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

1.1. Product identifier

TUNPAS AL 400ml D-GB-F-I-E-PL Alu-Paste

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

Use of the substance/mixture

Lubricant

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	TUNAP GmbH & Co. KG	
Street:	Bürgermeister-Seidl-Str. 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+ 49 (0) 8171/1600 - 0	Telefax: + 49 (0) 8171/1600 - 40
e-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

Supplier

Company name:	TUNAP UK Limited
Street:	Unit L4 Deacon Trading Estate, Morley Road
Place:	GB Tonbridge, Kent. TN9 1RA
Telephone:	+44 (0)1732 365163
e-mail:	sdb@tunap.com
Internet:	www.tunap.co.uk

1.4. Emergency telephone number:

111 NHS (National Health Service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Aerosol: Aerosol 1
Skin corrosion/irritation: Skin Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes skin irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane
Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics

Signal word: Danger

Pictograms:

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary 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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.

2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
75-28-5	isobutane			25 - < 50 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1, Liquefied gas; H220 H280			
92128-66-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane			10 - < 20 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
64742-49-0	Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics			5 - < 10 %
	920-750-0		01-2119473851-33	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411 EUH066			
74-98-6	propane			5 - < 10 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Liquefied gas; H220 H280			
1174921-73-3	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			3 - < 5 %
	927-241-2		01-2119471843-32	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 3; H226 H336 H304 H412 EUH066			
106-97-8	butane			1 - < 3 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Liquefied gas; H220 H280			
1471316-72-9	Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts			0.1 - < 1 %
	939-603-7		01-2119978241-36	
	Skin Sens. 1B; H317			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Headache, nausea, dizziness, fatigue, skin irritation

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO2). Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

Additional information

Danger of bursting container.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Observe instructions for use.
Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
When using do not eat, drink, smoke, sniff.
Wear personal protection equipment (refer to section 8).
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Advice on protection against fire and explosion

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

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Protect from frost. Protect against direct sunlight. Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7429-90-5	Aluminium metal, respirable dust	-	4		TWA (8 h)	WEL
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
1332-58-7	Kaolin respirable dust	-	2		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
92128-66-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane			
Worker DNEL, long-term		inhalation	systemic	2035 mg/m³
Worker DNEL, long-term		dermal	systemic	773 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	608 mg/m³
Consumer DNEL, long-term		dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	699 mg/kg bw/day
64742-49-0	Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics			
Worker DNEL, long-term		inhalation	systemic	2035 mg/m³
Worker DNEL, long-term		dermal	systemic	773 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	608 mg/m³
Consumer DNEL, long-term		dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	699 mg/kg bw/day
1174921-73-3	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			
Worker DNEL, long-term		inhalation	systemic	871 mg/m³
Worker DNEL, long-term		dermal	systemic	77 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	185 mg/m³
Consumer DNEL, long-term		dermal	systemic	46 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	46 mg/kg bw/day
1471316-72-9	Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts			
Worker DNEL, long-term		inhalation	systemic	35,26 mg/m³
Worker DNEL, long-term		dermal	systemic	25 mg/kg bw/day
Worker DNEL, acute		dermal	local	1,04 mg/cm²
Consumer DNEL, long-term		inhalation	systemic	8,7 mg/m³
Consumer DNEL, long-term		dermal	systemic	12,5 mg/kg bw/day
Consumer DNEL, acute		dermal	local	0,518 mg/cm²
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
1471316-72-9	Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts	
Freshwater		0,1 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,1 mg/l
Freshwater sediment		45211 mg/kg
Marine sediment		45211 mg/kg
Micro-organisms in sewage treatment plants (STP)		1000 mg/l
Soil		36739,74 mg/kg

Additional advice on limit values

a no restriction
b End of exposure or end of shift
c at long term exposure: after several previous shifts
d before next shift

blood (B)
Urine (U)

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Protective and hygiene measures

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.
DIN EN 166

Hand protection

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min
Thickness of the glove material 0,45 mm
EN ISO 374

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.
When exceeding the relevant workplace exposure limits, note the following:
Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..
Filtering device with filter or ventilator filtering device of type: AX
Observe the wear time limits as specified by the manufacturer.
Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	silver grey
Odour:	characteristic

		Test method
pH-Value (at 20 °C):	not applicable	DIN 19268

Changes in the physical state

Melting point:	No information available.
Initial boiling point and boiling range:	-40 °C
Sublimation point:	No information available.
Softening point:	No information available.

Flash point:	-80 °C	
Lower explosion limits:	1 vol. %	
Upper explosion limits:	11 vol. %	
Ignition temperature:	No information available.	
Vapour pressure:	No information available.	
Vapour pressure:	No information available.	
Density (at 20 °C):	0,85 g/cm³	DIN 51757
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Partition coefficient:	No information available.	
Viscosity / dynamic:	No information available.	
Viscosity / kinematic:	No information available.	
Flow time:	No information available.	
Vapour density:	No information available.	
Evaporation rate:	No information available.	
Solvent separation test:	No information available.	
Solvent content:	No information available.	

9.2. Other information

Solid content:	No information available.

Data apply to technical substance: Relative density, Colour, Odour, Viscosity, pH.

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable aerosol.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Take precautionary measures against static discharges.

10.5. Incompatible materials

Oxidizing agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

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

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
75-28-5	isobutane			
	inhalation vapour	LC50 1237 mg/l	Mouse.	
92128-66-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane			
	oral	LD50 > 5000 mg/kg	Rat	
	dermal	LD50 > 2800 - 3100 mg/kg	Rat	Study report (1977)
	inhalation (4 h) vapour	LC50 > 25,2 mg/l	Rat	Study report (1988)
64742-49-0	Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics			
	dermal	LD50 > 2800 - 3100 mg/kg	Rat	Study report (1977)
	inhalation (4 h) vapour	LC50 > 23,3 mg/l	Rat	Study report (1988)
1174921-73-3	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			
	oral	LD50 > 15000 mg/kg	Rat	Study report (1977)
	dermal	LD50 > 5000 mg/kg	Rabbit	Study report (1993)
	inhalation (4 h) vapour	LC50 > 4951 mg/l	Rat	
106-97-8	butane			
	inhalation (4 h) gas	LC50 658 ppm	Rat	GESTIS
1471316-72-9	Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts			
	oral	LD50 > 10000 - < 20000 mg/kg	Rat	Study report (1972)
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1989)

Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane)

STOT-repeated exposure

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

Aspiration hazard

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

Specific effects in experiment on an animal

No information available.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose		[h] | [d]	Species	Source
75-28-5	isobutane					
	Acute fish toxicity	LC50	91,42 mg/l	96 h	Fish, no other information	United States Environmental Protection A
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200
92128-66-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane					
	Acute fish toxicity	LC50	> 1-10 mg/l	96 h	Pimephales promelas	
	Acute algae toxicity	ErC50	10 - 30 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (1995)
	Acute crustacea toxicity	EC50	> 1-10 mg/l	48 h	Daphnia magna	
	Fish toxicity	NOEC	2,045 mg/l	28 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	SIDS Initial Assessment Report For SIAM
64742-49-0	Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics					
	Acute algae toxicity	ErC50	12 mg/l	72 h	Pseudokirchneriella subcapitata	SIDS Initial Assessment Report For SIAM
	Acute crustacea toxicity	EC50	7,4 mg/l	48 h	Daphnia magna	SIDS Initial Assessment Report For SIAM
	Fish toxicity	NOEC	0,574 mg/l	28 d	Oncorhynchus mykiss	Hydrocarbon Solvents Consortium SEIF (HS
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	SIDS Initial Assessment Report For SIAM
74-98-6	propane					
	Acute fish toxicity	LC50	49,9 mg/l	96 h	Fish, no other information	United States Environmental Protection A
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200
1174921-73-3	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics					
	Acute fish toxicity	LC50	>1000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	>1000 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	>1000 mg/l	48 h	Daphnia magna	
	Fish toxicity	NOEC	0,182 mg/l	28 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)

	Crustacea toxicity	NOEC	0,317 mg/l	21 d	Daphnia magna	Company report (2010)
106-97-8	butane					
	Acute fish toxicity	LC50	49,9 mg/l	96 h	Fish, no other information	United States Environmental Protection A
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200
1471316-72-9	Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts					
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (1994)
	Acute crustacea toxicity	EC50	> 1000 mg/l	48 h	Daphnia magna	Study report (1993)
	Acute bacteria toxicity	(> 10000 mg/l)		3 h	activated sludge of a predominantly domestic sewag	Study report (1994)

12.2. Persistence and degradability

There are no data available on the mixture itself. AOX (mg/l): 0

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
92128-66-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane			
	OECD Guideline 301 F	98%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
75-28-5	isobutane	1,09
92128-66-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	3,4 - 5,2
74-98-6	propane	1,09
106-97-8	butane	1,09
1471316-72-9	Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts	> 6,91

BCF

CAS No	Chemical name	BCF	Species	Source
1174921-73-3	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	144,3	calculated	Other company data (
1471316-72-9	Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts	70,8	Fish, not further specified.	Study report (2013)

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

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

List of Wastes Code - used product

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

List of Wastes Code - contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D

Inland waterways transport (ADN)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

Marine transport (IMDG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-

Hazard label:	2.1
Marine pollutant:	no
Special Provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, flammable
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1
Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):
Entry 3, Entry 28

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Aerosol directive (75/324/EEC)

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Additional information

94/69/EC (21st ATP). The benzene content of the product is less than 0.1%. It applies the annotation P.
Classification and labeling as carcinogenic is not necessary.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
ATE: Acute Toxicity Estimate
STEL (EC) Short Term Exposure Limit
LC50: Lethal Concentration
EC50: half maximal Effective Concentration
ErC50: means EC50 in terms of reduction of growth rate

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]: Calculation method.
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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