SAFETY DATA SHEET

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

Contact Spray Adhesive

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

1.1. Product identifier

Product name : Contact Spray Adhesive
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

Detergent according to Regulation (EC) No 648/2004

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

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.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements

Contains: isopentane.

Signal word Danger

H-statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H336 May cause drowsiness or dizziness.
H411 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.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405	Store locked up.
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 information

EUH066	Repeated exposure may cause skin dryness or cracking.

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	Conc. (C)	Classification according to CLP	Note	Remark
acetone 01-2119471330-49	67-64-1 200-662-2	1%<C<10%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
cyclohexane 01-2119463273-41	110-82-7 203-806-2	1%<C<10%	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
isopentane 01-2119475602-38	78-78-4 201-142-8	C>25%	Flam. Liq. 1; H224 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(2)(10)	Constituent
dimethyl ether 01-2119472128-37	115-10-6 204-065-8	C>1%	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant
pentane 01-2119459286-30	109-66-0 203-692-4	0.1%<C<3%	Flam. Liq. 2; H225 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(2)(10)	Constituent

(1) For 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:

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

After skin contact:

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

After eye contact:

Rinse with 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. 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:

Headache. Coughing. Dry/sore throat. Respiratory difficulties. Narcosis. Central nervous system depression.

After skin contact:

Red skin. ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

After eye contact:

Redness of the eye tissue.

After ingestion:

Headache. Abdominal pain. Diarrhoea. Vomiting. Disturbances of consciousness.

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

Upon combustion: formation of CO, CO2 and small quantities of phosphorus oxides. Pressurised container: May burst if heated.

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. Protective goggles. 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. 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. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Avoid prolonged and repeated contact with skin.

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 container in a well-ventilated place. Fireproof storeroom. Protect against frost. Keep out of direct sunlight. 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.

EU

Acetone	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)	1210 mg/m³
Cyclohexane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	700 mg/m³
Dimethylether	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1000 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1920 mg/m³
Isopentane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1000 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	3000 mg/m³
Pentane	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1000 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	3000 mg/m³

Belgium

Acétone	Time-weighted average exposure limit 8 h	500 ppm
	Time-weighted average exposure limit 8 h	1210 mg/m³
	Short time value	1000 ppm
	Short time value	2420 mg/m³
Cyclohexane	Time-weighted average exposure limit 8 h	100 ppm
	Time-weighted average exposure limit 8 h	350 mg/m³
Oxyde de diméthyle	Time-weighted average exposure limit 8 h	1000 ppm
	Time-weighted average exposure limit 8 h	1920 mg/m³
Pentane, tous isomères	Time-weighted average exposure limit 8 h	600 ppm
	Time-weighted average exposure limit 8 h	1800 mg/m³
	Short time value	750 ppm
	Short time value	2250 mg/m³

The Netherlands

Aceton	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	501 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1210 mg/m³
	Short time value (Public occupational exposure limit value)	1002 ppm
	Short time value (Public occupational exposure limit value)	2420 mg/m³
Cyclohexaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	700 mg/m³
	Short time value (Public occupational exposure limit value)	400 ppm
	Short time value (Public occupational exposure limit value)	1400 mg/m³
Dimethylether	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	496 ppm

Dimethylether	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	950 mg/m³
	Short time value (Public occupational exposure limit value)	783 ppm
	Short time value (Public occupational exposure limit value)	1500 mg/m³
isopentaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	600 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1800 mg/m³
n-Pentaan	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	600 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1800 mg/m³

France

Acétone	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	500 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1210 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	1000 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	2420 mg/m³
Cyclohexane	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	200 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	700 mg/m³
	Short time value (VL: Valeur non réglementaire indicative)	375 ppm
	Short time value (VL: Valeur non réglementaire indicative)	1300 mg/m³
Isopentane	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1000 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	3000 mg/m³
n-Pentane	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1000 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	3000 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

Aceton	Time-weighted average exposure limit 8 h (TRGS 900)	500 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1200 mg/m³
Cyclohexan	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	700 mg/m³
Dimethylether	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1900 mg/m³
Methylbutan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	3000 mg/m³
Pentan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	3000 mg/m³

UK

Acetone	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))	1210 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	1500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	3620 mg/m³
Cyclohexane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	100 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	350 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	300 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1050 mg/m³
Dimethyl ether	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	400 ppm

Dimethyl ether	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	766 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	958 mg/m³
Isopentane	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))	1800 mg/m³
Pentane	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))	1800 mg/m³

USA (TLV-ACGIH)

Acetone	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	250 ppm
	Short time value (TLV - Adopted Value)	500 ppm
Cyclohexane	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	100 ppm
Pentane, all isomers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1000 ppm

b) National biological limit values

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

Germany

Aceton (Aceton)	Urin: expositionsende, bzw. schichtende	80 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Cyclohexan (1,2-Cyclohexandiol (nach Hydrolyse))	Urin: bei langzeitexposition: am schichtende nach mehreren vorangegangenen schichten expositionsende, bzw. schichtende	150 mg/g Kreatinin	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG

USA (BEI-ACGIH)

Acetone (Acetone)	Urine: end of shift	25 mg/L	

8.1.2 Sampling methods

Product name	Test	Number
Acetone (ketones 1)	NIOSH	1300
Acetone (ketones I)	NIOSH	2555
Acetone (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Acetone (Volatile Organic compounds)	NIOSH	2549
ACETONE and METHYL ETHYL KETONE in urine	NIOSH	8319
Acetone	OSHA	69
Cyclohexane (Hydrocarbons, BP36 to 126C)	NIOSH	1500
Cyclohexane	OSHA	7
N-PENTANE (HYDROCARBONS, BP 36 TO 126 °C)	NIOSH	1500
n-Pentane (Volatile Organic compounds)	NIOSH	2549
Pentane	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/DMEL - Workers

acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1210 mg/m³	
	Acute local effects inhalation	2420 mg/m³	
	Long-term systemic effects dermal	186 mg/kg bw/day	

cyclohexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	700 mg/m³	
	Acute systemic effects inhalation	700 mg/m³	
	Long-term local effects inhalation	700 mg/m³	
	Acute local effects inhalation	700 mg/m³	
	Long-term systemic effects dermal	2016 mg/kg bw/day	

isopentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3000 mg/m³	
	Long-term systemic effects dermal	432 mg/kg bw/day	

pentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3000 mg/m³	
	Long-term systemic effects dermal	432 mg/kg bw/day	

DNEL/DMEL - General population

acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	200 mg/m³	
	Long-term systemic effects dermal	62 mg/kg bw/day	
	Long-term systemic effects oral	62 mg/kg bw/day	

cyclohexane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	206 mg/m³	
	Acute systemic effects inhalation	412 mg/m³	
	Long-term local effects inhalation	206 mg/m³	
	Acute local effects inhalation	412 mg/m³	
	Long-term systemic effects dermal	1186 mg/kg bw/day	
	Long-term systemic effects oral	59.4 mg/kg bw/day	

isopentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	643 mg/m³	
	Long-term systemic effects dermal	214 mg/kg bw/day	
	Long-term systemic effects oral	214 mg/kg bw/day	

pentane

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	643 mg/m³	
	Long-term systemic effects dermal	214 mg/kg bw/day	
	Long-term systemic effects oral	214 mg/kg bw/day	

PNEC

acetone

Compartments	Value	Remark
Fresh water	10.6 mg/l	
Aqua (intermittent releases)	21 mg/l	
Marine water	1.06 mg/l	
STP	100 mg/l	
Fresh water sediment	30.4 mg/kg sediment dw	
Marine water sediment	3.04 mg/kg sediment dw	
Soil	29.5 mg/kg soil dw	

cyclohexane

Compartments	Value	Remark
Fresh water	0.207 mg/l	
Marine water	0.207 mg/l	
Aqua (intermittent releases)	0.207 mg/l	
STP	3.24 mg/l	
Fresh water sediment	3.627 mg/kg sediment dw	
Marine water sediment	3.627 mg/kg sediment dw	
Soil	2.99 mg/kg soil dw	

pentane

Compartments	Value	Remark
Fresh water	230 µg/l	
Marine water	230 µg/l	
Aqua (intermittent releases)	880 µg/l	
STP	3600 µg/l	
Fresh water sediment	1.2 mg/kg sediment dw	
Marine water sediment	1.2 mg/kg sediment dw	
Soil	0.55 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. Take precautions against electrostatic charges. 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

Avoid prolonged and repeated contact with skin. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type AX at conc. in air > exposure limit.

b) Hand protection:

Gloves.

c) Eye protection:

Protective goggles.

d) Skin protection:

Protective clothing. Head/neck protection.

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	No data available on colour
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	No data available
Vapour pressure	No data available
Solubility	Water ; insoluble
Relative density	No data available
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Flash point	No data available
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	No data available

SECTION 10: Stability and reactivity

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

No data available.

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

No data available.

10.6. Hazardous decomposition products

Upon combustion: formation of CO, CO2 and small quantities of phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

Contact Spray Adhesive

No (test)data on the mixture available

Judgement is based on the relevant ingredients

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5800 mg/kg		Rat (female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	20000 mg/kg		Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50	Other	76 mg/l	4 h	Rat (female)	Experimental value	
Inhalation (vapours)	LCL0	Other	16000 ppm	4 h	Rat	Experimental value	

cyclohexane

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)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 2000 mg/kg bw		Rabbit (male/female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 32.88 mg/l air	4 h	Rat (male/female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 19.07 mg/l	4 h	Rat (male/female)	Experimental value	

isopentane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 423	> 5000 mg/kg		Rat (male/female)	Read-across	
Dermal						Data waiving	
Inhalation (vapours)	LC50	OECD 403	> 25.3 mg/l	4 h	Rat (male/female)	Read-across	

pentane

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 2000 mg/kg		Rat (male/female)	Experimental value	
Dermal						Data waiving	
Inhalation (vapours)	LC50		> 20 mg/l air	4 h	Rat (male/female)	Experimental value	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

Contact Spray Adhesive

No (test)data on the mixture available

Judgement is based on the relevant ingredients

acetone

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405		24; 48; 72 hours	Rabbit	Weight of evidence	
Skin	Not irritating	Other	3 day(s)	24; 48; 72 hours	Guinea pig	Weight of evidence	
Inhalation	Slightly irritating	Human observation study	20 minutes		Human	Literature	

cyclohexane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating	Equivalent to OECD 405		1 hour	Rabbit	Experimental value	
Skin	Not irritating	Equivalent to EU Method B.4	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Skin	Irritating; category 2					Annex VI	
Inhalation	Irritating					Literature study	

isopentane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		1; 24; 48; 72 hours	Rabbit	Read-across	
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 72 hours	Rabbit	Read-across	

pentane

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	Single exposure
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	Human observation	24 h		Human	Experimental value	

Conclusion

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

Contact Spray Adhesive

No (test)data on the mixture available

Judgement is based on the relevant ingredients

acetone

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Human observation			Human	Literature	

cyclohexane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	EU Method B.6		24; 48 hours	Guinea pig (male/female)	Experimental value	

isopentane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Intradermal	Not sensitizing	Equivalent to OECD 406		24; 48 hours	Guinea pig (female)	Experimental value	

pentane

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406		24 hours	Guinea pig (female)	Experimental value	

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

Contact Spray Adhesive

No (test)data on the mixture available

Classification is based on the relevant ingredients

acetone

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	Equivalent to OECD 408	20 mg/l		No effect	13 week(s)	Mouse (male/female)	Experimental value
Dermal								Not relevant, expert judgement
Inhalation (vapours)	NOAEC	Other	19000 ppm		No effect	8 week(s)	Rat (male)	Literature
Inhalation (vapours)	Dose level	Human observation study	361 ppm	Central nervous system	neurotoxic effects	2 day(s)	Human	Inconclusive, insufficient data

cyclohexane

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (vapours)	NOAEC	EPA OPPTS 870.3465	7000 ppm		No adverse systemic effects	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation (vapours)	NOAEC	EPA OPPTS 870.3465	500 mg/m³ air	Central nervous system	No effect	6 h	Rat (male/female)	Experimental value

isopentane

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	Dose level	Subacute toxicity test	500 mg/kg bw/day	Kidney	No effect	4 weeks (5 days/week)	Rat (male)	Experimental value
Dermal								Data waiving
Inhalation (vapours)	NOEC	OECD 413	> 2220 ppm	General	No effect	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation (vapours)	NOEC	OECD 413	≥ 6646 ppm	Central nervous system	No effect	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value

pentane

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (gases)	NOAEC	OECD 413	20000 mg/m³		No effect	13 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value

Conclusion

May cause drowsiness or dizziness.

Not classified for subchronic toxicity

Mutagenicity (in vitro)

Contact Spray Adhesive

No (test)data on the mixture available

acetone

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value

cyclohexane

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value

isopentane

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Read-across

pentane

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value

Mutagenicity (in vivo)

Contact Spray Adhesive

No (test)data on the mixture available

Judgement is based on the relevant ingredients

acetone

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative		13 week(s)	Mouse (male/female)		Literature

cyclohexane

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 475	5 days (6h/day)	Rat (male/female)	Bone marrow	Experimental value

isopentane

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	EU Method B.12		Rat (male/female)	Bone marrow	Read-across

pentane

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	EU Method B.12	13 weeks (6h/day, 5 days/week)	Rat (male/female)		Experimental value

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

Contact Spray Adhesive

No (test)data on the mixture available

Judgement is based on the relevant ingredients

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Dermal	NOEL	Other	79 mg	51 week(s)	Mouse (female)	No effect		Literature

isopentane

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

pentane

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

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

Contact Spray Adhesive

No (test)data on the mixture available

Judgement is based on the relevant ingredients

acetone

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	11000 ppm	6 days (gestation, daily) - 19 days (gestation, daily)	Rat (male/female)			Experimental value
Effects on fertility	NOAEL	Other	900 mg/kg bw/day	13 week(s)	Rat (male)	No effect		Literature

cyclohexane

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	7000 ppm	10 days (6h/day)	Rat	No effect		Experimental value
Maternal toxicity	NOAEC	Equivalent to OECD 414	2000 ppm	10 days (6h/day)	Rat (female)	No effect		Experimental value
Effects on fertility	NOAEC	Equivalent to OECD 416	7000 ppm	> 11 weeks (6h/day, 5 days/week)	Rat (male/female)	No effect		Experimental value

isopentane

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	7000 ppm	2 weeks (6h/day, 5 days/week)	Rat	No effect	Foetus	Read-across
Maternal toxicity	NOAEC	OECD 414	500 ppm - 2000 ppm	2 weeks (6h/day, 5 days/week)	Rat	No effect		Read-across
Effects on fertility	NOAEC	Equivalent to OECD 416	7000 ppm		Rat (male/female)	No effect		Read-across

pentane

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL (P)	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat (female)	No effect		Experimental value
Maternal toxicity	NOAEL	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat (female)	No effect		Experimental value
Effects on fertility	NOAEC (P/F1)	Equivalent to OECD 416	7000 ppm		Rat (male/female)	Reproductive performance		Read-across

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

Contact Spray Adhesive

No (test)data on the mixture available

Classification is based on the relevant ingredients

acetone

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study

cyclohexane

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
NOAEC	Other	2000 ppm		neurotoxic effects	6 h	Rat (male)	Experimental value
LOAEC	Other	7000 ppm		neurotoxic effects	6 h	Rat (male)	Experimental value

pentane

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study

Conclusion

Repeated exposure may cause skin dryness or cracking.

Chronic effects from short and long-term exposure

Contact Spray Adhesive
No effects known.

SECTION 12: Ecological information

12.1. Toxicity

Contact Spray Adhesive
No (test)data on the mixture available
Classification is based on the relevant ingredients

acetone

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EU Method C.1	5540 mg/l	96 h	Salmo gairdneri	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	LC50	Other	12600 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EC50		> 7000 mg/l	96 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	2212 mg/l	28 day(s)	Daphnia magna	Flow-through system	Fresh water	Experimental value

cyclohexane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	4.53 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Measured concentration
Acute toxicity crustacea	EC50	Equivalent to OECD 202	0.9 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	Equivalent to OECD 201	9.317 mg/l	72 h	Pseudokirchneriella subcapitata			Experimental value; GLP
	NOEC	OECD 201	0.94 mg/l	72 h	Pseudokirchneriella subcapitata			Experimental value; Growth rate
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving
Toxicity aquatic micro-organisms	IC50		29 mg/l	15 h	Aerobic micro-organisms			Experimental value; Nominal concentration

isopentane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	4.26 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Read-across; GLP
Acute toxicity crustacea	EC50	Equivalent to OECD 202	2.3 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	ErC50	OECD 201	10.7 mg/l	72 h	Selenastrum capricornutum	Static system	Fresh water	Read-across; GLP
Long-term toxicity fish	NOELR		7.618 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR
Long-term toxicity aquatic crustacea	NOELR		13.29 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR; Nominal concentration
Toxicity aquatic micro-organisms	EL50		130.9 mg/l	48 h	Tetrahymena pyriformis		Fresh water	Growth inhibition

pentane

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	4.26 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	Other	2.7 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	ErC50	OECD 201	10.7 mg/l	72 h	Scenedesmus sp.	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOELR		6.165 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Growth rate
Long-term toxicity aquatic crustacea	NOELR		10.76 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR; Reproduction

Conclusion

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

acetone

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	90.9 %	28 day(s)	Experimental value

cyclohexane

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	77 %; GLP	28 day(s)	Experimental value

Half-life soil (t1/2 soil)

Method	Value	Primary degradation/mineralisation	Value determination
	28 day(s) - 180 day(s)		Literature study

isopentane

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	71.43 %; Oxygen consumption	28 day(s)	Experimental value

Half-life air (t1/2 air)

Method	Value	Primary degradation/mineralisation	Value determination
	2.3 day(s)	Primary degradation	Literature study

pentane

Biodegradation water

Method	Value	Duration	Value determination
Equivalent or similar to OECD 301F	87 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	3.95 day(s)	500000 /cm³	Calculated value

Conclusion

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

Contact Spray Adhesive

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

acetone

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		0.69		Pisces	

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFWIN	3			Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
		-0.24		Test data

cyclohexane

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		167		Pimephales promelas	QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
Other		3.44	25 °C	Experimental value

isopentane

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		171		Pimephales promelas	Read-across

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		4	25 °C	Experimental value

pentane

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		171		Pimephales promelas	QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
Other		3.45	25 °C	Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

cyclohexane

(log) Koc

Parameter	Method	Value	Value determination
log Koc	Other	2.89	QSAR

isopentane

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.9	Read-across

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	95.9 %	0 %	0.9 %	0.1 %	3 %	Calculated value

pentane

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.9	QSAR

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	97.7 %	0 %	0.5 %	0 %	1.8 %	Calculated value

Conclusion

Contains component(s) that adsorb(s) into the soil

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

Contact Spray Adhesive

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)

cyclohexane

Groundwater

Groundwater pollutant

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).
16 05 04* (gases in pressure containers and discarded chemicals: gases in pressure containers (including halons) containing hazardous substances).
20 01 29* (separately collected fractions (except 15 01): detergents containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

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. Specific treatment. 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 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	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)

14.7. Transport in bulk according to Annex II of Marpol 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
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
92.55365 % - 95.99369 %	

Ingredients according to Regulation (EC) No 648/2004 and amendments

15-30% aliphatic hydrocarbons, 5-15% aromatic hydrocarbons

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
· acetone · cyclohexane · isopentane · pentane	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 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.	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 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.’
· acetone · cyclohexane · isopentane · pentane	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.
· cyclohexane	Cyclohexane	1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of neoprene-based contact adhesives in concentrations equal to or greater than 0,1 % by weight in package sizes greater than 350 g. 2. Neoprene-based contact adhesives containing cyclohexane and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010. 3. Without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that neoprene-based contact adhesives containing cyclohexane in concentrations equal to or greater than 0,1 % by weight that are placed on the market for supply to the general public after 27 December 2010 are visibly, legibly and indelibly marked as follows: "— This product is not to be used under conditions of poor ventilation. — This product is not to be used for carpet laying.".

National legislation Belgium

Contact Spray Adhesive
No data available

National legislation The Netherlands

Contact Spray Adhesive

Waterbezwaarlijkheid	Z (2)

National legislation France

Contact Spray Adhesive
No data available

National legislation Germany

Contact Spray Adhesive

WGK	2; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4) and Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) of 18 April 2017

acetone

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Aceton; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

cyclohexane

TA-Luft	5.2.5; I

isopentane

TA-Luft	5.2.5; I

pentane

TA-Luft	5.2.5; I
TRGS900 - Risiko der Fruchtschädigung	Pentan; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

National legislation United Kingdom

Contact Spray Adhesive
No data available

Other relevant data

Contact Spray Adhesive
No data available

acetone

TLV - Carcinogen	Acetone; A4

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H224 Extremely flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised 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 rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

M-factor

cyclohexane	1	Acute	ECHA

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 has been elaborated for use within the European Union, Switzerland, Iceland, Norway and Lichtenstein. It may be consulted in other countries, where local legislation with regards to the set-up of safety data sheets will take precedence. It is your obligation to verify and apply such local legislation. 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.