SAFETY DATA SHEET



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

NOVALEAK FOAM

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

1.1. Product identifier

Product name : NOVALEAK FOAM **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

Gas leak detector

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

2 +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

2 +32 14 85 97 37

4 +32 14 85 97 38

info@tec7.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

Wear eve protection

Do not breathe spray.

Class	Category	Hazard statements
Aerosol	category 3	H229: Pressurised container: May burst if heated.
STOT RE	category 2	H373: May cause damage to organs (kidneys) through prolonged or repeated exposure if swallowed.
Eye Irrit.	category 2	H319: Causes serious eye irritation.

2.2. Label elements





Contains: ethanediol.

Warning
Pressurised container: May burst if heated.
May cause damage to organs (kidneys) through prolonged or repeated exposure if swallowed.
Causes serious eye irritation.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not pierce or burn, even after use.

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

P280

P260

http://www.big.be

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Reason for revision: 5; 15; 16 Revision number: 0201

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Product number: 39071

Date of revision: 2017-10-31

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

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
ethanediol	107-21-1	12.5%	Acute Tox. 4; H302	(1)(2)(6)(10)	Constituent
01-2119456816-28	203-473-3	<c<20%< td=""><td>STOT RE 2; H373</td><td></td><td></td></c<20%<>	STOT RE 2; H373		
alcohols, C9-C16, ethoxylated	97043-91-9	1% <c<2.5%< td=""><td>Acute Tox. 4; H302</td><td>(1)(2)</td><td>Constituent</td></c<2.5%<>	Acute Tox. 4; H302	(1)(2)	Constituent
			Eve Dam. 1: H318		

- (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
- (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

If you feel unwell, seek medical advice.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

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:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher.

5.1.2 Unsuitable extinguishing media:

Small fire: Quick-acting CO2 extinguisher, Water (water can be used to control jet flame), Foam.

Major fire: Water (water can be used to control jet flame), Foam.

5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed. Pressurised container: May burst if heated.

5.3. Advice for firefighters

Reason for revision: 5; 15; 16 Publication date: 2003-02-14

Date of revision: 2017-10-31

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5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistant risk of physical explosion.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

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. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Dam up the liquid spill.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. 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. Gas/vapour heavier than air at 20°C. Observe strict hygiene.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Store in a cool area. Keep out of direct sunlight. Fireproof storeroom. Ventilation at floor level. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, oxidizing agents.

7.2.3 Suitable packaging material:

Aerosol.

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.

_		
E	L	J

, ,,	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	20 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	52 mg/m ³
	Short time value (Indicative occupational exposure limit value)	40 ppm
	Short time value (Indicative occupational exposure limit value)	104 mg/m³

Belgium

Ethylèneglycol (en aérosol)		Time-weighted average exposure limit 8 h	20 ppm (M)
		Time-weighted average exposure limit 8 h	52 mg/m³ (M)
		Short time value	40 ppm (M)
		Short time value	104 mg/m³ (M)

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Date of revision: 2017-10-31

La mention "M" indique que lors d'une exposition supérieure à la valeur limite, des irritations apparaissent ou un danger d'intoxication aiguë existe. Le procédé de travail doit être conçu de telle façon que l'exposition ne dépasse jamais la valeur limite. Lors des mesurages, la période d'échantillonnage doit être aussi courte que possible afin de pouvoir effectuer des mesurages fiables. Le résultat des mesurages est calculé en fonction de la période d'échantillonnage.

The Netherlands

ine itemeranas	
Ethaan-1,2-diol (damp)	Time-weighted average exposure limit 8 h (Public occupational exposure 20 ppm limit value)
	Time-weighted average exposure limit 8 h (Public occupational exposure 52 mg/m³ limit value)
	Short time value (Public occupational exposure limit value) 40 ppm
	Short time value (Public occupational exposure limit value) 104 mg/m ³
Ethaan-1,2-diol (druppels)	Time-weighted average exposure limit 8 h (Public occupational exposure 3.9 ppm limit value)
	Time-weighted average exposure limit 8 h (Public occupational exposure 10 mg/m³ limit value)

France

Ethylèneglycol (vapeur)	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	20 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	52 mg/m³
	Short time value (VRI: Valeur réglementaire indicative)	40 ppm
	Short time value (VRI: Valeur réglementaire indicative)	104 mg/m ³

Germany

Ethandiol	Time-weighted average exposure limit 8 h (TRGS 900)	10 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	26 mg/m ³

UK

Ethane-1,2-diol particulate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m ³
Ethane-1,2-diol vapour	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	20 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	52 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	40 ppm
	Short time value (Workplace exposure limit (EH40/2005))	104 mg/m ³

USA (TLV-ACGIH)

Ethylene glycol	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	25 ppm (V)
	Short time value (TLV - Adopted Value)	50 ppm (V)
	Short time value (TLV - Adopted Value)	10 mg/m³ (I.H)

(V): Vapor fraction

(I,H): Inhalable fraction, Aerosol only

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
1,2-ethanediol	NIOSH	5500
Ethylene Glycol	NIOSH	5523
Ethylene Glycol	OSHA	2024

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 DNEL/PNEC values

DNEL/DMEL - Workers

<u>ethanediol</u>

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term local effects inhalation	35 mg/m ³	
	Long-term systemic effects dermal	106 mg/kg bw/day	

DNEL/DMEL - General population

ethanediol

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term local effects inhalation	7 mg/m³	
	Long-term systemic effects dermal	53 mg/kg bw/day	

PNEC

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ethanediol

Compartments	Value	Remark
Fresh water	10 mg/l	
Marine water	1 mg/l	
Aqua (intermittent releases)	10 mg/l	
Fresh water sediment	37 mg/kg sediment dw	
Marine water sediment	3.7 mg/kg sediment dw	
STP	199.5 mg/l	
Soil	1.53 mg/kg soil dw	

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.

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:

Gloves.

c) Eye protection:

Protective goggles.

d) Skin protection:

Protective clothing.

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	Aerosol
Odour	Characteristic odour
Odour threshold	No data available
Colour	No data available on colour
Particle size	No data available
Explosion limits	3.2 - 53.0 vol %
Flammability	Non-flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Relative vapour density	>1
Vapour pressure	No data available
Solubility	Water ; insoluble
Relative density	1.0
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
рН	No data available

9.2. Other information

Absolute density	1017 kg/m³ ; 20 °C	
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SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Unstable on exposure to heat.

10.3. Possibility of hazardous reactions

Reason for revision: 5; 15; 16 Publication date: 2003-02-14

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No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

NOVALEAK FOAM

No (test)data on the mixture available

Judgement is based on the relevant ingredients

ethanediol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral			category 4			Annex VI	
Oral	LD50	BASF-internal standards	7712 mg/kg bw		Rat (male/female)	Experimental value	
Dermal	LD50	Developmental toxicity study	> 3500 mg/kg bw		Mouse (male/female)	Experimental value	
Inhalation (mist)	LC50	Teratogenicity study	> 2.5 mg/l air	6 h	Rat (male/female)	Experimental value	

In the light of practical experience, the classification for this substance is more stringent than the one based on test results of the used test organisms

alcohols, C9-C16, ethoxylated

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral			category 4			Literature study	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVALEAK FOAM

No (test)data on the mixture available

Classification is based on the relevant ingredients

<u>ethanediol</u>

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye		BASF-internal standards		1; 24 hours	Rabbit	Experimental value	
Skin		BASF-internal standards		8 days	Rabbit	Experimental value	

alcohols, C9-C16, ethoxylated

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye	Serious eye					Literature study	
	damage;						
	category 1						

Conclusion

Causes serious eye irritation.

Respiratory or skin sensitisation

NOVALEAK FOAM

No (test)data on the mixture available

Judgement is based on the relevant ingredients

 $\underline{\text{ethanediol}}$

Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin		Guinea pig maximisation test		Guinea pig (female)	Experimental value	

Reason for revision: 5; 15; 16 Publication date: 2003-02-14
Date of revision: 2017-10-31

Revision number: 0201 Product number: 39071 6 / 13

Conclusion

Not classified as sensitizing for skin Not classified as sensitizing for inhalation

Specific target organ toxicity

NOVALEAK FOAM

No (test)data on the mixture available

Classification is based on the relevant ingredients

<u>ethanediol</u>

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (diet)	NOEL	1 '	150 mg/kg bw/day	Kidney	No effect	16 weeks (daily)	` '	Experimental value
Oral (diet)	Dose level	1 '	500 mg/kg bw/day	,	Histopathologic al changes	16 weeks (daily)		Experimental value
Dermal	NOAEL	OECD 410	2220 mg/kg bw		Histopathologic al changes	4 weeks (daily, 5 days/week)	Dog (male)	Experimental value

Conclusion

May cause damage to organs (kidneys) through prolonged or repeated exposure if swallowed.

Mutagenicity (in vitro)

NOVALEAK FOAM

No (test)data on the mixture available

ethanediol

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value

Mutagenicity (in vivo)

NOVALEAK FOAM

No (test)data on the mixture available

Judgement is based on the relevant ingredients

ethanediol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Chromosome		Rat (male/female)		Experimental value
	aberration assay				

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVALEAK FOAM

No (test)data on the mixture available

Judgement is based on the relevant ingredients

 $\underline{\text{ethanediol}}$

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	- 0	Value determination
Oral	NOAEL	Carcinogenic	1000 mg/kg	24 month(s)	Rat			Experimental
		toxicity study	bw/day		(male/female)			value

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVALEAK FOAM

No (test)data on the mixture available

Judgement is based on the relevant ingredients

<u>ethanediol</u>

	Parameter	Method	Value	Exposure time	Species	Effect	- 0 -	Value determination
Developmental toxicity	NOAEC	Developmental toxicity study	<u> </u>	6 days (gestation, daily) - 15 days (gestation, daily)	Rat	No effect	l	Experimental value
Effects on fertility	NOAEL	3 generation study	> 1000 mg/kg bw/day		Rat (male/female)	No effect	l	Experimental value

Conclusion

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Not classified for reprotoxic or developmental toxicity

Toxicity other effects

NOVALEAK FOAM

No (test)data on the mixture available

Chronic effects from short and long-term exposure

NOVALEAK FOAM

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Affection of the renal tissue.

SECTION 12: Ecological information

12.1. Toxicity

NOVALEAK FOAM

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

ethanediol

<u>etrianeuloi</u>								
	Parameter	Method	Value	Duration	Species	_	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EPA 600/4- 90/027	72860 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value
Acute toxicity crustacea	EC50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	EC50	EPA 600/9- 78-018	6500 mg/l - 13000 mg/l	96 h	Pseudokirchnerie Ila subcapitata			Experimental value; Growth rate
Long-term toxicity fish	NOEC	EPA 600/4- 90/027	15380 mg/l	7 day(s)	Pimephales promelas			Experimental value
Long-term toxicity aquatic crustacea	NOEC	EPA 600/4- 90/027	8590 mg/l	7 day(s)	Ceriodaphnia sp.		Fresh water	Experimental value
Toxicity aquatic micro- organisms	EC20	ISO 8192	> 1995 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Read-across

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

ethanediol

Biodegradation water

	Method	Value	Duration	Value determination
	OECD 301A: DOC Die-Away Test	90 % - 100 %	10 day(s)	Experimental value
_				

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
SRC AOP v1.92	46.3 day(s)	500000 /cm³	Calculated value

Conclusion

Contains readily biodegradable component(s)

12.3. Bioaccumulative potential

NOVALEAK FOAM

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

ethanediol

Log Kow

Method	Remark	Value	Temperature	Value determination
		-1.36		Calculated

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

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ethanediol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v1.66	0	Calculated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.1327 Pa.m³/mol		25 °C		Calculated value

Percent distribution

Method	Fraction air	 Fraction sediment	Fraction soil	Fraction water	Value determination
Other	0.03 %	0 %	0 %	100 %	Calculated value

Conclusion

No (test)data on mobility of the components available

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

NOVALEAK FOAM

Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

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)

ethanediol

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

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. The waste code must be assigned by the user, preferably in consultation with the (environmental) authorities concerned.

13.1.2 Disposal methods

Specific treatment. Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment.

13.1.3 Packaging/Container

European Union

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

15 01 04 (metallic packaging).

SECTION 14: Transport information

Road (ADR)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	Aerosols
14.3. Transport hazard class(es)	
Hazard identification number	
Class	2
Classification code	5A
14.4. Packing group	
Packing group	
Labels	2.2
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Reason for revision: 5; 15; 16 Publication date: 2003-02-14
Date of revision: 2017-10-31

Revision number: 0201 Product number: 39071 9 / 13

4.1. UN number	4050
UN number	1950
4.2. UN proper shipping name	
Proper shipping name	Aerosols
4.3. Transport hazard class(es)	
Hazard identification number	20
Class	2
Classification code	5A
4.4. Packing group	
Packing group	
Labels	2.2
4.5. Environmental hazards	
Environmentally hazardous substance mark	no
4.6. Special precautions for user	Loo
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging
	liquids. A package shall not weigh more than 30 kg. (gross mass)
nd waterways (ADN)	
4.1. UN number	
UN number	1950
4.2. UN proper shipping name	
Proper shipping name	Aerosols
4.3. Transport hazard class(es)	7 (1 0 0 0 1)
Class	2
Classification code	5A
4.4. Packing group	JA.
Packing group	
Labels	2.2
4.5. Environmental hazards	
Environmentally hazardous substance mark	no
4.6. Special precautions for user	IIO
Special previsions	190
	327
Special provisions	344
Special provisions	
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging liquids. A package shall not weigh more than 30 kg. (gross mass)
	inquius. A package shall not weigh more than 50 kg. (gross mass)
(IMDG/IMSBC)	
4.1. UN number	
UN number	1950
4.2. UN proper shipping name	<u> </u>
Proper shipping name	aerosols
4.3. Transport hazard class(es)	<u>'</u>
Class	2.2
4.4. Packing group	·
Packing group	
Labels	2.2
4.5. Environmental hazards	
Marine pollutant	-
Environmentally hazardous substance mark	no
4.6. Special precautions for user	
Special previsions	63
Special provisions	190
Special provisions	277
Special provisions	327 344
Special provisions	
Special provisions	381
Special provisions	959
Limited quantities	Combination packagings: not more than 1 liter per inner packaging
	liquids. A package shall not weigh more than 30 kg. (gross mass)
4.7. Transport in bulk according to Annex II of Marpol and the	
	Tax and the first
Annex II of MARPOL 73/78	Not applicable

Reason for revision: 5; 15; 16 Publication date: 2003-02-14 Date of revision: 2017-10-31

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Air (ICAO-TI/IATA-DGR)

14.1. UN number		
UN number	1950	
14.2. UN proper shipping name		
Proper shipping name	Aerosols, non-flammable	
14.3. Transport hazard class(es)		
Class	2.2	
14.4. Packing group		
Packing group		
Labels	2.2	
14.5. Environmental hazards		
Environmentally hazardous substance mark	no	
14.6. Special precautions for user		
Special provisions	A98	
Special provisions	A145	
Special provisions	A167	
Special provisions	A802	
Limited quantities: maximum net quantity per packaging	30 kg G	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture <u>European legislation:</u>

VOC content Directive 2010/75/EU

VOC content	Remark
0 %	

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC and 2009/161/EU)

Product name	Skin resorption
Ethylene glycol	Skin

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.

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 R65 or 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 R65 or 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 R65 or 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 R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competen	and ase or seriam dange	rous substances, mixtures and articles.	
regarded as dangerous in accordance with Directive 1999/45/EC or are 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, 9.10, 2.12, 2.13 categories 1.3. Shall not be placed on the market. They cannot be placed on the market of the young agent, unless required for 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 ther than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1. (d) hazard class 5.1. Switch and be placed on the market, and are abelled with R65 or H304, the placed on the market in the young and the placed on the market in the young and the placed on the market in the young and the young 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 R65 or H304, the placed on the market in the young and the placed on the market in the young and the young and placed on the market in the young and the young and young a		, , ,	Conditions of restriction
	· ethanediol	regarded as dangerous in accordance with Directive 1999/45/EC or are 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;	— 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 R65 or 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 R65 or 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 R65 or 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 R65 or 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 th

National legislation Belgium

Reason for revision: 5; 15; 16 Publication date: 2003-02-14

Date of revision: 2017-10-31

Revision number: 0201 Product number: 39071 11 / 13

NOVALEAK FOAM

No data available

<u>ethanediol</u>

Résorption peau	Ethylèneglycol (en aérosol); D; La mention "D" signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux,
	constitue une partie importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par
	présence de l'agent dans l'air.

National legislation The Netherlands

NOVALEAK FOAM

Waterbezwaarlijkheid	B (4)	
thanediol control of the control of		
Huidopname (wettelijk)	Ethaan-1,2-diol (damp); H	

National legislation France

NOVALEAK FOAM

No data available

ethanediol

Risque de pénétration	Ethylèneglycol (vapeur); PP
percutanée	

National legislation Germany

NOVALEAK FOAM

	WGK	1; Classification water polluting based on the H-statements in compliance with Verwaltungsvorschrift wassergefährdender	
		Stoffe (VwVwS) of 27 July 2005 (Anhang 3) and Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen	
		(AwSV) of 18 April 2017 (group)	
<u>e</u>	<u>ethanediol</u>		
	TA-Luft	5.2.5	
	TROCCOCO DI IL I	ed PLV Print Leg 1, 10P L 1, 10P L 1 Al 20 L	

TA-Luft	5.2.5
TRGS900 - Risiko der	Ethandiol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen
Fruchtschädigung	Grenzwertes nicht befürchtet zu werden
Hautresorptive Stoffe	Ethandiol; H; Hautresorptiv

National legislation United Kingdom

NOVALEAK FOAM

No data available

<u>ethanediol</u>

Skin absorption	Ethane-1,2-diol particulate; Sk
	Ethane-1.2-diol vapour: Sk

Other relevant data

NOVALEAK FOAM

No data available

ethanediol

<u>e</u>	<u>trianedioi</u>	
	TLV - Carcinogen	Ethylene glycol; A4

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:

- H229 Pressurised container: May burst if heated.
- H302 Harmful if swallowed.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H373 May cause damage to organs (kidneys) through prolonged or repeated exposure if swallowed.

(*) INTERNAL CLASSIFICATION BY BIG

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

vPvB very Persistent & very Bioaccumulative

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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. Old versions must be destroyed. 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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