF fishes Parameter BCF Log Kow Method reaction mass of tris(2 ester and phosphoric BCF fishes Parameter BCF Log Kow Method EU Method A.8	Method 2-chloropro acid, 2-chloropro Method	ot applicable (i anate 1 Remark No data avai opyl) phosphate oro-1-methylet Vali 5 0.8	iable and tris(2-ch hyl bis(2-chlo je	Duration Value Value iloro-1-methy ropropyl) ester Duration 6 week(s)	lethyl) phospha r Sp	ecies Temperature ate and phosphoric a ecies prinus carpio		Literatu Value deter ro-1-methyleti Value d Experim	re study rmination nyl) 2-chloropropy etermination ental value rmination
nd Held B2 Expanding og Kow Method polymethylene polyp BCF fishes Parameter BCF Log Kow Method reaction mass of tris(2 ester and phosphoric BCF fishes Parameter BCF Log Kow Method	Alenyl isocya Method	ot applicable (r anate Vali 1 Remark No data avai opyl) phosphate oro-1-methylet Vali 5 0.8 Remark	Je iable e and tris(2-ch hyl bis(2-chlo Je - 14; Fresh	Duration Value Value iloro-1-methy ropropyl) ester Duration 6 week(s)	lethyl) phospha r Sp	ecies Temperature ate and phosphoric a ecies prinus carpio Temperature		Literatu Value deter ro-1-methyleti Value d Experim Value deter	re study mination hyl) 2-chloropropy etermination ental value mination

12.4. Mobility in soil

reaction mass of tris(2-chloropropyl) phosphate and tris(2-chloro-1-methylethyl) phosphate and phosphoric acid, bis(2-chloro-1-methylethyl) 2-chloropropyl ester and phosphoric acid, 2-chloro-1-methylethyl bis(2-chloropropyl) ester

(log) Koc						_			
Parameter				Method			Value		Value determination
log Koc	og Koc						2.76		Experimental value
Percent distribution									
Method	Fraction air	Fraction biota	Fraction		Fraction soil	Fraction	water \	Value determ	ination
			sediment	t					
Mackay level I	0.01 %	0 %	3.55 %		3.52 %	92.89 %	F	Read-across	

Conclusion

Contains component(s) with potential for mobility in the soil

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

Hand Held B2 Expanding Foam

Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 05 01* (wastes not otherwise specified in 08: waste isocyanates).

16 05 04* (gases in pressure containers and discarded chemicals: gases in pressure containers (including halons) containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Recycle/reuse. Specific treatment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)			
14.1. UN number			
UN number		1950	
14.2. UN proper shipping na	me		
Proper shipping name		Aerosols	
14.3. Transport hazard class(es)		
Hazard identification nur	nber		
Class		2	
Classification code		5F	
14.4. Packing group			
Packing group			
Labels		2.1	
14.5. Environmental hazards			
Environmentally hazardo <mark>us substance mark</mark>		no	
14.6. Special precautions for	user		
Special provisions		190	
Special provisions		327	
Special provisions		344	
Special provisions		625	
son for revision: 2;3		Publication date: 2007-08-16	
,-		Date of revision: 2018-01-09	
sion number: 0403		Product number: 45261	11/1

Limited quantities		Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Rail (RID)		
14.1. UN number		
UN number		1950
14.2. UN proper shipp	ing name	
Proper shipping na	-	Aerosols
14.3. Transport hazard		
Hazard identificati		23
Class		2
Classification code		5F
14.4. Packing group		
Packing group		
Labels		2.1
14.5. Environmental h	azards	
	azardous substance mark	no
14.6. Special precaution		
Special provisions		190
Special provisions		327
Special provisions		344
Special provisions		625
· · ·		
Limited quantities		Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
Inland waterways (A	ADN)	
14.1. UN number		
UN number		1950
14.2. UN proper shipp	ing name	
Proper shipping na		Aerosols
14.3. Transport hazard		
Class		2
Classification code		5F
14.4. Packing group		
Packing group		
Labels		2.1
	azarda	2.1
14.5. Environmental h	azardous substance mark	ha
14.6. Special precaution		no
	ons for user	100
Special provisions		190 327
Special provisions		
Special provisions		344
Special provisions		625
Limited quantities		Combination packagings: not more than 1 liter per inner packaging for
		liquids. A package shall not weigh more than 30 kg. (gross mass)
Sea (IMDG/IMSBC)		
14.1. UN number		
UN number		1950
14.2. UN proper shipp	ing name	1990
Proper shipping na		Aerosols
14.3. Transport hazard		
Class		21
		2.1
14.4. Packing group		
Packing group		
Labels		2.1
14.5. Environmental h	azards	
Marine pollutant		
	azardous substance mark	no
14.6. Special precaution	ons for user	
Special provisions		63
Special provisions		190
Special provisions		277
Special provisions		327
Special provisions		344
Special provisions		381
Special provisions		959
Limited quantities		Combination packagings: not more than 1 liter per inner packaging for
		liquids. A package shall not weigh more than 30 kg. (gross mass)
son for revision: 2;3		Publication date: 2007-08-16
		Date of revision: 2018-01-09
		Product number: 45261
ion number: 0403		

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code					
Annex II of MARPOL 73/7 <mark>8</mark>		Not applicable			
Air (ICAO-TI/IATA-DGR)					
14.1. UN number					
UN number		1950			
14.2. UN proper shipping na	me				
Proper shipping name		Aerosols, flammable			
14.3. Transport hazard class	(es)				
Class		2.1			
14.4. Packing group					
Packing group					
Labels		2.1			
14.5. Environmental hazards	5				
Environmentally hazardo	ous substance mark	no			
14.6. Special precautions for	ruser				
Special provisions		A145			
Special provisions		A167			
Special provisions		A802			
Limited quantities: maximum net quantity per packaging		30 kg G			

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	R	Remark		
16.26 % - 23.01 %				
156.58 g/l - 221.55 g/l				

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

		substances, mixtures and artic		
		Designation of the substance, of the substances or of the mixture	group of	Conditions of restriction
· polymethylene polyphenyl isocyanat		Liquid substances or mixtures which	aro	1. Shall not be used in:
· reaction mass of tris(2-chloropropyl)		regarded as dangerous in accordance		 ornamental articles intended to produce light or colour effects by means of different
phosphate and tris(2-chloro-1-methyl		Directive 1999/45/EC or are fulfilling		phases, for example in ornamental lamps and ashtrays,
phosphate and phosphoric acid, bis(2-		criteria for any of the following haza	,	- tricks and jokes,
chloro-1-methylethyl) 2-chloropropyl		or categories set out in Annex I to R		 – games for one or more participants, or any article intended to be used as such, even with
		•	eguiation	
and phosphoric acid, 2-chloro-1-meth bis(2-chloropropyl) ester		(EC) No 1272/2008:	27 20	ornamental aspects,
bis(2-chioropropyi) ester		(a) hazard classes 2.1 to 2.4, 2.6 and		2. Articles not complying with paragraph 1 shall not be placed on the market.
			-	13. Shall not be placed on the market if they contain a colouring agent, unless required for
		and 2, 2.14 categories 1 and 2, 2.15	types A to	
				 can be used as fuel in decorative oil lamps for supply to the general public, and,
		(b) hazard classes 3.1 to 3.6, 3.7 adv		 present an aspiration hazard and are labelled with R65 or H304,
		effects on sexual function and fertili		4. Decorative oil lamps for supply to the general public shall not be placed on the market
		development, 3.8 effects other than	narcotic	unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopte
		effects, 3.9 and 3.10;		by the European Committee for Standardisation (CEN).
		(c) hazard class 4.1;		5. Without prejudice to the implementation of other Community provisions relating to the
		(d) hazard class 5.1.		classification, packaging and labelling of dangerous substances and mixtures, suppliers sha
				ensure, before the placing on the market, that the following requirements are met:
				a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibl
				legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach
				children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of
				lamps — may lead to life- threatening lung damage";
				b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public a
				legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may
				lead to life threatening lung damage";
				c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general
				public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
				6. No later than 1 June 2014, the Commission shall request the European Chemicals Agence
				to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to
				ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304,
				intended for supply to the general public.
				7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter
				fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter,
				provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the
				competent authority in the Member State concerned. Member States shall make those da
				available to the Commission.'
· polymethylene polyphenyl isocyanat	te	Methylenediphenyl diisocyanate (M	DI)	1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures
		including the following specific isom		concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general
		Methylenediphenyl diisocyanate; 2,		public, unless suppliers shall ensure before the placing on the market that the packaging:
		Methylenediphenyl diisocyanate; 2,		passed an ess suppliers and ensure before the placing on the market that the plackaging.
		inetry encupriently ansocyanate, 2,	-	
son for revision: 2;3				Publication date: 2007-08-16
				Date of revision: 2018-01-09
ision number: 0403				Product number: 45261 13 / 15

Hand Held B2 Expanding Foam				
	Methylenediphenyl diisocyanate	 (a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC; (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures: "— 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. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives. 		
<u>National legislation Belgium</u> <u>Hand Held B2 Expanding Foa</u> No data available National legislation The Nether				
Hand Held B2 Expanding Foa				
Waterbezwaarlijkheid <u>National legislation France</u> <u>Hand Held B2 Expanding Foa</u> No data available	z (2)			
polymethylene polyphenyl is	socvanate			
Catégorie cancérogène	4,4'-Diisocyanate de diphényln	néthane; C2		
National legislation Germany				
Hand Held B2 Expanding Foa		hand a discussion of the second strength of t		
WGK	Stoffe (VwVwS) of 27 July 2005 (AwSV) of 18 April 2017	g based on the components in compliance with Verwaltungsvorschrift wassergefährdender 5 (Anhang 4) and Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen		
polymethylene polyphenyl is TA-Luft	5.2.5; I			
TRGS900 - Risiko der Fruchtschädigung	und des biologischen Grenzwe pMDI (als MDI berechnet); Y; R	nat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes rtes nicht befürchtet zu werden isiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des t befürchtet zu werden		
Sensibilisierende Stoffe	4,4'-Methylendiphenyldiisocya	biologischen Grenzwertes nicht befürchtet zu werden 4,4'-Methylendiphenyldiisocyanat; Sah; Atemwegssensibilisierende Stoffe Und Hautsensibilisierende Stoffe, an beiden Zielorganen Allergien auslösende		
TRGS905 - Krebserzeugend		DI) (in Form atembarer Aerosole, A-Fraktion); 2		
TRGS905 - Erbgutveränder TRGS905 - Fruchtbarkeitsgefährdend		DI) (in Form atembarer Aerosole, A-Fraktion); - DI) (in Form atembarer Aerosole, A-Fraktion); -		
TRGS905 - Fruchtschädiger Hautresorptive Stoffe	4,4'-Methylendiphenyldiisocya pMDI (als MDI berechnet); H; H	lautresorptiv		
		ro-1-methylethyl) phosphate and phosphoric acid, bis(2-chloro-1-methylethyl) 2-chloropropy		
TA-Luft	-chloro-1-methylethyl bis(2-chlorop 5.2.5	<u>JIOPYI/ 63(61</u>		
National legislation United King Hand Held B2 Expanding Foa No data available polymethylene polyphenyl is	u <u>m</u>			
Skin Sensitisation	Isocyanates, all (as -NCO) Exce			
Respiratory sensitisation	Isocyanates, all (as -NCO) Exce	pt methyl isocyanate; Sen		
<u>Other relevant data</u> <u>Hand Held B2 Expanding Foa</u> No data available	<u>ım</u>			
polymethylene polyphenyl is				
IARC - classification 15.2. Chemical safety assess No chemical safety assessme	β; Polymethylene polyphenyl is sment endoted for the mix			
Reason for revision: 2;3		Publication date: 2007-08-16 Date of revision: 2018-01-09		
Revision number: 0403		Product number: 45261 14 / 15		

	riand ricid bz Expanding i barri				
SECTION 16: Othe	r information				
Full text of any H-state	ements referred to under heading 3:				
H220 Extremely fl	ammable gas.				
H222 Extremely fl	ammable aerosol.				
H229 Pressurised	contai <mark>ner: May burst if heated.</mark>				
	s under pressure; may explode if heated.				
H302 Harmful if sv					
H315 Causes skin					
	in allergic skin reaction.				
H319 Causes serio H332 Harmful if in					
	illergy or asthma symptoms or breathing diff	iculties if inhaled			
	espiratory irritation.	iculties in initialet			
H351 Suspected o					
	lamage to organs through prolonged or repe	ated exposure if	inhaled.		
(*)	INTERNAL CLASSIFICATION BY BIG				
CLP (EU-GHS)	Classification, labelling and packaging (G	lobally Harmoni	sed System in Europe)		
DMEL	Derived Minimal Effect Level				
DNEL	Derived No Effect Level				
EC50	Effect Concentration 50 %				
ErC50	EC50 in terms of reduction of growth ra	te			
LC50	Lethal Concentration 50 %				
LD50	Lethal Dose 50 %				
NOAEL	No Observed Adverse Effect Level				
NOEC	No Observed Effect Concentration				
OECD	Organisation for Economic Co-operatior	and Developme	ent		
РВТ	Persistent, Bioaccumulative & Toxic				
PNEC	Predicted No Effect Concentration				
STP	STP Sludge Treatment Process				
vPvB very Persistent & very Bioaccumulative					
Specific concentration	limits CLP				
		C≥5%	Eye Irrit 2;H319	analogous to Annex VI	

polymethylene polyphen <mark>yl isocyanate</mark>	C ≥ 5 %	Eye Irrit 2;H319	analogous to Annex VI
	C ≥ 5 %	Skin Irrit 2;H315	analogous to Annex VI
	C ≥ 0.1 %	Resp Sens 1;H334	analogous to Annex VI
	C ≥ 5 %	STOT SE 3;H335	analogous to Annex VI

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