SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

Soudal Superglue Activator

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

1.1 Product identifier:

Product name : Soudal Superglue Activator
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Adhesive: activator

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
☎ +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
☎ +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:

2.1.1 Classification according to Regulation EC No 1272/2008

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.
Skin Irrit.	category 2	H315: Causes skin irritation.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Acute	category 1	H400: Very toxic to aquatic life.
Aquatic Chronic	category 1	H410: Very toxic to aquatic life with long lasting effects.

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC
F+; R12 - Extremely flammable.
Xi; R38 - Irritating to skin.
R67 - Vapours may cause drowsiness and dizziness.
N; R50-53 - Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

2.2 Label elements:

Labelling according to Regulation EC No 1272/2008 (CLP)

Contains: heptane.

Signal word Danger

H-statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.

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.
P280	Wear protective gloves, protective clothing and eye protection/face protection.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/ 122°F.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Labels


Extremely flammable


Irritant


Dangerous for the environment

R-phrases

38	Irritating to skin
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
67	Vapours may cause drowsiness and dizziness

S-phrases

02	Keep out of the reach of children
16	Keep away from sources of ignition - No smoking
23	Do not breathe spray
(46)	(If swallowed, seek medical advice immediately and show this container or label)
51	Use only in well-ventilated areas
61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Additional recommendations

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C.
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.

2.3 Other hazards:

CLP

May be ignited by sparks
Gas/vapour spreads at floor level: ignition hazard
Aerosol may explode under the effect of heat
Slightly irritant to respiratory organs
Slightly irritant to eyes

DSD/DPD

May be ignited by sparks
Gas/vapour spreads at floor level: ignition hazard
Aerosol may explode under the effect of heat
Slightly irritant to respiratory organs
Slightly irritant to eyes

SECTION 3: Composition/information on ingredients

3.1 Substances:

Not applicable

3.2 Mixtures:

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to DSD/DPD	Classification according to CLP	Note	Remark

heptane 01-2119457603-38	142-82-5 205-563-8	C>25 %	F; R11 Xn; R65 Xi; R38 R67 N; R50-53	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)(2)(10)	Constituent
N,N-dimethyl-p-toluidine	99-97-8 202-805-4	C<5 %	T; R23/24/25 R33 R52-53	Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 STOT RE 2; H373 Aquatic Chronic 3; H412	(1)(10)	Constituent
propane 01-2119486944-21	74-98-6 200-827-9	5%<C<20 %	F+; R12	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant
butane 01-2119474691-32	106-97-8 203-448-7	C>25 %	F+; R12	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant

(1) For R-phrases and H-statements in full: see heading 16
(2) Substance with a Community workplace exposure limit
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1 Description of first aid measures:

General:

If you feel unwell, seek medical advice.

After inhalation:

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

After skin contact:

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

Slight irritation. Dry/sore throat. Coughing. EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression. Headache. Dizziness.

After skin contact:

Red skin. Tingling/irritation of the skin.

After eye contact:

Slight irritation. Redness of the eye tissue.

After ingestion:

Headache. Vomiting. Abdominal pain. Diarrhoea.

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:

Water spray. Alcohol-resistant foam. BC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

Solid water jet ineffective as extinguishing medium.

5.2 Special hazards arising from the substance or mixture:

Upon combustion: CO and CO2 are formed.

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. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Face-shield. 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. Face-shield. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2 Environmental precautions:

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

6.3 Methods and material for containment and cleaning up:

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4 Reference to other sections:

See heading 13.

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. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards. 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. Protect against frost. Keep out of direct sunlight. Ventilation at floor level. Fireproof storeroom. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources, ignition sources.

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.

The Netherlands

n-Butaan	Time-weighted average exposure limit 8 h (Private occupational exposure limit value)	592 ppm
	Time-weighted average exposure limit 8 h (Private occupational exposure limit value)	1430 mg/m³
n-Heptaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	288 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1200 mg/m³
	Short time value (Public occupational exposure limit value)	384 ppm
	Short time value (Public occupational exposure limit value)	1600 mg/m³

EU

n-Heptane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	500 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	2085 mg/m³

Belgium

Hydrocarbures aliphatiques sous forme gazeuse : (Alcanes C1-C4)	Time-weighted average exposure limit 8 h	1000 ppm
n-Heptane	Time-weighted average exposure limit 8 h	400 ppm
	Time-weighted average exposure limit 8 h	1664 mg/m³
	Short time value	500 ppm
	Short time value	2085 mg/m³

USA (TLV-ACGIH)

Butane, all isomers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1000 ppm
Heptane, all isomers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	400 ppm
	Short time value (TLV - Adopted Value)	500 ppm

Germany

Butan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m³
Heptan (alle Isomeren)	Time-weighted average exposure limit 8 h (TRGS 900)	500 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	2100 mg/m³
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m³

France

n-Butane	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	800 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m³
n-Heptane	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	400 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1668 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	500 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	2085 mg/m³

UK

Butane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	600 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1450 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	750 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1810 mg/m³
n-Heptane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	500 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	2085 mg/m³

b) National biological limit values

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

8.1.2 Sampling methods

If applicable and available it will be listed below.

N,N-Dimethyl p-Toluidine (Amines, Aromatic)	NIOSH	2002
n-Heptane (Hydrocarbons, BP 26 to 126 C)	NIOSH	1500
n-Heptane (Volatile Organic compounds)	NIOSH	2549
n-Heptane	NIOSH	95-117
n-Heptane	OSHA	7

8.1.3 Applicable limit values when using the substance or mixture as intended

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

8.1.4 DNEL/PNEC values

DNEL - Workers

heptane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2085 mg/m³	
	Long-term systemic effects dermal	300 mg/kg bw/day	

N,N-dimethyl-p-toluidine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1.3523 mg/m³	
	Long-term systemic effects dermal	1.1862 mg/kg bw/day	

DNEL - General population

heptane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	447 mg/m³	
	Long-term systemic effects dermal	149 mg/kg bw/day	
	Long-term systemic effects oral	149 mg/kg bw/day	

N,N-dimethyl-p-toluidine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.3364 mg/m³	
	Long-term systemic effects dermal	0.2925 mg/kg bw/day	
	Long-term systemic effects oral	2.3725 mg/m³	

PNEC

N,N-dimethyl-p-toluidine

Compartments	Value	Remark
Fresh water	0.15259 mg/l	
Marine water	0.015259 mg/l	
Aqua (intermittent releases)	0.15259 mg/l	
STP	4.2863 mg/l	
Fresh water sediment	45.37770249 mg/kg sediment dw	
Marine water sediment	45.37770249 mg/kg sediment dw	
Soil	18.67677186 mg/kg soil dw	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2 Exposure controls:

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.

8.2.1 Appropriate engineering controls

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

Materials	Breakthrough time	Thickness
nitrile rubber	>480 minutes	0.35 mm

- materials (good resistance)

Nitrile rubber.

c) Eye protection:

Protective goggles.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical form	Aerosol
Odour	Characteristic odour
Odour threshold	No data available
Colour	Colourless to light yellow
Particle size	No data available
Explosion limits	1.05 - 6.7 vol %
Flammability	Extremely flammable aerosol.
Log Kow	Not applicable (mixture)
Dynamic viscosity	1 mPa.s ; 20 °C
Kinematic viscosity	1 mm²/s ; 20 °C
Melting point	No data available
Boiling point	-140 - 99 °C
Flash point	Not applicable
Evaporation rate	4.3 ; butyl acetate
Relative vapour density	No data available
Vapour pressure	460 hPa ; 20 °C
Solubility	water ; insoluble
Relative density	0.8
Decomposition temperature	No data available

Auto-ignition temperature	285 °C
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

9.2 Other information:

Absolute density	650 kg/m³

SECTION 10: Stability and reactivity

10.1 Reactivity:

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard. No data available.

10.2 Chemical stability:

Unstable on exposure to heat.

10.3 Possibility of hazardous reactions:

No data available.

10.4 Conditions to avoid:

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

10.5 Incompatible materials:

No data available.

10.6 Hazardous decomposition products:

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

Soudal Superglue Activator

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		>5000 mg/kg bw		Rat	Calculated value	

heptane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	>5000 mg/kg bw		Rat (male/female)	Read-across	
Dermal	LD50	Equivalent to OECD 402	>2000 mg/kg bw	24 h	Rabbit (male/female)	Read-across	
Inhalation (vapours)	LC50	Equivalent to OECD 403	>29.29 mg/l air	4 h	Rat (male/female)	Experimental value	

N,N-dimethyl-p-toluidine

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		980 mg/kg bw		Rat	Weight of evidence	
Oral			category 3			Annex VI	
Dermal	LD50	Equivalent to OECD 402	>2000 mg/kg bw		Rabbit (male/female)	Weight of evidence	
Dermal			category 3			Annex VI	
Inhalation			category 3			Annex VI	

Judgement is based on the relevant ingredients

Conclusion

Not classified for acute toxicity

Corrosion/irritation

Soudal Superglue Activator

No (test)data on the mixture available

heptane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Read-across	Single treatment
Skin	Irritating	Equivalent to OECD 404	24 h	72 hours	Rabbit	Read-across	

N,N-dimethyl-p-toluidine

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating				Rabbit	QSAR	
Skin	Not irritating	OECD 404			Rabbit	QSAR	

Classification is based on the relevant ingredients

Conclusion

Causes skin irritation.

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

Soudal Superglue Activator

No (test)data on the mixture available

heptane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406		24; 48 hours	Guinea pig (male/female)	Read-across	

N,N-dimethyl-p-toluidine

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing				Rabbit (male/female)	QSAR	

Judgement is based on the relevant ingredients

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

Soudal Superglue Activator

No (test)data on the mixture available

heptane

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Inhalation (vapours)	NOAEC	Subchronic toxicity test	12470 mg/m³ air	Central nervous system	No effect	16 weeks (daily)	Rat (male)	Experimental value
Inhalation (vapours)	NOAEC systemic effects	Subchronic toxicity test	12470 mg/m³ air	General	No adverse systemic effects	16 weeks (daily)	Rat (male)	Experimental value
Inhalation			STOT SE cat.3	Central nervous system	Drowsiness, dizziness		Human	Literature study

N,N-dimethyl-p-toluidine

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	LOEL		201.79 mg/kg bw/day				Rat (male/female)	QSAR
Dermal			STOT RE cat.2					Annex VI
Dermal								Data waiving
Inhalation (vapours)	LOEL		67.28 mg/kg bw/day				Rat (male/female)	QSAR

Classification is based on the relevant ingredients

Conclusion

May cause drowsiness or dizziness.

Not classified for subchronic toxicity

Mutagenicity (in vitro)

Soudal Superglue Activator

No (test)data on the mixture available

heptane

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative	Equivalent to OECD 473	Rat liver cells	No effect	Experimental value
Negative	OECD 476	Human lymphocytes	No effect	Read-across

N,N-dimethyl-p-toluidine

Result	Method	Test substrate	Effect	Value determination
Negative		Chinese hamster lung fibroblasts		Weight of evidence

Mutagenicity (in vivo)

Soudal Superglue Activator
No (test)data on the mixture available

Carcinogenicity

Soudal Superglue Activator
No (test)data on the mixture available

heptane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Organ	Effect
Inhalation						Data waiving		
Dermal						Data waiving		
Oral						Data waiving		

Reproductive toxicity

Soudal Superglue Activator
No (test)data on the mixture available

heptane

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	10560 mg/m³ air	10 days (6h/day)	Mouse	No effect	Foetus	Read-across
	NOAEL	Equivalent to OECD 414	31680 mg/m³ air	10 days (6h/day)	Mouse	Minor skeletal variations	Foetus	Read-across
Maternal toxicity	NOAEL	Equivalent to OECD 414	3168 mg/m³ air	10 days (6h/day)	Mouse	No effect		Read-across
	LOAEL	Equivalent to OECD 414	10560 mg/m³ air	10 days (6h/day)	Mouse	Lung tissue affection/degeneration	Lungs	Read-across
Effects on fertility	NOAEL	Equivalent to OECD 416	31680 mg/m³ air		Rat (male/female)	No effect		Read-across

N,N-dimethyl-p-toluidine

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Effects on fertility	LOAEL (F2)		72097 mg/kg bw/day		Rat (male/female)			QSAR

Judgement is based on the relevant ingredients

Conclusion CMR

Not classified for reprotoxic or developmental toxicity
Not classified for mutagenic or genotoxic toxicity
Not classified for carcinogenicity

Chronic effects from short and long-term exposure

Soudal Superglue Activator
No effects known.

SECTION 12: Ecological information

12.1 Toxicity:

Soudal Superglue Activator
No (test)data on the mixture available

heptane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50		5.738 mg/l	96 h	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Acute toxicity invertebrates	LC50	Other	0.2 mg/l	96 h	Chaetogammarus marinus	Semi-static system	Salt water	Experimental value; Locomotor effect
	LC50	Other	0.1 mg/l	96 h	Americamysis bahia	Semi-static system	Salt water	Experimental value
Toxicity algae and other aquatic plants	EL50		4.338 mg/l	72 h	Pseudokirchneriella subcapitata		Fresh water	QSAR; Biomass
Long-term toxicity fish	NOELR		1.284 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Growth rate
Long-term toxicity aquatic invertebrates	NOEC	OECD 211	0.17 mg/l	21 day(s)	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity aquatic micro-organisms	EL50		22.6 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR; Nominal concentration

N,N-dimethyl-p-toluidine

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		46 mg/l	96 h	Pimephales promelas		Fresh water	Experimental value; Lethal
Acute toxicity invertebrates	LC50	ECOSAR	15.26 mg/l	48 h	Daphnia magna			QSAR
Toxicity algae and other aquatic plants	EC50		24.3 mg/l	72 h	Pseudokirchneriella subcapitata	Flow-through system	Fresh water	QSAR
Long-term toxicity fish	LC50	ECOSAR	24.89 mg/l	14 day(s)				QSAR
Toxicity aquatic micro-organisms	EC50		42.86 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR

Classification of the mixture is based on the relevant ingredients and on application of the summation method

Conclusion

Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability:

heptane

Biodegradation water

Method	Value	Duration	Value determination
Other	70 %; Oxygen consumption	10 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
SRC AOP v1.92	18.68 h	1.5E6 /cm³	Calculated value

N,N-dimethyl-p-toluidine

Biodegradation water

Method	Value	Duration	Value determination
EPA OPPTS 835.3210	50 %	38 day(s)	Calculated value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
EPA N 161-2	0.079 day(s)	0 /cm³	

Conclusion

Contains non readily biodegradable component(s)

12.3 Bioaccumulative potential:

Soudal Superglue Activator

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

heptane

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.00	552			Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
		4.66		Experimental value
		4.5		Literature study

N,N-dimethyl-p-toluidine

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	EPA OTS 797.1520	33		Pisces	Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 107		1.729	35 °C	Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4 Mobility in soil:

heptane

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	2.38	Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	79 %	0 %	10 %	3.8 %	7.8 %	Calculated value

N,N-dimethyl-p-toluidine

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	2.1	Calculated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
9.58 atm m^3/mol	SRC HENRYWIN v3.20	25 °C		QSAR

Conclusion

No straightforward conclusion can be drawn based upon the available numerical values

12.5 Results of PBT and vPvB assessment:

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6 Other adverse effects:

Soudal Superglue Activator

Global warming potential (GWP)

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

Ozone-depleting potential (ODP)

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

heptane

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

N,N-dimethyl-p-toluidine

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

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

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).
08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

13.1.2 Disposal methods

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

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 name:

Proper shipping name	Aerosols

14.3 Transport hazard class(es):

Hazard identification number	
Class	2
Classification code	5F

14.4 Packing group:

Packing group	
Labels	2.1

14.5 Environmental hazards:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

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)

Rail (RID)

14.1 UN number:

UN number	1950

14.2 UN proper shipping name:

Proper shipping name	Aerosols

14.3 Transport hazard class(es):

Hazard identification number	23
Class	2
Classification code	5F

14.4 Packing group:

Packing group	
Labels	2.1

14.5 Environmental hazards:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

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 (ADN)

14.1 UN number:

UN number	1950

14.2 UN proper shipping name:

Proper shipping name	Aerosols

14.3 Transport hazard class(es):

Class	2
Classification code	5F

14.4 Packing group:

Packing group	
Labels	2.1

14.5 Environmental hazards:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

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)

Sea (IMDG/IMSBC)

14.1 UN number:

UN number	1950

14.2 UN proper shipping name:

Proper shipping name	Aerosols

14.3 Transport hazard class(es):

Class	2.1

14.4 Packing group:

Packing group	
Labels	2.1

14.5 Environmental hazards:

Marine pollutant	P
Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

Special provisions	63
Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
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)

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

Annex II of MARPOL 73/78	Not applicable

Air (ICAO-TI/IATA-DGR)

14.1 UN number:

UN number	1950

14.2 UN proper shipping name:

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:

Environmentally hazardous substance mark	yes

14.6 Special precautions for user:

Special provisions	A145
Special provisions	A167
Special provisions	A802
Passenger and cargo transport: 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	Remark
100 %	

VOC content Directive 2004/42/EC

609.8 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.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· heptane · N,N-dimethyl-p-toluidine	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects,2. Articles not complying with paragraph 1 shall not be placed on the market.3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304,4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to

	effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall 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 visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of 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 are 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 Agency 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 data available to the Commission.'
· heptane	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — "whoopee" cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs.2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: "For professional users only".3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

National legislation The Netherlands

Soudal Superglue Activator

Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 06
Waterbezwaarlijkheid	6

National legislation Germany

Soudal Superglue Activator

WGK	2; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

heptane

Schwangerschaft Gruppe	D
MAK 8-Stunden-Mittelwert ppm	n-Heptan; 500 ppm
MAK 8-Stunden-Mittelwert mg/m³	n-Heptan; 2100 mg/m³
TA-Luft	5.2.5; I

N,N-dimethyl-p-toluidine

TA-Luft	5.2.5; I

National legislation France

Soudal Superglue Activator

No data available

National legislation Belgium

Soudal Superglue Activator

No data available

Other relevant data

Soudal Superglue Activator

No data available

15.2 Chemical safety assessment:

No chemical safety assessment is required.

SECTION 16: Other information

Full text of any R-phrases referred to under headings 2 and 3:

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed
R33 Danger of cumulative effects
R38 Irritating to skin
R50 Very toxic to aquatic organisms
R52 Harmful to aquatic organisms
R53 May cause long-term adverse effects in the aquatic environment
R65 Harmful: may cause lung damage if swallowed
R67 Vapours may cause drowsiness and dizziness

Full text of any H-statements referred to under headings 2 and 3:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.
H301 Toxic if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
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.
H412 Harmful to aquatic life with long lasting effects.

(*) = INTERNAL CLASSIFICATION BY BIG
PBT-substances = persistent, bioaccumulative and toxic substances
DSD Dangerous Substance Directive
DPD Dangerous Preparation Directive
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

Specific concentration limits DSD

N,N-dimethyl-p-toluidine	C ≥ 5 %	T; R23/24/25	DSD Annex VI (ATP 0)
	1 % ≤ C < 5 %	Xn; R20/21/22	DSD Annex VI (ATP 0)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.