

Trade name: Pelikan Fixierspray

Current version : 4.0.0, issued: 10.08.2015

Replaced version: 3.0.0, issued: 08.10.2014

Region: GB

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

1.1 Product identifier

Trade name

Pelikan Fixierspray

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

Relevant identified uses of the substance or mixture

fixing agent

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Pelikan Vertriebsgesellschaft mbH & Co. KG

Postfach 11 07 55

30102 Hannover

GERMANY

Telephone no. +49 (0) 511 69 69 - 0

Information provided by / telephone

Product Safety 030-4393-0 (8:30 to 16:30)

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

Giftnotruf Berlin +49 (0) 30 30 686 - 790 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Aerosol 1; H222

Aquatic Chronic 3; H412

Asp. Tox. 1; H304

Skin Irrit. 2; H315

STOT SE 3; H336

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms



GHS02



GHS07

Signal word

Danger

Hazard statements

H222

H229

H315

H336

H412

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.

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Precautionary 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.
P271	Use only outdoors or in a well-ventilated area.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

Mixture (preparation)

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Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	butane			
	106-97-8 203-448-7 601-004-00-0 -	Flam. Gas 1; H220 Press. Gas	> 25.00 - < 50.00	%-b.w.
2	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			
	- 927-241-2 - 01-2119471843-32	Aquatic Chronic 3; H412 Asp. Tox. 1; H304 Flam. Liq. 3; H226 STOT SE 3; H336 EUH066	> 16.00 - < 25.00	%-b.w.
3	propane			
	74-98-6 200-827-9 601-003-00-5 -	Flam. Gas 1; H220 Press. Gas	> 10.00 - < 25.00	%-b.w.
4	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics			
	- 927-510-4 - -	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336	> 3.00 - < 10.00	%-b.w.
5	propan-2-ol			
	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	> 3.00 - < 10.00	%-b.w.
6	1-ethoxypropan-2-ol			
	1569-02-4 216-374-5 603-177-00-8 -	Flam. Liq. 3; H226 STOT SE 3; H336	> 3.00 - < 10.00	%-b.w.
7	Hydrocarbons, C6, isoalkanes, <5% n-hexane			
	- 931-254-9 - -	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	> 3.00 - < 10.00	%-b.w.
8	isobutane			
	75-28-5 200-857-2 601-004-00-0 -	Flam. Gas 1; H220 Press. Gas	> 2.50 - < 3.00	%-b.w.
9	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane			
	- 926-605-8 - -	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 2; H225 STOT SE 3; H336	> 1.00 - < 2.50	%-b.w.
10	cyclohexane			
	110-82-7 203-806-2 601-017-00-1 -	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Asp. Tox. 1; H304 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336	> 1.00 - < 2.50	%-b.w.
11	n-hexane			

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110-54-3 203-777-6 601-037-00-0 -	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 2; H225 Repr. 2; H361f*** Skin Irrit. 2; H315 STOT RE 2*; H373** STOT SE 3; H336	> 0.30 - < 1.00	%-b.w.
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Full Text for all H-phrases and EUH-phrases: pls. see section 16

(*, **, ***, ****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
11	-	STOT RE 2; H373: C >= 5%	-	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Ensure supply of fresh air.

After skin contact

When in contact with the skin, clean with soap and water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse mouth thoroughly with water. Call a doctor. Do not induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing powder; Alcohol-resistant foam; Carbon dioxide; Water spray jet

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide and smoke. Vapours are heavier than air.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not inhale vapours. Keep away sources of ignition.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Send in suitable containers for recovery or disposal.

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6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation.

General protective and hygiene measures

Keep away from foodstuffs and beverages. Wash soiled clothing. Do not inhale vapours. Avoid contact with eyes and skin.

Advice on protection against fire and explosion

Keep away from sources of ignition - refrain from smoking. Vapours can form an explosive mixture with air.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Storage temperature may not exceed 50°C (=122°F).

Recommended storage temperature

Value 15 - 35 °C

Storage stability

Value min. 2 year(s)

Requirements for storage rooms and vessels

Keep container tightly closed.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	butane	106-97-8	203-448-7
List of approved workplace exposure limits (WELs) / EH40			
Butane			
	STEL	1810	mg/m ³ 750 ml/m ³
	TWA	1450	mg/m ³ 600 ml/m ³
2	propane	74-98-6	200-827-9
List of approved workplace exposure limits (WELs) / EH40			
Propane			
3	propan-2-ol	67-63-0	200-661-7
List of approved workplace exposure limits (WELs) / EH40			
Propan-2-ol			
	STEL	1250	mg/m ³ 500 ml/m ³
	TWA	999	mg/m ³ 400 ml/m ³
4	cyclohexane	110-82-7	203-806-2
List of approved workplace exposure limits (WELs) / EH40			
Cyclohexane			
	STEL	1050	mg/m ³ 300 ml/m ³
	TWA	350	mg/m ³ 100 ml/m ³
2006/15/EG			
Cyclohexan			
	TWA	700	mg/m ³ 200 ml/m ³
5	n-hexane	110-54-3	203-777-6
List of approved workplace exposure limits (WELs) / EH40			
n-Hexane			
	TWA	72	mg/m ³ 20 ml/m ³
2006/15/EG			
n-Hexane			
	TWA	72	mg/m ³ 20 ml/m ³

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DNEL and PNEC values**DNEL values (worker)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			-	
				927-241-2	
	dermal	Long term (chronic)	systemic	300	mg/kg/day
	inhalative	Long term (chronic)	systemic	1500	mg/m ³
2	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics			-	
				927-510-4	
	dermal	Long term (chronic)	systemic	300	mg/kg/day
	inhalative	Long term (chronic)	systemic	2085	mg/m ³
3	propan-2-ol			67-63-0 200-661-7	
	dermal	Long term (chronic)	systemic	888	mg/kg/day
	inhalative	Long term (chronic)	systemic	500	mg/m ³
4	Hydrocarbons, C6, isoalkanes, <5% n-hexane			-	
				931-254-9	
	dermal	Long term (chronic)	systemic	13964	mg/kg/day
	inhalative	Long term (chronic)	systemic	5306	mg/m ³
5	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane			-	
				926-605-8	
	dermal	Long term (chronic)	systemic	773	mg/kg/day
	inhalative	Long term (chronic)	systemic	2035	mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			-	
				927-241-2	
	oral	Long term (chronic)	systemic	300	mg/kg/day
	dermal	Long term (chronic)	systemic	300	mg/kg/day
	inhalative	Long term (chronic)	systemic	900	mg/m ³
2	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics			-	
				927-510-4	
	oral	Long term (chronic)	systemic	149	mg/kg/day
	dermal	Long term (chronic)	systemic	149	mg/kg/day
	inhalative	Long term (chronic)	systemic	447	mg/m ³
3	propan-2-ol			67-63-0 200-661-7	
	oral	Long term (chronic)	systemic	26	mg/kg/day
	dermal	Long term (chronic)	systemic	319	mg/kg/day
	inhalative	Long term (chronic)	systemic	89	mg/m ³
4	Hydrocarbons, C6, isoalkanes, <5% n-hexane			-	
				931-254-9	
	oral	Long term (chronic)	systemic	1301	mg/kg/day
	dermal	Long term (chronic)	systemic	1377	mg/kg/day
	inhalative	Long term (chronic)	systemic	1131	mg/m ³
5	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane			-	
				926-605-8	
	oral	Long term (chronic)	systemic	699	mg/kg/day
	dermal	Long term (chronic)	systemic	699	mg/kg/day
	inhalative	Long term (chronic)	systemic	603	mg/m ³

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PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	propan-2-ol		67-63-0 200-661-7	
	water	fresh water	140.9	mg/l
	water	marine water	140.9	mg/l
	water	fresh water sediment	552	mg/l
	water	marine water sediment	552	mg/l
	water	Aqua intermittent	140.9	
	soil	-	28	mg/kg
	sewage treatment plant	-	2251	mg/l
	secondary poisoning	-	160	mg/kg
	with reference to: food			

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol, vapour and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material

nitrile rubber

Material thickness

0.4

mm

Breakthrough time

>

480

min.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour	
Aerosol	
colourless	
Odour	
sweetish	
Odour threshold	
No data available	
pH value	
No data available	
Boiling point / boiling range	
Value	-44 °C
Melting point / melting range	
No data available	
Decomposition point / decomposition range	
No data available	
Flash point	
Not applicable	
Ignition temperature	
Value	240 °C

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Auto-ignition temperature			
Remarks	Product is not selfigniting.		
Oxidising properties			
No data available			
Explosive properties			
In and after use danger of production of inflammable compounds. Danger of bursting when heating over 50°C.			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
Value	0.6	% vol	
Upper flammability or explosive limits			
Value	10.9	% vol	
Vapour pressure			
No data available			
Vapour density			
No data available			
Evaporation rate			
No data available			
Relative density			
No data available			
Density			
Value	0.64	g/cm ³	
Reference temperature	20	°C	
Solubility in water			
Remarks	immiscible		
Solubility(ies)			
No data available			
Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
	log Pow	0.05	
	Reference temperature	25	°C
	Source	ECHA	
2	n-hexane	110-54-3	203-777-6
	log Pow	3.9	
	Source	Supplier	
Viscosity			
No data available			
Solids content			
Value	3	%	

9.2 Other information

Other information
Vapours are heavier than air.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

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10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Temperatures > 50°C.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	927-241-2
LD50	>	2000	mg/kg bodyweight
Species	rat		
Source	Manufacturer		
2	propan-2-ol	67-63-0	200-661-7
LD50		5045	mg/kg bodyweight
Species	rat		
Source	Manufacturer		
3	1-ethoxypropan-2-ol	1569-02-4	216-374-5
LD50		4900	mg/kg bodyweight
Species	rat		
Source	Manufacturer		
4	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
LD50	>	5000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
5	isobutane	75-28-5	200-857-2
LD50		12705	mg/kg bodyweight
Species	rat		
Source	Manufacturer		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	927-241-2
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Source	Manufacturer		
2	propan-2-ol	67-63-0	200-661-7
LD50		12800	mg/kg bodyweight
Species	rabbit		
Source	Manufacturer		
3	1-ethoxypropan-2-ol	1569-02-4	216-374-5
LD50		9500	mg/kg bodyweight
Species	rabbit		
Source	Manufacturer		
4	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
LD50	>	3350	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		

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Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	butane	106-97-8	203-448-7
LC50		658	mg/l
Duration of exposure		4	h
State of aggregation	Gas		
Species	rat		
Source	Manufacturer		
2	propane	74-98-6	200-827-9
LC50		>	20 mg/l
Duration of exposure		4	h
State of aggregation	Gas		
Species	rat		
Source	Manufacturer		
3	propan-2-ol	67-63-0	200-661-7
LC50		30	mg/l
Duration of exposure		4	h
State of aggregation	Gas		
Species	rat		
Source	Manufacturer		
4	1-ethoxypropan-2-ol	1569-02-4	216-374-5
LC50		>	14200 mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Source	Manufacturer		
5	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
LC50		259	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Method	OECD 403		
Source	ECHA		
6	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
LC50		>	25.2 mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Source	ECHA		
Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
Species	rabbit		
Source	ECHA		
Evaluation	non-irritant		
2	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
Duration of exposure		4	h
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	irritant		

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Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	
2	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
Duration of exposure		72	h
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		non-irritant	
Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	
2	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
Route of exposure		Skin	
Species		mouse	
Method		OECD 429	
Source		ECHA	
Evaluation		non-sensitizing	
Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
Type of examination		gene mutation assay	
Species		Salmonella typhimurium	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		inhalational	
Type of examination		Chromosome aberration test	
Species		rat	
Method		OECD 475	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
Route of exposure		inhalational	
Type of examination		Chromosome aberration test	
Species		rat	
Method		OECD 475	
Source		ECHA	

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Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
Route of exposure		inhalational	
NOAEC		9000	ppm
Duration of exposure		13	week/s
Type of examination	2 generation study		
Species	rat		
Method	OECD 416		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
Route of exposure		inhalational	
NOAEC		9000	ppm
Type of examination	2 generation study		
Species	rat		
Method	OECD 416		
Source	ECHA		

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
Route of exposure		inhalational	
NOAEC		9016	ppm
Duration of exposure		2	year(s)
Species	mouse		
Method	OECD 451		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
Route of exposure		inhalational	
NOAEC		3000	ppm
Species	rat		
Method	OECD 451		
Source	ECHA		

STOT-single exposure			
No data available			

STOT-repeated exposure			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6, isoalkanes, <5% n-hexane	-	931-254-9
Route of exposure		inhalational	
NOAEC		2984	ppm
Duration of exposure		13	week/s
Species	mouse		
Target organ	liver, kidney		
Method	OECD 413		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure		inhalational	
NOAEC		8992	ppm
Duration of exposure		13	week/s
Species	mouse		
Method	OECD 413		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
Route of exposure		inhalational	
NOAEC		14000	mg/m ³
Duration of exposure		8	h
Species	rat		
Source	ECHA		

Aspiration hazard			
No data available			

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SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	927-241-2
LC50	>	100	mg/l
Duration of exposure		96	h
Species	fish		
Source	Manufacturer		
2	propan-2-ol	67-63-0	200-661-7
LC50		9640	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	OECD 203		
Source	ECHA		
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
LL50		11.4	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)			
No data available			

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	927-241-2
EL50	> 22	- 46	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
2	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
EL50		3	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No data available			

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
EL50		1030	mg/l
Duration of exposure		72	h
Species	Raphidocelis subcapitata		
Method	OECD 201		
Source	ECHA		

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Toxicity to algae (chronic)
No data available
Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	927-241-2
Type		aerobic biodegradation	
Value		89	%
Duration		28	day(s)
Method		OECD 301 F	
Source		ECHA	
Evaluation		readily biodegradable	
2	propan-2-ol	67-63-0	200-661-7
Type		BOD/COD	
Value		53	%
Duration		5	day(s)
Source		ECHA	
Evaluation		readily biodegradable	
3	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	-	926-605-8
Type		aerobic biodegradation	
Value		98	%
Duration		28	day(s)
Method		OECD 301 F	
Source		ECHA	
Evaluation		readily degradable	

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
log Pow		0.05	
Reference temperature		25	°C
Source		ECHA	
2	n-hexane	110-54-3	203-777-6
log Pow		3.9	
Source		Supplier	

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.
Smaller quantities can be disposed with household garbage.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

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SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	2
Classification code	5F
UN number	UN1950
Technical name	AEROSOLS
Tunnel restriction code	D
Label	2.1

14.2 Transport IMDG

Class	2
UN number	UN1950
Proper shipping name	AEROSOLS
EmS	F-D+S-U
Label	2.1

14.3 Transport ICAO-TI / IATA

Class	2.1
UN number	UN1950
Proper shipping name	Aerosols, flammable
Label	2.1

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII. No 3

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.

No	Substance name	CAS no.	EC no.	No
1	cyclohexane	110-82-7	203-806-2	57

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category: P3a

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents (VOC Directive)

VOC content 97.03 %

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

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SECTION 16: Other information

Further information

Not to be used by children.

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Department issuing safety data sheet

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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