SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

TWINBOND CLEAN AEROSOL

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

1.1. Product identifier

Product name : TWINBOND CLEAN AEROSOL
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

Twinbond*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
🖷 +32 14 22 02 66
info@novatech.be
* Twinbond is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
🖷 +32 14 85 97 38
info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

24h/24h :
Nederland - Nationaal Vergiftigingen Informatie Centrum (NVIC): +31 88 755 8000
(Uitsluitend bestemd om artsen te informeren bij accidentele vergiftigingen)
(Only for the purpose of informing medical personnel in cases of acute intoxications)

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.
Asp. Tox.	category 1	H304: May be fatal if swallowed and enters airways.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.2. Label elements

Contains: hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics.

Signal word Danger
H-statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

P-statements

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.
P260	Do not breathe spray.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

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 List No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics 01-2119471843-32	927-241-2	75% <C<100%	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 3; H412 EUH066	(1)(10)	UVCB	
butane 01-2119474691-32	106-97-8 203-448-7	10% <C<25%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant	
propane 01-2119486944-21	74-98-6 200-827-9	2.5% <C<10%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant	
isobutane 01-2119485395-27	75-28-5 200-857-2	1%<C<2.5%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant	

(1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006
(21) 1,3-butadiene <0.1%

Note: numbers 9xx-xxx-x are provisional list numbers assigned by Echa pending an official EC inventory number

SECTION 4: First aid measures

4.1. Description of first aid measures

General:
Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:
Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:
If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:
Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:
Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:
Dizziness. Drowsiness.

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

After eye contact:
No effects known.

After ingestion:
No effects known.

4.2.2 Delayed symptoms
No effects known.

4.3. Indication of any immediate medical attention and special treatment needed
If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media
5.1.1 Suitable extinguishing media:
Small fire: Water, Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

Major fire: Quantities of water.

5.2. Special hazards arising from the substance or mixture
Upon combustion: CO and CO2 are formed. 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.

5.3.2 Special protective equipment for fire-fighters:
Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

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. Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

6.1.1 Protective equipment for non-emergency personnel
See section 8.2

6.1.2 Protective equipment for emergency responders
Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing
See section 8.2

6.2. Environmental precautions
Contain released product. Dam up the liquid spill.

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 section 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. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities
7.2.1 Safe storage requirements:
Storage temperature: < 50 °C. Meet the legal requirements. Keep container in a well-ventilated place. Fireproof storeroom. Keep out of direct sunlight.

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.

Belgium

Butane, tous isomères: iso-butane	Short time value	980 ppm
	Short time value	2370 mg/m³
Butane, tous isomères: n-butane	Short time value	980 ppm
	Short time value	2370 mg/m³
Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3)	Time-weighted average exposure limit 8 h	1000 ppm

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

Germany

Butan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm **(1)**
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m³ **(1)**
Isobutan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm **(1)**
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m³ **(1)**
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm **(1)**
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m³ **(1)**

(1) UF: 4 (II)

Austria

Butan (beide Isomeren): n-Butan (R 600) Isobutan (R 600a)	Tagesmittelwert (MAK)	800 ppm
	Tagesmittelwert (MAK)	
	Tagesmittelwert (MAK)	1900 mg/m³
	Tagesmittelwert (MAK)	
	Kurzzeitwert 60(Mow) 3x (MAK)	1600 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	
	Kurzzeitwert 60(Mow) 3x (MAK)	3800 mg/m³
	Kurzzeitwert 60(Mow) 3x (MAK)	
Propan (R 290)	Tagesmittelwert (MAK)	1000 ppm
	Tagesmittelwert (MAK)	1800 mg/m³
	Kurzzeitwert 60(Mow) 3x (MAK)	2000 ppm
	Kurzzeitwert 60(Mow) 3x (MAK)	3600 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

USA (TLV-ACGIH)

Butane, isomers	Short time value (TLV - Adopted Value)	1000 ppm
	Short time value (TLV - Adopted Value)	
	Explosion hazard	
Propane	*See Appendix F: Minimal Oxygen Content; Simple asphyxiant, Explosion hazard*	

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.

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 Threshold values

DNEL/DMEL - Workers

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	871 mg/m³	
	Long-term systemic effects dermal	77 mg/kg bw/day	

DNEL/DMEL - General population

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	185 mg/m³	
	Long-term systemic effects dermal	46 mg/kg bw/day	
	Long-term systemic effects oral	46 mg/kg bw/day	

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

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

a) Respiratory protection:

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

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.5 mm	Class 6	

c) Eye protection:

Protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034). Head/neck protection.

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Aerosol
Colour	Colourless
Odour	Characteristic odour
Odour threshold	No data available in the literature
Melting point	No data available in the literature
Boiling point	Not applicable (aerosol)
Flammability	Extremely flammable aerosol.
Explosion limits	0.6 - 10.9 vol % ; Propellant
Flash point	Not applicable (aerosol)
Auto-ignition temperature	Not applicable (aerosol)
Decomposition temperature	No data available in the literature
pH	Not applicable (aerosol)
Kinematic viscosity	≤ 20.5 mm²/s ; 40 °C ; Liquid
Dynamic viscosity	Not applicable (aerosol)
Solubility	Water ; insoluble
Log Kow	Not applicable (mixture)
Vapour pressure	2800 hPa ; 20 °C
Absolute density	718 kg/m³ ; 20 °C
Relative density	0.72 ; 20 °C
Relative vapour density	No data available in the literature
Particle size	Not applicable (mixture)

9.2. Other information

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: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Test results

Acute toxicity

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients
hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 15000 mg/kg bw		Rat (male / female)	Read-across	
Dermal	LD50	Equivalent to OECD 402	> 3160 mg/kg bw	24 h	Rabbit (male / female)	Read-across	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 6.1 mg/l air	4 h	Rat (male / female)	Experimental value	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients
hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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 without rinsing
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	

Conclusion

Not classified as irritating to the respiratory system
Not classified as irritating to the skin
Not classified as irritating to the eyes

Respiratory or skin sensitisation

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients
hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

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

Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

Specific target organ toxicity

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	EPA OPP 82-1	≥ 500 mg/kg bw/day	No adverse systemic effects	13 weeks (7 days / week)	Rat (male / female)	Read-across	
Dermal							Data waiving	
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	6000 mg/m³ air	No adverse systemic effects	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation			STOT SE cat.3	Drowsiness, dizziness			Literature study	

Conclusion

May cause drowsiness or dizziness.

Not classified for subchronic toxicity

Mutagenicity (in vitro)

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Read-across	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)		Read-across	

Mutagenicity (in vivo)

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (stomach tube))	Equivalent to OECD 474		Mouse (male / female)	No effect	Read-across	Single treatment

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Dermal	NOAEL	Carcinogenic toxicity study	50 %	No carcinogenic effect	52 week(s)	Mouse (male)	Experimental value	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m³ air	10 days (6h / day)	Rat	No effect	Experimental value	
Maternal toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	≥ 5220 mg/m³ air	10 days (6h / day)	Rat	No effect	Experimental value	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

TWINBOND CLEAN AEROSOL

Classification is based on the relevant ingredients

May be fatal if swallowed and enters airways.

Toxicity other effects

TWINBOND CLEAN AEROSOL

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
				(skin dryness or cracking)			Literature study	

Conclusion

Repeated exposure may cause skin dryness or cracking.

Chronic effects from short and long-term exposure

TWINBOND CLEAN AEROSOL

Risk of aspiration pneumonia.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

TWINBOND CLEAN AEROSOL

No (test)data on the mixture available

Classification is based on the relevant ingredients

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	10 mg/l - 30 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	22 mg/l - 46 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	NOELR	OECD 201	< 1 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOELR		0.18 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR; Nominal concentration
Long-term toxicity aquatic crustacea	NOELR		0.32 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR; Reproduction

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	89 %; GLP	28 day(s)	Experimental value

Conclusion

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

TWINBOND CLEAN AEROSOL

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.00	6.9 l/kg - 1582 l/kg		Pisces	QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
		2 - 5.3		QSAR

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

(log) Koc

Parameter	Method	Value	Value determination
log Koc		4.2 - 5.9	QSAR

Conclusion

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

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. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

TWINBOND CLEAN AEROSOL

Greenhouse gases

Contains component(s) included in the list of substances which may contribute to the greenhouse effect (IPCC)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

Groundwater

Groundwater pollutant

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

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).
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. Specific treatment. 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. Should not be landfilled with household waste. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

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 or ID 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	no

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 or ID 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	no

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 or ID number

UN number/ID 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	no

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 or ID 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	-
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	63
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. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable

Air (ICAO-TI/IATA-DGR)

14.1. UN number or ID number

UN number/ID 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	no

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 %	
718 g/l	

Directive 2012/18/EU (Seveso III)

Threshold values under normal circumstances

Substance or category	Low tier (tonnes)	Top tier (tonnes)	Group	For this substance or mixture the summation rule has to be applied for:
P3b FLAMMABLE AEROSOLS	5000 (net)	50000 (net)	None	Flammability

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

≥30% aliphatic 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
· hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Liquid substances or mixtures 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 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 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 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 H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
· hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	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 Belgium

TWINBOND CLEAN AEROSOL

No data available

National legislation The Netherlands

TWINBOND CLEAN AEROSOL

Waterbezwaarlijkheid	B (3); Algemene Beoordelingsmethodiek (ABM)

National legislation France

TWINBOND CLEAN AEROSOL

No data available

National legislation Germany

TWINBOND CLEAN AEROSOL

Lagerklasse (TRGS510)	2B: Aerosolpackungen und Feuerzeuge
WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

hydrocarbons, C9-10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

TA-Luft	5.2.5/I

National legislation Austria

TWINBOND CLEAN AEROSOL

No data available

National legislation United Kingdom

TWINBOND CLEAN AEROSOL

No data available

Other relevant data

TWINBOND CLEAN AEROSOL

No data available

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H226 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.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
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

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. 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.