

# SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830



## PFA-430

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

#### 1.1. Product identifier

Product name : PFA-430  
Registration number REACH : Not applicable (mixture)  
Product type REACH : Mixture

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

##### 1.2.1 Relevant identified uses

Deodorizer

##### 1.2.2 Uses advised against

No uses advised against known

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier of the safety data sheet

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

##### Manufacturer of the product

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

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Skin Irrit.	category 2	H315: Causes skin irritation.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements



Signal word

H-statements

H315  
H319  
H411

P-statements

P280  
P264  
P302 + P352  
P305 + P351 + P338  
  
P337 + P313  
P391



Warning

Causes skin irritation.  
Causes serious eye irritation.  
Toxic to aquatic life with long lasting effects.

Wear protective gloves, protective clothing and eye protection/face protection.  
Wash hands thoroughly after handling.  
IF ON SKIN: Wash with plenty of water and soap.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
Collect spillage.

# PFA-430

## Supplemental information

EUH208

Contains: 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

### 2.3. Other hazards

No other hazards known

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
ethanol 01-2119457610-43	64-17-5 200-578-6	2.5%≤C<5%	Flam. Liq. 2; H225 Eye Irrit. 2; H319	(1)(2)(6)(8)(10)	Constituent
onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates 01-2120763656-43	61791-34-2 263-167-0	1%≤C<2.5%	Skin Corr. 1; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)(9)	Constituent
quaternary ammonium compounds, benzyl-C12-16- alkyldimethyl, chlorides	68424-85-1 270-325-2	0.01% ≤C<0.05%	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)(9)	Constituent

(1) For H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data

(8) Specific concentration limits, see heading 16

(9) M-factor, see heading 16

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General:

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

#### After inhalation:

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

#### After skin contact:

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

#### After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

#### After ingestion:

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

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

#### 4.2.1 Acute symptoms

##### After inhalation:

No effects known.

##### After skin contact:

Tingling/irritation of the skin.

##### After eye contact:

Irritation of the eye tissue.

##### After ingestion:

No effects known.

#### 4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

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Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.  
Major fire: Class B foam (alcohol-resistant), Water spray if puddle cannot expand.

## 5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.  
Major fire: Water; risk of puddle expansion.

## 5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed.

## 5.3. Advice for firefighters

### 5.3.1 Instructions:

Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

### 5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

No naked flames.

#### 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034).

#### Suitable protective clothing

See heading 8.2

### 6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

### 6.3. Methods and material for containment and cleaning up

Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with a soap solution. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

See heading 13.

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Do not discharge the waste into the drain.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1 Safe storage requirements:

Storage temperature: 5 °C - 35 °C. Keep out of direct sunlight. Meet the legal requirements.

#### 7.2.2 Keep away from:

No data available.

#### 7.2.3 Suitable packaging material:

No data available

#### 7.2.4 Non suitable packaging material:

No data available

### 7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 Occupational exposure

##### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### Belgium

Alcool éthylique	Time-weighted average exposure limit 8 h	1000 ppm
	Time-weighted average exposure limit 8 h	1907 mg/m <sup>3</sup>

#### The Netherlands

Ethanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	260 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	1900 mg/m <sup>3</sup>

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## France

Alcool éthylique	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1000 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m <sup>3</sup>
	Short time value (VL: Valeur non réglementaire indicative)	5000 ppm
	Short time value (VL: Valeur non réglementaire indicative)	9500 mg/m <sup>3</sup>

## Germany

Ethanol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	380 mg/m <sup>3</sup>

## UK

Ethanol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1000 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1920 mg/m <sup>3</sup>

## USA (TLV-ACGIH)

Ethanol	Short time value (TLV - Adopted Value)	1000 ppm
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### b) National biological limit values

If limit values are applicable and available these will be listed below.

#### 8.1.2 Sampling methods

Product name	Test	Number
Ethanol (Volatile Organic compounds)	NIOSH	2549
ethanol	NIOSH	8002
Ethyl Alcohol (Ethanol)(Alcohols I)	NIOSH	1400
Ethyl Alcohol	OSHA	100

#### 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

#### 8.1.4 Threshold values

##### DNEL/DMEL - Workers

ethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	950 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	343 mg/kg bw/day	

##### DNEL/DMEL - General population

ethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	114 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	206 mg/kg bw/day	
	Long-term systemic effects oral	87 mg/kg bw/day	

##### PNEC

ethanol

Compartments	Value	Remark
Fresh water	0.96 mg/l	
Marine water	0.79 mg/l	
Fresh water (intermittent releases)	2.75 mg/l	
STP	580 mg/l	
Fresh water sediment	3.6 mg/kg sediment dw	
Marine water sediment	2.9 mg/kg sediment dw	
Soil	0.63 mg/kg soil dw	
Oral	0.38 g/kg food	

#### 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

### 8.2.2 Individual protection measures, such as personal protective equipment

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

#### a) Respiratory protection:

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

#### b) Hand protection:

Protective gloves against chemicals (EN 374).

#### c) Eye protection:

Face shield (EN 166).

#### d) Skin protection:

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Protective clothing (EN 14605 or EN 13034).

## 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical form	Liquid
Odour	Pleasant odour
Odour threshold	No data available in the literature
Colour	Colourless
Particle size	Not applicable (mixture)
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available in the literature
Kinematic viscosity	No data available in the literature
Melting point	No data available in the literature
Boiling point	No data available in the literature
Evaporation rate	No data available in the literature
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water ; complete
Relative density	1.0 ; 20 °C
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	> 90 °C
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	8.9

### 9.2. Other information

Absolute density	1000 kg/m <sup>3</sup> ; 20 °C
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Heating increases the fire hazard. Basic reaction.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

#### Precautionary measures

Keep away from naked flames/heat.

### 10.5. Incompatible materials

No data available.

### 10.6. Hazardous decomposition products

Upon combustion: CO and CO<sub>2</sub> are formed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### 11.1.1 Test results

#### Acute toxicity

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No (test) data on the mixture available

Judgement is based on the relevant ingredients

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## ethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	10470 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation (vapours)	LC50	Equivalent to OECD 403	124.7 mg/l air	4 h	Rat (male / female)	Experimental value	

## onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral						Data waiving	

### Conclusion

Not classified for acute toxicity

### Corrosion/irritation

#### PFA-430

No (test)data on the mixture available

Classification is based on the relevant ingredients

#### ethanol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405	14 day(s)	24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating	OECD 404	24 h	1; 2; 3; 4; 5; 7 days	Rabbit	Experimental value	Single treatment

## onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye						Data waiving	
Eye	Serious eye damage; category 1					Literature study	
Skin	Corrosive			24; 48; 72 hours	Rabbit	Experimental value	

Data waiving for eye corrosion based on corrosive properties

### Conclusion

Causes skin irritation.

Causes serious eye irritation.

Not classified as irritating to the respiratory system

### Respiratory or skin sensitisation

#### PFA-430

No (test)data on the mixture available

Judgement is based on the relevant ingredients

#### ethanol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 429			Mouse (male)	Experimental value	
Inhalation (vapours)	Not sensitizing				Rat (male / female)	Experimental value	

## onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin						Data waiving	

### Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

### Specific target organ toxicity

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No (test)data on the mixture available

Judgement is based on the relevant ingredients

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# PFA-430

## ethanol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	3160 mg/kg	Liver; kidney	No effect	7 weeks (daily) - 14 weeks (daily)	Rat (male)	Experimental value
Dermal								Data waiving
Inhalation (vapours)	LOAEC	Equivalent to OECD 453	1.3 mg/l air	Pituitary	Histology	12 month(s)	Rat (male / female)	Read-across

### Conclusion

Not classified for subchronic toxicity

### Mutagenicity (in vitro)

#### PFA-430

No (test)data on the mixture available

Judgement is based on the relevant ingredients

#### ethanol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	

#### onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	

### Mutagenicity (in vivo)

#### PFA-430

No (test)data on the mixture available

Judgement is based on the relevant ingredients

#### ethanol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Ambiguous (Oral (stomach tube))	Equivalent to OECD 478	5 days (1x / day)	Mouse (male)	General	Experimental value

### Conclusion

Not classified for mutagenic or genotoxic toxicity

### Carcinogenicity

#### PFA-430

No (test)data on the mixture available

Judgement is based on the relevant ingredients

#### ethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	≥ 1.3 ppm	24 month(s)	Rat (male / female)	No carcinogenic effect		Read-across
Oral (diet)	NOAEL	Equivalent to OECD 451	> 3000 mg/kg bw/day	104 weeks (daily)	Rat (male / female)	No carcinogenic effect		Experimental value

### Conclusion

Not classified for carcinogenicity

### Reproductive toxicity

#### PFA-430

No (test)data on the mixture available

Judgement is based on the relevant ingredients

#### ethanol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	≥ 20000 ppm	20 days (7h / day)	Rat (male)	No effect	Stomach	Experimental value
Maternal toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	16000 ppm	20 days (7h / day)	Rat (female)	No effect		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL (P)	Equivalent to OECD 416	20700 mg/kg bw/day	18 week(s)	Mouse (male / female)	No effect		Experimental value

### Conclusion

Not classified for reprotoxic or developmental toxicity

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## Toxicity other effects

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No (test) data on the mixture available

## Chronic effects from short and long-term exposure

### PFA-430

Skin rash/inflammation.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### PFA-430

No (test) data on the mixture available

Classification is based on the relevant ingredients

#### ethanol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	US EPA	15300 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	LC50	ASTM E729-80	5012 mg/l	48 h	Ceriodaphnia dubia	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	ErC50	Equivalent to OECD 201	275 mg/l	3 day(s)	Chlorella vulgaris	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish	ChV	US EPA	245 mg/l	30 day(s)	Pisces		Fresh water	QSAR; Lethal
Long-term toxicity aquatic crustacea	NOEC		9.6 mg/l	9 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Nominal concentration
Toxicity aquatic micro-organisms	EC50		5800 mg/l	4 h	Paramecium caudatum	Static system	Fresh water	Experimental value; Nominal concentration

#### onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity crustacea	EC50	OECD 202	0.09 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	0.021 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	EC10	OECD 201	0.016 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate

#### quatarnary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		0.85 mg/l	96 h	Pisces			Literature
Acute toxicity crustacea	EC50		0.016 mg/l	48 h	Crustacea			Literature
Toxicity algae and other aquatic plants	IC50		0.03 mg/l	96 h	Selenastrum sp.			Literature
	NOEC		0.001 mg/l - 0.01 mg/l		Selenastrum sp.			Literature

## Conclusion

Toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

#### ethanol

##### Biodegradation water

Method	Value	Duration	Value determination
	84 %; Oxygen consumption	20 day(s)	Experimental value

##### Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	40 h	500000 /cm <sup>3</sup>	Calculated value

#### onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

##### Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	0 %; GLP	29 day(s)	Experimental value

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quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

## Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	95.5 %	28 day(s)	Experimental value

## Conclusion

### Water

Contains non readily biodegradable component(s)

## 12.3. Bioaccumulative potential

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### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

ethanol

### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		1 - 4.5	72 h	Cyprinus carpio	Read-across

### Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		-0.35	24 °C	Experimental value

onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

### BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	70.79 l/kg; Fresh weight			Estimated value

### Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		7		Estimated value

quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

### BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF		79			Literature

## Conclusion

Does not contain bioaccumulative component(s)

## 12.4. Mobility in soil

ethanol

### (log) Koc

Parameter	Method	Value	Value determination
log Koc		0	Calculated value

### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	53.2 %		0.1 %	13.7 %	33.1 %	QSAR

onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

### (log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	5.612	Calculated value

quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

### (log) Koc

Parameter	Method	Value	Value determination
log Koc		> 5.8	

## Conclusion

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

Contains component(s) with potential for mobility in the soil

## 12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

## 12.6. Other adverse effects

PFA-430

### Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

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ethanol

Groundwater

Groundwater pollutant

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

##### European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

20 01 29\* (separately collected fractions (except 15 01): detergents containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste.

Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

#### 13.1.3 Packaging/Container

##### European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

## SECTION 14: Transport information

### Road (ADR)

#### 14.1. UN number

UN number	3082
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#### 14.2. UN proper shipping name

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
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#### 14.3. Transport hazard class(es)

Hazard identification number	90
Class	9
Classification code	M6

#### 14.4. Packing group

Packing group	III
Labels	9

#### 14.5. Environmental hazards

Environmentally hazardous substance mark	yes
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#### 14.6. Special precautions for user

Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Rail (RID)

#### 14.1. UN number

UN number	3082
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#### 14.2. UN proper shipping name

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
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#### 14.3. Transport hazard class(es)

Hazard identification number	90
Class	9
Classification code	M6

#### 14.4. Packing group

Packing group	III
Labels	9

#### 14.5. Environmental hazards

Environmentally hazardous substance mark	yes
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#### 14.6. Special precautions for user

Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601

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Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
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## Inland waterways (ADN)

14.1. UN number	
UN number	3082
14.2. UN proper shipping name	
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
14.3. Transport hazard class(es)	
Class	9
Classification code	M6
14.4. Packing group	
Packing group	III
Labels	9
14.5. Environmental hazards	
Environmentally hazardous substance mark	yes
14.6. Special precautions for user	
Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

## Sea (IMDG/IMSBC)

14.1. UN number	
UN number	3082
14.2. UN proper shipping name	
Proper shipping name	environmentally hazardous substance, liquid, n.o.s. (onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
14.3. Transport hazard class(es)	
Class	9
14.4. Packing group	
Packing group	III
Labels	9
14.5. Environmental hazards	
Marine pollutant	P
Environmentally hazardous substance mark	yes
14.6. Special precautions for user	
Special provisions	274
Special provisions	335
Special provisions	969
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	
Annex II of MARPOL 73/78	Not applicable, based on available data

## Air (ICAO-TI/IATA-DGR)

14.1. UN number	
UN number	3082
14.2. UN proper shipping name	
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates)
14.3. Transport hazard class(es)	
Class	9
14.4. Packing group	
Packing group	III
Labels	9
14.5. Environmental hazards	
Environmentally hazardous substance mark	yes
14.6. Special precautions for user	
Special provisions	A158
Special provisions	A197
Special provisions	A97
Passenger and cargo transport	
Limited quantities: maximum net quantity per packaging	30 kg G

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## SECTION 15: Regulatory information

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

#### European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
2.6 % - 5.25 %	

European drinking water standards (Directive 98/83/EC)

onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates

Parameter	Parametric value	Note	Reference
Sulphate	250 mg/l		Listed in Annex I, Part C, of Directive 98/83/EC on the quality of water intended for human consumption.

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· ethanol	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage"; b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled H304, intended for supply to the general public. 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'
· ethanol	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — "whoopie" cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: "For professional users only". 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC. 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

#### National legislation Belgium

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No data available

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## National legislation The Netherlands

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Waterbezwaarlijkheid	A (2); Algemene Beoordelingsmethodiek (ABM)
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### ethanol

Huidopname (wettelijk)	Ethanol; H
SZW - Lijst van kankerverwekkende stoffen	Ethanol; Listed in SZW-list of carcinogenic substances
SZW - Lijst van voor de voortplanting giftige stoffen (ontwikkeling)	ethanol / ethylalcohol; 1A; May damage the unborn child.
SZW - Lijst van voor de voortplanting giftige stoffen (vruchtbaarheid)	ethanol / ethylalcohol; 1A; May damage fertility.
SZW - Lijst van voor de voortplanting giftige stoffen (borstvoeding)	ethanol / ethylalcohol; May cause harm to breastfed babies

## National legislation France

### PFA-430

No data available

## National legislation Germany

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WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
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### ethanol

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Ethanol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
<u>onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates</u>	
TA-Luft	5.2.5/I

## National legislation United Kingdom

### PFA-430

No data available

## Other relevant data

### PFA-430

No data available

### ethanol

IARC - classification	1; Alcohol beverages
TLV - Carcinogen	Ethanol; A3

## 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

## SECTION 16: Other information

### Full text of any H-statements referred to under heading 3:

- H225 Highly flammable liquid and vapour.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- 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.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ERC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process

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vPvB

very Persistent & very Bioaccumulative

## M-factor

onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates	10	Acute	ECHA (registration dossier)
onium compounds, morpholinium, 4-ethyl-4-soya alkyl, Et sulfates	1	Chronic (NRD)	ECHA (registration dossier)
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	10	Acute	Customer information THOR (2014-10-27)
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	1	Chronic	Customer information THOR (2014-10-27)

## Specific concentration limits CLP

ethanol	C ≥ 50 %	Eye Irrit. 2; H319	ECHA
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The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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