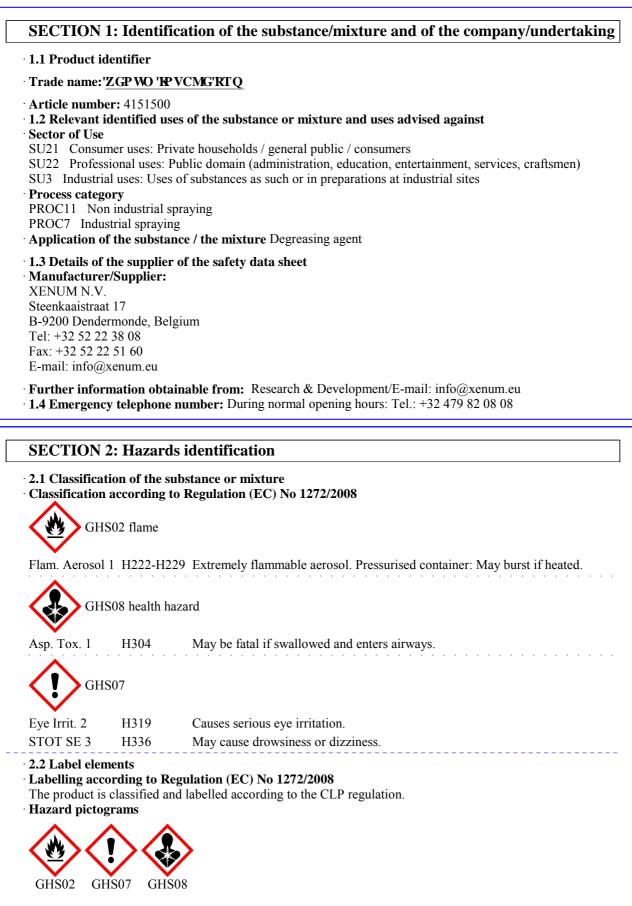
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· Signal word Danger

• **Hazard-determining components of labelling:** Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

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	(Contd. of page 1)
ethyl acetate	
	htha (petroleum), light arom. Benzene<0.1%
Hazard sta	
	Extremely flammable aerosol. Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
	ary 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.
P251	Do not pierce or burn, even after use.
P260	Do not breathe spray.
P211	Do not spray on an open flame or other ignition source.
P280	Wear protective gloves / eye protection.
P271	Use only outdoors or in a well-ventilated area.
P301+P310	5
P305+P351	+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	
P331	Do NOT induce vomiting.
P410+P412	
P403	Store in a well-ventilated place.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
· Additional	information:
	epeated exposure may cause skin dryness or cracking.
· 2.3 Other h	
	MILLIN US PRT and vPvR assessment

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## **SECTION 3: Composition/information on ingredients**

· 3.2 Mixtures

\*

· Description: Active substance with propellant

Dangerous components:		
CAS: 141-78-6	ethyl acetate	25-<50%
EINECS: 205-500-4 Reg.nr.: 01-2119475103-46	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 106-97-8	butane (containing < 0.1% butadiene (203-450-8))	10-<25%
EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	Flam. Gas 1, H220; Press. Gas C, H280	
EC number: 919-857-5 Reg.nr.: 01-2119463258-33	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	10-<25%
	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H336	1
CAS: 74-98-6	propane	10-<25%
EINECS: 200-827-9	Flam. Gas 1, H220; Press. Gas C, H280	1
Reg.nr.: 01-2119486944-21		
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom. Benzene<0.1%	10-<25%
EINECS: 265-199-0	Flam. Liq. 3, H226; Asp. Tox. 1, H304	]

# · Ingredients according to detergents guidline 648/2004/EC aliphatic hydrocarbons ② 30% (Contd. on page 3)

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5 - 15%

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#### aromatic hydrocarbons

· Additional information:

#### **SECTION 4: First aid measures**

#### · 4.1 Description of first aid measures

· After inhalation: Supply fresh air; consult doctor in case of complaints.

- After skin contact: Generally the product does not irritate the skin.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

• After swallowing: Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

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

No further relevant information available.

#### **SECTION 5: Firefighting measures**

#### - 5.1 Extinguishing media

• Suitable extinguishing agents:

Water haze

Fire-extinguishing powder

Carbon dioxide

Alcohol resistant foam

· For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture No further relevant information available.

- 5.3 Advice for firefighters
- Protective equipment:

No special measures required.

Mount respiratory protective device.

#### **SECTION 6: Accidental release measures**

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions:
- Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

• 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

- 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### **SECTION 7: Handling and storage**

#### · 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material.

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		(Contd. of page 3)		
	gnition sources away - Do not sr	noke.		
Protect against electrostatic charges. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric				
lights. Do not pierce or burn, even after use.				
	nditions for safe storage, inclu	ding any incompatibilities		
Storage Requir	e: rements to be met by storeroor	ns and recentacles.		
	a cool location.	ns and receptacies.		
Observ	e official regulations on storing	packagings with pressurised containers.		
	ation about storage in one co			
	r information about storage c	packagings with pressurised containers.		
	eceptacle tightly sealed.	onutions.		
Do not	seal receptacle gas tight.			
	n cool, dry conditions in well set	aled receptacles.		
	from heat and direct sunlight. ccific end use(s) No further rele	vant information available		
7.5 Spc				
SECT	<b>TION 8: Exposure contro</b>	ls/personal protection		
Additio	onal information about design	of technical facilities: No further data; see item 7.		
8.1 Cor	ntrol parameters			
Ingred	ients with limit values that ree	quire monitoring at the workplace:		
	-6 ethyl acetate			
	WEL Short-term value: 400 ppm			
	Long-term value: 200 ppm			
	-8 butane (containing < 0.1%			
	Short-term value: 1810 mg/m <sup>3</sup> , 7 Long-term value: 1450 mg/m <sup>3</sup> , 6			
	Carc (if more than 0.1% of buta			
74-98-6	6 propane			
	Short-term value: 3600 mg/m <sup>3</sup> , 2	2000 ppm		
Ι	Long-term value: 1800 mg/m <sup>3</sup> , 1	ng-term value: 1800 mg/m <sup>3</sup> , 1000 ppm		
DNEL	5			
141-78	-6 ethyl acetate			
Oral	DNEL Long term-systemic	4.5 mg/kg bw/day (Consumer)		
Dermal	DNEL Long term-systemic	37 mg/kg bw/day (Consumer)		
		63 mg/kg bw/day (Worker)		
	ive DNEL Acute-local	734 mg/m3 (Consumer)		
Inhalati	IVE DIVEL Acute-local	e v /		
Inhalati	We DIVEL Acut-local	1468 mg/m3 (Worker)		
Inhalati	DNEL Acute-systemic	1468 mg/m3 (Worker) 734 mg/m3 (Consumer)		
Inhalati		1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker)		
Inhalati		1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer)		
Inhalati	DNEL Acute-systemic DNEL Long term-local	1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer) 734 mg/m3 (Worker)		
Inhalati	DNEL Acute-systemic	1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer) 734 mg/m3 (Worker) 367 mg/m3 (Consumer)		
	DNEL Acute-systemic DNEL Long term-local DNEL Long term-systemic	1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer) 734 mg/m3 (Worker) 367 mg/m3 (Consumer) 34 mg/m3 (Worker)		
Hydroo	DNEL Acute-systemic DNEL Long term-local DNEL Long term-systemic carbons, C9-C11, n-alkanes, is	1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer) 734 mg/m3 (Worker) 367 mg/m3 (Consumer) 34 mg/m3 (Worker) soalkanes, cyclics, <2% aromatics		
<b>Hydroo</b> Oral	DNEL Acute-systemic DNEL Long term-local DNEL Long term-systemic carbons, C9-C11, n-alkanes, is DNEL Long term-systemic	1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer) 734 mg/m3 (Worker) 367 mg/m3 (Consumer) 34 mg/m3 (Worker) <b>soalkanes, cyclics, &lt;2% aromatics</b> 125 mg/kg bw/day (Consumer)		
Hydroo	DNEL Acute-systemic DNEL Long term-local DNEL Long term-systemic carbons, C9-C11, n-alkanes, is DNEL Long term-systemic	1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer) 734 mg/m3 (Worker) 367 mg/m3 (Consumer) 34 mg/m3 (Worker) <b>soalkanes, cyclics, &lt;2% aromatics</b> 125 mg/kg bw/day (Consumer) 125 mg/kg bw/day (Consumer)		
<b>Hydroo</b> Oral	DNEL Acute-systemic DNEL Long term-local DNEL Long term-systemic carbons, C9-C11, n-alkanes, is DNEL Long term-systemic	1468 mg/m3 (Worker) 734 mg/m3 (Consumer) 1468 mg/m3 (Worker) 367 mg/m3 (Consumer) 734 mg/m3 (Worker) 367 mg/m3 (Consumer) 34 mg/m3 (Worker) <b>soalkanes, cyclics, &lt;2% aromatics</b> 125 mg/kg bw/day (Consumer)		

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	(Contd. of page
Initialative DIVEL Long termi-sy	stemic 185 mg/m3 (Consumer)
	871 mg/m3 (Worker)
PNECs	
141-78-6 ethyl acetate	
PNEC Freshwater	0.26 mg/l (Undefind)
PNEC Freshwater sediment	0.34 mg/kg (Undefind)
PNEC Marine water	0.026 mg/l (Undefind)
PNEC Marine water sediment	0.034 mg/kg (Undefind)
PNEC Sewage Treatment Plant	650 mg/l (Undefind)
PNEC Soil	0.22 mg/kg (Undefind)
Additional information: The li	ists valid during the making were used as basis.
use self-contained respiratory pr Filter AX/P2	rerages and feed. and contaminated clothing at the end of work. rosols. skin. pollution use respiratory filter device. In case of intensive or longer exposure
Selection of the glove material of <b>Material of gloves</b> The selection of the suitable glo and varies from manufacturer to resistance of the glove material application. Nitrile rubber, NBR Recommended thickness of the <b>Penetration time of glove mate</b>	

observed.

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Eye protection:	(Contd. of pag
Safety glasses	
Tightly sealed goggles	
Body protection: Use protective suit	t
SECTION 9: Physical and ch	nemical properties
9.1 Information on basic physical a General Information	Ind chemical properties
Appearance: Form:	Aerosol
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. -44 °C
Flash point:	-4 °C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	270 °C
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
• Explosion limits:	
Lower:	0.6 Vol %
Upper:	11.5 Vol %
· Vapour pressure at 20 °C:	8300 hPa
Density at 20 °C:	0.6999 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wat	ter): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content: Organic solvents:	100.0 %
Solids content:	0.8 %
9.2 Other information	No further relevant information available.

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#### **SECTION 10: Stability and reactivity**

• 10.1 Reactivity No further relevant information available.

10.2 Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

## · Acute toxicity

## · LD/LC50 values relevant for classification:

141-78-6 ethyl acetate

Oral	LD50	4100 mg/kg (mouse)
Inhalative	LC50/4 h	1600 mg/l (rat)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)

Inhalative LC50 (4h) 4951 mg/m3 (rat)

### 64742-95-6 Solvent naphtha (petroleum), light arom. Benzene<0.1%

LD50 >6800 mg/kg (rat) Oral LD50 Dermal >3400 mg/kg (rabbit)

Inhalative LC50/4 h >10.2 mg/l (rat)

Primary irritant effect:

• Skin corrosion/irritation Based on available data, the classification criteria are not met.

· Serious eye damage/irritation

Causes serious eye irritation.

• Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.

• **Reproductive toxicity** Based on available data, the classification criteria are not met.

- STOT-single exposure
- May cause drowsiness or dizziness.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard

May be fatal if swallowed and enters airways.

#### **SECTION 12: Ecological information**

### · 12 1 Toxicity

12.1 IOAICITY		
· Aquatic toxicity:		
141-78-6 ethyl acetate		
EC50	7.4 mg/l (Pseudomonas fluorescens)	
EC50/48h	0.164 mg/l (Daphnia magna)	
	3.3 mg/l (Scenedesmus subspicatus)	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		
EL0 (48h)	1000 mg/l (Daphnia magna)	

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EL50 (72h)	>1000 mg/l (Pseudokirchneriella subcapitata)	
LL50 (96h)	>1000 mg/l (Oncorhynchus mykiss (96h))	
NOELR (72h)	100 mg/l (Pseudokirchneriella subcapitata)	
12.3 Bioaccun 12.4 Mobility	<b>ce and degradability</b> No further relevant information available. <b>Sulative potential</b> No further relevant information available. <b>in soil</b> No further relevant information available.	
• Ecotoxical eff • Remark: Harn		
· General notes	0	
Do not allow p Danger to drin Harmful to aqu <b>12.5 Results o</b> <b>PBT:</b> Not appl <b>vPvB:</b> Not app	<b>PBT and vPvB assessment</b> icable.	

## **SECTION 13: Disposal considerations**

#### · 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

14.1 UN-Number ADR, ADN, IMDG, IATA	UN1950
14.2 UN proper shipping name	
ADR, ADN	UN1950 AEROSOLS
IMDG	AEROSOLS
IATA	AEROSOLS, flammable
14.3 Transport hazard class(es)	
ADR	
Class Label	2 5F Gases. 2.1
ADN	
ADN/R Class:	2 5F
IMDG, IATA	
Class	2.1

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·Label	2.1	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
<ul> <li>14.6 Special precautions for user</li> <li>Danger code (Kemler):</li> <li>EMS Number:</li> </ul>	Warning: Gases. - F-D,S-U	
· 14.7 Transport in bulk according to An Marpol and the IBC Code	nex II of Not applicable.	
Transport/Additional information:		
<ul> <li>ADR</li> <li>Limited quantities (LQ)</li> <li>Excepted quantities (EQ)</li> <li>Transport category</li> <li>Tunnel restriction code</li> </ul>	1L Code: E0 Not permitted as Except 2 D	
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Except	ted Quantity
· UN "Model Regulation":	UN1950, AEROSOLS,	2.1

### **SECTION 15: Regulatory information**

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

Directive 2012/18/EU

- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations:
- Technical instructions (air):

Class	Share in %
NK	75-<100

- · VOC-CH 100.00 %
- · VOC-EU 699.9 g/l
- · Danish MAL Code 5-3
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

H220 Extremely flammable gas.

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

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Department issuing MSDS: Research & Development	
Contact: Peter Tossyn	
Abbreviations and acronyms:	
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (R	egulations Concerning the
International Transport of Dangerous Goods by Rail)	egulations concerning the
ICAO: International Civil Aviation Organisation	
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement c	oncerning the International
Carriage of Dangerous Goods by Road)	<b>3 1 1 1</b>
IMDG: International Maritime Code for Dangerous Goods	
IATA: International Air Transport Association	
GHS: Globally Harmonised 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)	
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation	n hazards, Denmark)
DNEL: Derived No-Effect Level (REACH)	
PNEC: Predicted No-Effect Concentration (REACH)	
LC50: Lethal concentration, 50 percent	
LD50: Lethal dose, 50 percent	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
Flam. Gas 1: Flammable gases, Hazard Category 1	
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1	
Press. Gas C: Gases under pressure: Compressed gas	
Flam. Liq. 2: Flammable liquids, Hazard Category 2	
Flam. Liq. 3: Flammable liquids, Hazard Category 3	
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2	
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3	
Asp. Tox. 1: Aspiration hazard, Hazard Category 1	
Sources st	
* Data compared to the previous version altered. *	