

according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 1 of 9

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

1.1. Product identifier

Fire Extinguisher Spray VEHICLES

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

Use of the substance/mixture

Extinguishing media

1.3. Details of the supplier of the safety data sheet

Company name: Prymos GmbH
Street: Siemensstraße 18
Place: D-63225 Langen

Telephone: +49 (0)6103 440 94-30 Telefax: +49 (0)6103 440 94-39

e-mail (Contact person): info@prymos.com 1.4. Emergency telephone +49 (0)6103 440 94-30

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Aerosol: Aerosol 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Pressurised container: May burst if heated.

May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

ethanediol

Signal word: Warning

Pictograms:



Hazard statements

H229 Pressurised container: May burst if heated.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

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 dust/fume/gas/mist/vapours/spray.

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

2.3. Other hazards

none

SECTION 3: Composition/information on ingredients

3.2. Mixtures





according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 2 of 9

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification according to Regul	ation (EC) No. 1272/2008 [CLP]	•			
107-21-1	ethanediol					
	203-473-3		01-2119456816-28			
	Acute Tox. 4, STOT RE 2; H302 H373					
112-34-5	112-34-5 2-(2-butoxyethoxy)ethanol					
	203-961-6	603-096-00-8	01-2119475104-44			
	Eye Irrit. 2; H319					

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move victim out of danger zone. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.

After inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Irritation to eyes, Nausea, Vomiting, Dizziness.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product acts as extinguishing media.

Unsuitable extinguishing media

not applicable

5.2. Special hazards arising from the substance or mixture

none

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures



Prymos GmbH

according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 3 of 9

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe vapour/aerosol.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Provide adequate ventilation. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations. Do not use in enclosed rooms.

Advice on protection against fire and explosion

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place.

Advice on storage compatibility

Do not store together with: Oxidising agent

Further information on storage conditions

Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F.

Protect against: Frost

7.3. Specific end use(s)

not applicable

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		STEL (15 min)	WEL
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL



according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 4 of 9

DNEL/DMEL values

CAS No	Substance						
DNEL type		Exposure route	Effect	Value			
107-21-1	ethanediol						
Worker DNEL,	long-term	inhalation	local	35 mg/m³			
Worker DNEL,	long-term	dermal	systemic	106 mg/kg bw/day			
Consumer DNEL, long-term		inhalation	local	7 mg/m³			
Consumer DNEL, long-term		dermal	systemic	53 mg/kg bw/day			

PNEC values

CAS No	Substance			
Environmental	Value			
107-21-1 ethanediol				
Freshwater	10 mg/l			
Marine water		1 mg/l		
Freshwater sediment		20,9 mg/kg		
Micro-organisms in sewage treatment plants (STP)		199,5 mg/l		
Soil		1,53 mg/kg		

8.2. Exposure controls

Appropriate engineering controls

Personal protective equipment has to be chosen in accordance with workplace specific conditions, e. g. concentration of the product. Chemical resistance has to be clarified with the supplier of protective equipment.

Protective and hygiene measures

Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately.

Eye/face protection

Wear eye/face protection.

Hand protection

Suitable material: Butyl caoutchouc (butyl rubber) (0,7 mm), NBR (Nitrile rubber) (0,4 mm), CR (polychloroprene, chloroprene rubber) (0,5 mm).

Breakthrough time (maximum wearing time) > 480 min.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Skin protection

Protective apron

Respiratory protection

Respiratory protection necessary at: insufficient ventilation

Suitable respiratory protection apparatus: Particle filter device (DIN EN 143)

Environmental exposure controls

See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Aerosol
Colour: light yellow
Odour: odourless

Test method



Prymos GmbH

according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 5 of 9

pH-Value (at 20 °C): 4 - 5 Active agent

Changes in the physical state

Melting point:
Initial boiling point and boiling range:
Initial boiling point and boiling range:
Inot applicable
Inot applicable
Inot applicable

Explosive properties

not explosive.

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable
not applicable

Oxidizing properties

Not oxidizing.

Vapour pressure: ca. 23 hPa Active agent

(at 20 °C)

Density (at 20 °C): 1,06 - 1.10 g/cm³ Active agent

Water solubility: miscible
Viscosity / dynamic: not determined
Viscosity / kinematic: not determined
Vapour density: not determined
Evaporation rate: not determined

9.2. Other information

none

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

none

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

Based on available data, the classification criteria are not met.



Prymos GmbH

according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 6 of 9

CAS No	Chemical name							
	Exposure routes	Method	Dose	Species	Source			
107-21-1	ethanediol							
	oral	LD50	1600 mg/kg	Rat				
	dermal	LD50	> 3500 mg/kg	Mouse				
112-34-5	2-(2-butoxyethoxy)ethanol							
	oral	LD50	5660 mg/kg	Rat				
	dermal	LD50	4120 mg/kg	Rabbit				

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

May cause damage to organs through prolonged or repeated exposure. (ethanediol)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

CAS No	Chemical name							
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source		
107-21-1	ethanediol							
	Acute fish toxicity	LC50	72860 mg/l	96 h	Pimephales promelas (fathead minnow)			
	Acute algae toxicity	ErC50 mg/l	6500 - 13000	96 h	Selenastrum capricornutum			
	Acute crustacea toxicity	EC50	> 100 mg/l	48 h	Daphnia magna (Big water flea)			
	Fish toxicity	NOEC	15380 mg/l	7 d	Pimephales promelas (fathead minnow)			
	Crustacea toxicity	NOEC	8590 mg/l	7 d	Ceriodaphnia spec			
112-34-5	2-(2-butoxyethoxy)ethanol							
	Acute fish toxicity	LC50	1300 mg/l	96 h	Lepomis macrochirus (Bluegill)			
	Acute algae toxicity	ErC50	> 100 mg/l		Scenedesmus sp.			
	Acute crustacea toxicity	EC50	> 100 mg/l	48 h	Daphnia magna			

12.2. Persistence and degradability

There are no data available on the mixture itself.



according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 7 of 9

CAS No	Chemical name						
	Method Value d Source						
	Evaluation						
107-21-1	ethanediol						
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	90 - 100	10				

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol	-1,36
112-34-5	2-(2-butoxyethoxy)ethanol	0,56

12.4. Mobility in soil

If product enters soil, it will be mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

none

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded

chemicals; gases in pressure containers (including halons) containing hazardous substances

Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING: ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances

Classified as hazardous waste.

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es): 2
14.4. Packing group: -

Hazard label: 2.2







according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 8 of 9

Classification code: 5A

Special Provisions: 190 327 344 625

Limited quantity: 1 L
Excepted quantity: E0
Transport category: 3
Tunnel restriction code: E

Other applicable information (land transport)

Transport as "limited quantity" according to chapter 3.4 ADR/RID.

Inland waterways transport (ADN)

14.1. UN number:UN 195014.2. UN proper shipping name:AEROSOLS

14.3. Transport hazard class(es):214.4. Packing group:-Hazard label:2.2



Classification code: 5A

Special Provisions: 190 327 344 625

Limited quantity: 1 L Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es):2.214.4. Packing group:-Hazard label:2.2



Marine pollutant:

Special Provisions: 63, 190, 277, 327, 344, 959

Limited quantity: 1000 mL Excepted quantity: E0 EmS: F-D, S-U

Air transport (ICAO)

14.1. UN number: UN 1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es):2.214.4. Packing group:-Hazard label:2.2



Special Provisions: A145 A167 A802

Limited quantity Passenger: 30 kg G Passenger LQ: Y203 Excepted quantity: E0



Prymos GmbH

according to Regulation (EC) No 1907/2006

Fire Extinguisher Spray VEHICLES

Print date: 08.06.2018 Page 9 of 9

IATA-packing instructions - Passenger:203IATA-max. quantity - Passenger:75 kgIATA-packing instructions - Cargo:203IATA-max. quantity - Cargo:150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

see section 6 - 8

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not relevant

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H229 Pressurised container: May burst if heated.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

Further Information

Data sources: Data arise from reference works and literature.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)