MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades)
24-93

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades) 24-93

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

Relevant uses: High temperature protection

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

EVOCHEM S.A.
Tzaverdella Place
133 41 PHILI , ATTICA - GREECE
Phone.: 0030 210 5590460 , 0030 210 5590155 -
Fax: 0030 210 6254737 , 0030 210 5590244
info@evochem.gr; vmergoupis@evochem.gr;
sales@evochem.gr
www.evochem.gr

1.4 Emergency telephone number: National Poisoning Center 2107793777

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Directive 67/548/EC and Directive 1999/45/EC:

This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) nº1907/2006 (REACH regulation).

F+: R12 - Extremely flammable
Xi: R36 - Irritating to eyes
Xn: R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed
R66 - Repeated exposure may cause skin dryness or cracking

CLP Regulation (EC) nº 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) nº 1272/2008.

Aerosol 1: Pressurised container: May burst if heated.
Aerosol 1: Flammable aerosols, Category 1
Eye Irrit. 2: Eye irritation, Category 2
Skin Irrit. 2: Skin irritation, Category 2
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3

2.2 Label elements:

Directive 67/548/EC and Directive 1999/45/EC:

In accordance with the legislation, the elements on the label are as follows:



R Phrases:

R12: Extremely flammable
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed
R36: Irritating to eyes
R66: Repeated exposure may cause skin dryness or cracking

S Phrases:

S2: Keep out of the reach of children
S46: If swallowed, seek medical advice immediately and show this container or label

Supplementary information:

P96: 94/1/EC–Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use
P97: 2008/47/EC–Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children

Substances that contribute to the classification:

Xylene (mixture of isomers)

- CONTINUED ON NEXT PAGE -

MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades)
24-93

SECTION 2: HAZARDS IDENTIFICATION (continue)

CLP Regulation (EC) nº 1272/2008:

Danger



Hazard statements:

Aerosol 1: H229 - Pressurised container: May burst if heated
Aerosol 1: H222 - Extremely flammable aerosol
Eye Irrit. 2: H319 - Causes serious eye irritation
Skin Irrit. 2: H315 - Causes skin irritation
STOT SE 3: H336 - May cause drowsiness or dizziness

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before use
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
P280: Wear protective gloves/protective clothing/eye protection/face protection
P410+P412: Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

Supplementary information:

EUH066: Repeated exposure may cause skin dryness or cracking

Substances that contribute to the classification

Acetone; Ethyl Acetate

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical description: Mixture composed of resins in solvents

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 67-64-1 EC: 200-662-2 Index: 606-001-00-8 REACH: 01-2119471330-49-XXXX	**Acetone**	ATP CLP00	**24 - <50 %**
	Directive 67/548/EC	F: R11; Xi: R36; R66; R67	
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX	**Xylene (mixture of isomers)**	ATP CLP00	**9,9 - <19 %**
	Directive 67/548/EC	Xi: R38; Xn: R20/21; R10	
	Regulation 1272/2008	Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH: 01-2119489370-35-XXXX	**Ethylbenzene**	ATP ATP06	**0,9 - <2,4 %**
	Directive 67/548/EC	F: R11; Xn: R20, R48/20, R65	
	Regulation 1272/2008	Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	
CAS: 141-78-6 EC: 205-500-4 Index: 607-022-00-5 REACH: 01-2119475103-46-XXXX	**Ethyl Acetate**	ATP CLP00	**0,9 - <2,4 %**
	Directive 67/548/EC	F: R11; Xi: R36; R66; R67	
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	
CAS: 67-56-1 EC: 200-659-6 Index: 603-001-00-X REACH: 01-2119433307-44-XXXX	**Methanol**	ATP CLP00	**0,9 - <2,4 %**
	Directive 67/548/EC	F: R11; T: R23/24/25, R39/23/24/25	
	Regulation 1272/2008	Acute Tox. 3: H301+H311+H331; Flam. Liq. 2: H225; STOT SE 1: H370 - Danger	
CAS: 111-76-2 EC: 203-905-0 Index: 603-014-00-0 REACH: 01-2119475108-36-XXXX	**2-butoxyethanol**	ATP CLP00	**<0,09 %**
	Directive 67/548/EC	Xi: R36/38; Xn: R20/21/22	
	Regulation 1272/2008	Acute Tox. 4: H302+H312+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16.

- CONTINUED ON NEXT PAGE -

MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades)
24-93

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the MSDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply,etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with luke warm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the MSDS of the product.

By consumption:

Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire exginguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO2). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflamation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertizing agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

This product is not classified as dangerous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

- CONTINUED ON NEXT PAGE -

SECTION 6: ACCIDENTAL RELEASE MEASURES (continue)

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 ºC

Maximun Temp.: 35 ºC

Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits		
Acetone	IOELV (8h)	500 ppm	1210 mg/m³
CAS: 67-64-1	IOELV (STEL)		
EC: 200-662-2	Year	2014	
Xylene (mixture of isomers)	IOELV (8h)	50 ppm	221 mg/m³
CAS: 1330-20-7	IOELV (STEL)	100 ppm	442 mg/m³
EC: 215-535-7	Year	2014	
Ethylbenzene	IOELV (8h)	100 ppm	442 mg/m³
CAS: 100-41-4	IOELV (STEL)	200 ppm	884 mg/m³
EC: 202-849-4	Year	2014	
Methanol	IOELV (8h)	200 ppm	260 mg/m³
CAS: 67-56-1	IOELV (STEL)		
EC: 200-659-6	Year	2014	

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Identification	Environmental limits		
2-butoxyethanol	IOELV (8h)	20 ppm	98 mg/m³
CAS: 111-76-2	IOELV (STEL)	50 ppm	246 mg/m³
EC: 203-905-0	Year	2014	

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Acetone	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 67-64-1	Dermal	Non-applicable	Non-applicable	186 mg/kg	Non-applicable
EC: 200-662-2	Inhalation	Non-applicable	2420 mg/m³	1210 mg/m³	Non-applicable
Xylene (mixture of isomers)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	289 mg/m³	289 mg/m³	77 mg/m³	Non-applicable
Ethylbenzene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	293 mg/m³	77 mg/m³	Non-applicable
Ethyl Acetate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 141-78-6	Dermal	Non-applicable	Non-applicable	63 mg/kg	Non-applicable
EC: 205-500-4	Inhalation	1468 mg/m³	1468 mg/m³	734 mg/m³	734 mg/m³
Methanol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 67-56-1	Dermal	40 mg/kg	Non-applicable	40 mg/kg	Non-applicable
EC: 200-659-6	Inhalation	260 mg/m³	260 mg/m³	260 mg/m³	260 mg/m³
2-butoxyethanol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 111-76-2	Dermal	89 mg/kg	Non-applicable	75 mg/kg	Non-applicable
EC: 203-905-0	Inhalation	663 mg/m³	246 mg/m³	98 mg/m³	Non-applicable

DNEL (Population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Acetone	Oral	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
CAS: 67-64-1	Dermal	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
EC: 200-662-2	Inhalation	Non-applicable	Non-applicable	200 mg/m³	Non-applicable
Xylene (mixture of isomers)	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	108 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	Non-applicable	Non-applicable	14,8 mg/m³	Non-applicable
Ethylbenzene	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	Non-applicable	15 mg/m³	Non-applicable
Ethyl Acetate	Oral	Non-applicable	Non-applicable	4,5 mg/kg	Non-applicable
CAS: 141-78-6	Dermal	Non-applicable	Non-applicable	37 mg/kg	Non-applicable
EC: 205-500-4	Inhalation	734 mg/m³	734 mg/m³	367 mg/m³	367 mg/m³
Methanol	Oral	8 mg/kg	Non-applicable	8 mg/kg	Non-applicable
CAS: 67-56-1	Dermal	8 mg/kg	Non-applicable	8 mg/kg	Non-applicable
EC: 200-659-6	Inhalation	50 mg/m³	50 mg/m³	50 mg/m³	50 mg/m³
2-butoxyethanol	Oral	13,4 mg/kg	Non-applicable	3,2 mg/kg	Non-applicable
CAS: 111-76-2	Dermal	44,5 mg/kg	Non-applicable	38 mg/kg	Non-applicable
EC: 203-905-0	Inhalation	426 mg/m³	123 mg/m³	49 mg/m³	Non-applicable

PNEC:

Identification				
Acetone	STP	100 mg/L	Fresh water	10,6 mg/L
CAS: 67-64-1	Soil	29,5 mg/kg	Marine water	1,06 mg/L
EC: 200-662-2	Intermittent	21 mg/L	Sediment (Fresh water)	30,4 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	3,04 mg/kg

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Identification				
Xylene (mixture of isomers)	STP	6,58 mg/L	Fresh water	0,327 mg/L
CAS: 1330-20-7	Soil	2,31 mg/kg	Marine water	0,327 mg/L
EC: 215-535-7	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg
Ethylbenzene	STP	9,6 mg/L	Fresh water	0,1 mg/L
CAS: 100-41-4	Soil	2,68 mg/kg	Marine water	0,01 mg/L
EC: 202-849-4	Intermittent	0,1 mg/L	Sediment (Fresh water)	13,7 mg/kg
	Oral	20 g/kg	Sediment (Marine water)	1,37 mg/kg
Ethyl Acetate	STP	650 mg/L	Fresh water	0,24 mg/L
CAS: 141-78-6	Soil	0,148 mg/kg	Marine water	0,024 mg/L
EC: 205-500-4	Intermittent	1,65 mg/L	Sediment (Fresh water)	1,15 mg/kg
	Oral	200 g/kg	Sediment (Marine water)	0,115 mg/kg
Methanol	STP	100 mg/L	Fresh water	154 mg/L
CAS: 67-56-1	Soil	23,5 mg/kg	Marine water	15,4 mg/L
EC: 200-659-6	Intermittent	1540 mg/L	Sediment (Fresh water)	570,4 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
2-butoxyethanol	STP	463 mg/L	Fresh water	8,8 mg/L
CAS: 111-76-2	Soil	3,13 mg/kg	Marine water	0,88 mg/L
EC: 203-905-0	Intermittent	9,1 mg/L	Sediment (Fresh water)	34,6 mg/kg
	Oral	20 g/kg	Sediment (Marine water)	Non-applicable

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the professional exposure limits. In case of using indivudual protection equipment they should have the ""CE marking"" in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles	CE CAT III	EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistence to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves	CE CAT III	EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face mask	CE CAT II	EN 166:2001 EN 167:2001 EN 168:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Bodily protection

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistent properties	CE CAT III	EN 13287:2008 EN ISO 20345:2011 EN 13832-1:2006 EN ISO 20344:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatil organic compounds:

With regard to Directive 1999/13/EC, this product has the following characteristics:

V.O.C. (Supply): 85,82 % weight

V.O.C. density at 20 ºC: 729,51 kg/m³ (729,51 g/L)

Average carbon number: 4,25

Average molecular weight: 71,58 g/mol

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 20 ºC: 729,51 kg/m³ (729,51 g/L)

EUlimit for the product (Cat. B.E): 840 g/L (2010)

Components: Non-applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC: Aerosol

Appearance: Fluid

Color: ■ Black

Odor: Characteristic

Volatility:

Boiling point at atmospheric pressure: -42 ºC (Propellant)

Vapour pressure at 20 ºC: Non-applicable *

Vapour pressure at 50 ºC: <300000 Pa (300 kPa)

Evaporation rate at 20 ºC: Non-applicable *

Product description:

Density at 20 ºC: 850 kg/m³

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades)
24-93

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)

Relative density at 20 ºC:	Non-applicable *
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	850 g/L (active ingredient)
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility property:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Recipient pressure:	Non-applicable *

Flammability:

Flash Point:	-104 ºC (Propellant)
Autoignition temperature:	410 ºC (Propellant)
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

9.2 Other information:

Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Avoid direct impact	Not applicable

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

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SECTION 11: TOXICOLOGICAL INFORMATION (continue)

No experimental information is available on the product itself in relation to the toxicological properties. When performing the danger classification on corrosive or irritant effects the recommendations included in section 3.2.5 of Annex VI of Directive 67/548/EC, in paragraphs b) and c) of section 3 of article 6 of Directive 1999/45/EC and in section 3.2.3.3.5. of Annex I of CLP Regulation were taken into account.

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.

B- Inhalation:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.

C- Contact with the skin and the eyes:

Produces skin inflammation.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

E- Sensitizing effects:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensibilizing effects. For more information see section 3.

F- Specific target organ toxicity (STOT)-time exposure:

Exposure in high concentrations can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion and in serious cases, loss of concentration.

G- Specific target organ toxicity (STOT)-repeated exposure:

Repeated exposure may cause skin dryness or cracking

H- Aspiration hazard:

Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Xylene (mixture of isomers)	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg	Rat
EC: 215-535-7	LC50 inhalation	11 mg/L (4 h)	Rat
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabbit
EC: 202-849-4	LC50 inhalation	17,2 mg/L (4 h)	Rat
Ethyl Acetate	LD50 oral	4100 mg/kg	Rat
CAS: 141-78-6	LD50 dermal	20000 mg/kg	Rabbit
EC: 205-500-4	LC50 inhalation	Non-applicable	
Methanol	LD50 oral	100 mg/kg	Rat
CAS: 67-56-1	LD50 dermal	300 mg/kg	Rabbit
EC: 200-659-6	LC50 inhalation	3 mg/L (4 h)	Rat
Acetone	LD50 oral	5800 mg/kg	Rat
CAS: 67-64-1	LD50 dermal	7426 mg/kg	Rabbit
EC: 200-662-2	LC50 inhalation	76 mg/L (4 h)	Rat
2-butoxyethanol	LD50 oral	500 mg/kg	Rat
CAS: 111-76-2	LD50 dermal	1100 mg/kg	Rat
EC: 203-905-0	LC50 inhalation	11 mg/L (4 h)	Rat

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the ecotoxicological properties of the product itself is not available

12.1 Toxicity:

Identification	Acute toxicity		Specie	Genus
Acetone	LC50	5540 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 67-64-1	EC50	23,5 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-662-2	EC50	3400 mg/L (48 h)	Chlorella pyrenoidosa	Alga
Xylene (mixture of isomers)	LC50	13,5 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 1330-20-7	EC50	0,6 mg/L (96 h)	Gammarus lacustris	Crustacean
EC: 215-535-7	EC50	10 mg/L (72 h)	Skeletonema costatum	Alga
Ethylbenzene	LC50	42,3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 100-41-4	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-849-4	EC50	63 mg/L (3 h)	Chlorella vulgaris	Alga
Ethyl Acetate	LC50	230 mg/L (96 h)	Pimephales promelas	Fish
CAS: 141-78-6	EC50	717 mg/L (48 h)	Daphnia magna	Crustacean
EC: 205-500-4	EC50	3300 mg/L (48 h)	Scenedesmus subspicatus	Alga
Methanol	LC50	15400 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 67-56-1	EC50	12000 mg/L (96 h)	Nitrocra spinipes	Crustacean
EC: 200-659-6	EC50	530 mg/L (168 h)	Microcystis aeruginosa	Alga
2-butoxyethanol	LC50	1490 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 111-76-2	EC50	1815 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-905-0	EC50	911 mg/L (72 h)	Pseudokirchneriella subcapitata	Alga

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Acetone	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 67-64-1	COD	Non-applicable	Period	28 days
EC: 200-662-2	BOD5/COD	0.96	% Biodegradable	96 %
Ethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 100-41-4	COD	Non-applicable	Period	14 days
EC: 202-849-4	BOD5/COD	Non-applicable	% Biodegradable	90 %
Ethyl Acetate	BOD5	1.36 g O2/g	Concentration	100 mg/L
CAS: 141-78-6	COD	1.69 g O2/g	Period	14 days
EC: 205-500-4	BOD5/COD	0.81	% Biodegradable	83 %
Methanol	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 67-56-1	COD	1.42 g O2/g	Period	14 days
EC: 200-659-6	BOD5/COD	Non-applicable	% Biodegradable	92 %
2-butoxyethanol	BOD5	0.71 g O2/g	Concentration	100 mg/L
CAS: 111-76-2	COD	2.2 g O2/g	Period	14 days
EC: 203-905-0	BOD5/COD	0.32	% Biodegradable	96 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Acetone	BCF	1
CAS: 67-64-1	Pow Log	-0,24
EC: 200-662-2	Potential	Low
Xylene (mixture of isomers)	BCF	9
CAS: 1330-20-7	Pow Log	2,77
EC: 215-535-7	Potential	Low
Ethylbenzene	BCF	1
CAS: 100-41-4	Pow Log	3,15
EC: 202-849-4	Potential	Low
Ethyl Acetate	BCF	30
CAS: 141-78-6	Pow Log	0,73
EC: 205-500-4	Potential	Moderate

- CONTINUED ON NEXT PAGE -

MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades)
24-93

SECTION 12: ECOLOGICAL INFORMATION (continue)

Identification	Bioaccumulation potential	
Methanol	BCF	3
CAS: 67-56-1	Pow Log	-0,77
EC: 200-659-6	Potential	Low
2-butoxyethanol	BCF	3
CAS: 111-76-2	Pow Log	0,83
EC: 203-905-0	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Acetone	Koc	1	Henry	2,929E+0 Pa·m³/mol
CAS: 67-64-1	Conclusion	Very High	Dry soil	Yes
EC: 200-662-2	Surface tension	23040 N/m (25 ºC)	Moist soil	Yes
Xylene (mixture of isomers)	Koc	202	Henry	5,249E+2 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
EC: 215-535-7	Surface tension	Non-applicable	Moist soil	Yes
Ethylbenzene	Koc	520	Henry	7,984E+2 Pa·m³/mol
CAS: 100-41-4	Conclusion	Moderate	Dry soil	Yes
EC: 202-849-4	Surface tension	28590 N/m (25 ºC)	Moist soil	Yes
Ethyl Acetate	Koc	59	Henry	1,358E+1 Pa·m³/mol
CAS: 141-78-6	Conclusion	Very High	Dry soil	Yes
EC: 205-500-4	Surface tension	23240 N/m (25 ºC)	Moist soil	Yes
Methanol	Koc	Non-applicable	Henry	Non-applicable
CAS: 67-56-1	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 200-659-6	Surface tension	23550 N/m (25 ºC)	Moist soil	Non-applicable
2-butoxyethanol	Koc	8	Henry	1,621E-1 Pa·m³/mol
CAS: 111-76-2	Conclusion	Very High	Dry soil	No
EC: 203-905-0	Surface tension	27290 N/m (25 ºC)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Directive 2008/98/EC)
16 05 04*	Gases in pressure containers (including halons) containing dangerous substances	Dangerous

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2000/532/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) nº1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2000/532/EC: Commission Decision of 3 May 2000

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2013 and RID 2013:

- CONTINUED ON NEXT PAGE -

MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades)
24-93

SECTION 14: TRANSPORT INFORMATION (continue)



14.1	**UN number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS, flammable
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Special regulations:	190, 327, 625
	Tunnel restriction code:	D
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 36-12:



14.1	**UN number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS, flammable
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	EmS Codes:	F-D, S-U
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2014:



14.1	**UN number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS, flammable
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Non-applicable

- CONTINUED ON NEXT PAGE -

MINOS FIRE COAT SPRAY - BLACK - Fire coat (650 Celsious grades)
24-93

SECTION 15: REGULATORY INFORMATION (continue)

Regulation (EC) 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009, 2009 No. 716
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits
The Waste Regulations 2011, 2011 No. 988
Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers
Commission Directive 94/1/EC of 6 January 1994 adapting some technicalities of Council Directive 75/324/EEC on the approximation of the laws of the relating Member States to aerosol dispensers
Commission Directive 2008/47/EC of 8 April 2008 amending, for the purposes of adapting to technical progress, Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers
Commission Directive 2013/10/EU of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) Nº 1907/2006 (Regulation (EC) Nº 453/2010)

Modifications related to the previous security card which concerns the ways of managing risks. :

Non-applicable

Text of R-phrases considered in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

Directive 67/548/EC and Directive 1999/45/EC:

R10: Flammable
R11: Highly flammable
R20: Harmful by inhalation
R20/21: Harmful by inhalation and in contact with skin
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed
R23/24/25: Toxic by inhalation, in contact with skin and if swallowed
R36: Irritating to eyes
R36/38: Irritating to eyes and skin
R38: Irritating to skin
R39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
R65: Harmful: may cause lung damage if swallowed
R66: Repeated exposure may cause skin dryness or cracking
R67: Vapours may cause drowsiness and dizziness

CLP Regulation (EC) nº 1272/2008:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continue)

Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled
Acute Tox. 4: H332 - Harmful if inhaled
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 2: H225 - Highly flammable liquid and vapour
Flam. Liq. 3: H226 - Flammable liquid and vapour
Skin Irrit. 2: H315 - Causes skin irritation
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure
STOT SE 1: H370 - Causes damage to organs
STOT SE 3: H336 - May cause drowsiness or dizziness

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://esis.jrc.ec.europa.eu
http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

- ADR: European agreement concerning the international carriage of dangerous goods by road
-IMDG: International maritime dangerous goods code
-IATA: International Air Transport Association
-ICAO: International Civil Aviation Organisation
-COD: Chemical Oxygen Demand
-BOD5: 5-day biochemical oxygen demand
-BCF: Bioconcentration factor
-LD50: Lethal Dose 50
-CL50: Lethal Concentration 50
-EC50: Effective concentration 50
-Log-POW: Octanol–water partition coefficient
-Koc: Partition coefficient of organic carbon

The information contained in this security data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -