

ISOFLEX TOPAS L 32 N Spray

Version 1.1

Revision Date 29.12.2016

Print Date 29.12.2016

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : ISOFLEX TOPAS L 32 N Spray
Article-No. : 081282

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

Use of the Substance/Mixture : Lubricant spray
Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Klüber Lubrication München
Geisenhausenerstr. 7
81379 München
Deutschland
Tel: +49 (0) 89 7876 0
Fax: +49 (0) 89 7876 333
info@klueber.com

E-mail address : mcm@klueber.com
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Austria Ges.m.b.H.
Franz-W.-Schererstrasse 32
5020 Salzburg
Austria
+43-662-452705-0
Fax: +43-662-452705-30
office@at.klueber.com

1.4 Emergency telephone number

+43 1 406 43 43 (Vergiftungsinformationszentrale)
0049 (0) 897876-700 (24hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1	H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated.
Skin irritation, Category 2	H315: Causes skin irritation.
Specific target organ toxicity - single	H336: May cause drowsiness or dizziness.

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exposure, Category 3, Central nervous system

Aspiration hazard, Category 1

H304: May be fatal if swallowed and enters airways.

Chronic aquatic toxicity, Category 3

H412: Harmful to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Extremely flammable

R12: Extremely flammable.

R67: Vapours may cause drowsiness and dizziness.

Dangerous for the environment

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements :

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:	
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 mist.
P273	Avoid release to the environment.
Response:	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Do NOT induce vomiting.
P331	
Storage:	
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label:

90622-56-3 Alkanes, C7-10-iso-

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2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : solvent (hydrocarbons)
Propellant
Synthetic hydrocarbon oil
Thickening agent

Hazardous components

Chemical Name	CAS-No. EC-No. Index-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Alkanes, C7-10-iso-	90622-56-3 292-458-5 / 01- 2119471305- 42-XXXX	F; R11 Xn; R65 Xi; R38 R67 N; R51/53	Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 10 - < 20
Dec-1-ene, homopolymer, hydrogenated + 7- methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated	68037-01-4, 1000172-11-1		Asp. Tox. 1; H304	>= 10 - < 20
propan-2-ol	67-63-0 200-661-7 603-117-00-0 / 01- 2119457558- 25-XXXX	F; R11 Xi; R36 R67	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 3 - < 10
Substances with a workplace exposure limit :				
isobutane	75-28-5 200-857-2 601-004-00-0	F+; R12	Flam. Gas 1; H220 Press. Gas Compr. Gas; H280	>= 30 - < 50
propane	74-98-6 200-827-9 601-003-00-5	F+; R12	Flam. Gas 1; H220 Press. Gas Compr. Gas; H280	>= 1 - < 10
butane	106-97-8 203-448-7 601-004-00-0	F+; R12	Flam. Gas 1; H220 Press. Gas Compr. Gas; H280	>= 1 - < 10

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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4. First aid measures

4.1 Description of first aid measures

- If inhaled : Call a physician or poison control centre immediately.
Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
Wash off with soap and plenty of water.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : Move the victim to fresh air.
If accidentally swallowed obtain immediate medical attention.
Keep respiratory tract clear.
Do NOT induce vomiting.
Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.
- Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No information available.

5. Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Metal oxides

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- : Fire Hazard
Do not let product enter drains.
Contains gas under pressure; may explode if heated.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
Exposure to decomposition products may be a hazard to health.
- Further information : Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Cool containers/tanks with water spray.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Evacuate personnel to safe areas.
Ensure adequate ventilation.
Remove all sources of ignition.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

- Environmental precautions : Do not allow contact with soil, surface or ground water.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

- Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Keep in suitable, closed containers for disposal.
Non-sparking tools should be used.

6.4 Reference to other sections

- For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Do not use in areas without adequate ventilation.

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Do not breathe vapours or spray mist.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid contact with skin and eyes.
For personal protection see section 8.
Keep away from fire, sparks and heated surfaces.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Do not ingest.
Do not use sparking tools.
These safety instructions also apply to empty packaging which may still contain product residues.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
Store in accordance with the particular national regulations.

7.3 Specific end use(s)

: Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type	Control parameters	Update	Basis
isobutane	75-28-5	TMW	800 ppm 1.900 mg/m ³	2011-12-19	AT OEL
isobutane	75-28-5	KZW	1.600 ppm 3.800 mg/m ³	2011-12-19	AT OEL
propan-2-ol	67-63-0	TMW	200 ppm 500 mg/m ³	2011-12-19	AT OEL
propan-2-ol	67-63-0	KZW	800 ppm 2.000 mg/m ³	2007-09-11	AT OEL
Further information:	Short term value for large casting; applicable until 31.12.2013				
propan-2-ol	67-63-0	KZW	800 ppm	2011-12-19	AT OEL

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			2.000 mg/m ³		
propane	74-98-6	TMW	1.000 ppm 1.800 mg/m ³	2006-06-29	AT OEL
propane	74-98-6	KZW	2.000 ppm 3.600 mg/m ³	2006-06-29	AT OEL
butane	106-97-8	KZW	1.600 ppm 3.800 mg/m ³	2011-12-19	AT OEL
butane	106-97-8	TMW	800 ppm 1.900 mg/m ³	2011-12-19	AT OEL

DNEL

Alkanes, C7-10-iso-

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 2035 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 773 mg/kg

propan-2-ol

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 500 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 888 mg/kg

PNEC

propan-2-ol

: Water
Value: 140,9 mg/l

Marine water
Value: 140,9 mg/l

Fresh water sediment
Value: 552 mg/kg

Soil
Value: 28 mg/kg

Marine sediment

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Value: 552 mg/kg

8.2 Exposure controls

Engineering measures

Use only in an area equipped with explosion proof exhaust ventilation.
Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Short term only
Filter type A-P
- Hand protection : Wear protective gloves.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
In case of contact through splashing:

: Nitrile rubber
Protective index Class 1
- Eye protection : Safety glasses with side-shields conforming to EN166
- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

- General advice : Do not allow contact with soil, surface or ground water.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

Values refer to the propellant:

9.1 Information on basic physical and chemical properties

Appearance : aerosol

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Colour	: beige
Odour	: characteristic
Odour Threshold	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: -80 °C, Test Method: open cup
Evaporation rate	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Lower explosion limit	: 1,5 %(V)
Upper explosion limit	: 11,2 %(V)
Vapour pressure	: 2.700 hPa, 20 °C
Relative vapour density	: No data available
Density	: 0,60 g/cm ³ , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: > 350 °C
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: No data available

9.2 Other information

Sublimation point	: No data available
Bulk density	: No data available

10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

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10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. Toxicological information

11.1 Information on toxicological effects

Product

- Acute oral toxicity : Effects due to ingestion may include:
: Central nervous system depression
- Acute inhalation toxicity : Respiration of solvent vapour may cause dizziness.
: Inhalation may provoke the following symptoms:, Respiratory disorder, Dizziness, Drowsiness, Vomiting, Fatigue, Vertigo, Central nervous system depression
- Skin corrosion/irritation : This information is not available.
- Serious eye damage/eye irritation : Contact with eyes may cause irritation.
- Respiratory or skin sensitisation : This information is not available.
- Germ cell mutagenicity
- Genotoxicity in vitro : No data available
- Genotoxicity in vivo : No data available
- Carcinogenicity : No data available
- Reproductive toxicity : No data available
- Teratogenicity : No data available
- Repeated dose toxicity : This information is not available.
- Aspiration toxicity : May be fatal if swallowed and enters airways.
- Further information : Information given is based on data on the components and the toxicology of similar products.

Components:

Alkanes, C7-10-iso- :

- Acute oral toxicity : LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 401
- Acute inhalation toxicity : LC50: > 21 mg/l, 4 h, Rat, vapour, OECD Test Guideline 403
- Acute dermal toxicity : LD50: > 2.000 mg/kg, Rabbit, OECD Test Guideline 402
- Skin corrosion/irritation : Rabbit, Result: Irritating to skin., Classification: Irritating to

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	skin., OECD Test Guideline 404, GLP: yes
Serious eye damage/eye irritation	: Rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405
Respiratory or skin sensitisation	: Maximisation Test (GPMT), Guinea pig, Result: Did not cause sensitisation on laboratory animals., Classification: Did not cause sensitisation on laboratory animals., OECD Test Guideline 406
Germ cell mutagenicity Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
STOT - single exposure	: Exposure routes: Inhalation Target Organs: Central nervous system Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
STOT - repeated exposure	: Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	: May be fatal if swallowed and enters airways.

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Acute oral toxicity	: LD50: > 5.000 mg/kg, Rat
Acute dermal toxicity	: LD50: > 2.000 mg/kg, Rat, OECD Test Guideline 402, The substance or mixture has no acute dermal toxicity
Skin corrosion/irritation	: Rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404, GLP: yes
Serious eye damage/eye irritation	: Rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405, GLP: yes
Respiratory or skin sensitisation	: Maximisation Test (GPMT), Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406, GLP: yes
Germ cell mutagenicity Genotoxicity in vitro	: Ames test, Result: negative, Mutagenicity (Escherichia coli - reverse mutation assay), GLP: yes
Assessment	: Animal testing did not show any mutagenic effects.
Aspiration toxicity	: May be fatal if swallowed and enters airways.

propan-2-ol :

Acute oral toxicity	: LD50: 5.840 mg/kg, Rat, OECD Test Guideline 401
Acute inhalation toxicity	: LC50: 72,6 mg/l, 4 h, Rat, vapour

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	: Respiration of solvent vapour may cause dizziness.
	: Dizziness, Drowsiness, Vomiting, Fatigue, Vertigo, Central nervous system depression, Inhalation may provoke the following symptoms:
Acute dermal toxicity	: LD50: 12.800 mg/kg, Rabbit
Skin corrosion/irritation	: Rabbit, Result: No skin irritation, Classification: No skin irritation
Serious eye damage/eye irritation	: Rabbit, Result: Irritating to eyes., Classification: Irritating to eyes., OECD Test Guideline 405
Respiratory or skin sensitisation	: Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406
Germ cell mutagenicity	
Genotoxicity in vitro	: Ames test, with and without metabolic activation, Result: negative
Genotoxicity in vivo	: In vivo micronucleus test, Mouse(male and female), Mutagenicity (micronucleus test), GLP: yes, Result: negative
Assessment	: Animal testing did not show any mutagenic effects.
STOT - single exposure	: Exposure routes: inhalation (vapour) Target Organs: Central nervous system Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
isobutane :	
Acute inhalation toxicity	: LC50: 658 mg/l, 4 h, Rat, gas
butane :	
Acute inhalation toxicity	: LC50: 658 mg/l, 4 h, Rat, gas

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxicity to daphnia and other aquatic invertebrates	:	No data available
Toxicity to algae	:	No data available
Toxicity to bacteria	:	No data available

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Components:

Alkanes, C7-10-iso- :

- Toxicity to fish : LC50: 18,4 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), semi-static test, OECD Test Guideline 203, GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EC50: 2,4 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202
- Toxicity to algae : EC50: 29 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), static test, OECD Test Guideline 201, GLP: yes
- Toxicity to fish (Chronic toxicity) : NOEC: 0,778 mg/l, 28 d, Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,17 mg/l, 21 d, Daphnia magna (Water flea), Reproduction Test, OECD Test Guideline 211, GLP: yes

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

- Toxicity to fish : LC50: > 1.000 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), static test, OECD Test Guideline 203, GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EC50: > 1.000 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes
- Toxicity to algae : ErC50: > 1.000 mg/l, 72 h, Scenedesmus capricornutum (fresh water algae), Growth inhibition, OECD Test Guideline 201, GLP: yes
- Toxicity to bacteria : EC50: > 1.000 mg/l, 3 h, Bacteria, Respiration inhibition, OECD 209, GLP: yes
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 125 mg/l, 21 d, Daphnia magna (Water flea)

propan-2-ol :

- Toxicity to fish : LC50: > 1.400 mg/l, 96 h, Pimephales promelas (fathead minnow), flow-through test, OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50: 13.299 mg/l, 48 h, Daphnia magna (Water flea), Immobilization
- Toxicity to algae : EC50: > 1.000 mg/l, 72 h, Desmodesmus subspicatus (green algae), Growth inhibition

12.2 Persistence and degradability

Product:

Biodegradability :

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Physico-chemical
removability : No data available

Components:

Alkanes, C7-10-iso- :

Biodegradability : aerobic, 51,3 %, Result: Not rapidly biodegradable, Exposure time: 28 d, activated sludge, OECD Test Guideline 301F

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Biodegradability : Primary biodegradation, Result: Not readily biodegradable., activated sludge, OECD Test Guideline 301B

propan-2-ol :

Biodegradability : Result: Readily biodegradable

12.3 Bioaccumulative potential

Product:

Bioaccumulation : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT)., This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Components:

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Bioaccumulation : Bioconcentration factor (BCF): > 10

12.4 Mobility in soil

Product:

Mobility : No data available
Distribution among environmental compartments : No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Alkanes, C7-10-iso- :

Assessment : Non-classified PBT substance, Non-classified vPvB substance

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Assessment : Non-classified PBT substance, Non-classified vPvB substance

propan-2-ol :

Assessment : Non-classified PBT substance, Non-classified vPvB substance

12.6 Other adverse effects

Product:

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Additional ecological information : Harmful to aquatic life with long lasting effects.

13. Disposal considerations

13.1 Waste treatment methods

Product : In accordance with local and national regulations.
: Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging : Offer empty spray cans to an established disposal company.
Pressurized container: Do not pierce or burn, even after use.

14. Transport information

14.1 UN number

ADR : 1950
IMDG : 1950
IATA : 1950

14.2 Proper shipping name

ADR : AEROSOLS
IMDG : AEROSOLS
IATA : AEROSOLS, FLAMMABLE

14.3 Transport hazard class

ADR : 2
IMDG : 2.1
IATA : 2.1

14.4 Packing group

ADR :
Classification Code : 5F
Labels : 2.1
Tunnel restriction code : (D)

IMDG
Labels : 2.1
EmS Number : F-D, S-U

IATA
Packing instruction (cargo aircraft) : 203
Labels : 2.1

14.5 Environmental hazards

ADR
Environmentally hazardous : no

IMDG
Marine pollutant : no

IATA

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Environmentally hazardous : no

14.6 Special precautions for user

No special precautions required.

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

Remarks : Not applicable for product as supplied.

15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Risk classification according to VbF : Not applicable

Major Accident Hazard Legislation : 96/82/EC Update:
Extremely flammable
8
Quantity 1: 10 t
Quantity 2: 50 t

15.2 Chemical Safety Assessment

This information is not available.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R11	Highly flammable.
R12	Extremely flammable.
R36	Irritating to eyes.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.

Full text of H-Statements referred to under sections 2 and 3.

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H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further information

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