Evochem® www.sersusever

## According to 1907/2006/EC (REACH), 2015/830/EU



# MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087

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

1.1 Product identifier: MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner

24-087

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

Relevant uses: Miscellaneous

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

Email: <a href="mailto:info@evochem.gr">info@evochem.gr</a> ymergoupis@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:

#### 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., H229

Aerosol 1: Flammable aerosols, Category 1, H222

Eye Irrit. 2: Eye irritation, Category 2, H319

STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

#### 2.2 Label elements:

#### CLP Regulation (EC) nº 1272/2008:

#### Danger





#### **Hazard statements:**

Aerosol 1: H229 - Pressurized container: May burst if heated

Aerosol 1: H222 - Extremely flammable aerosol Eye Irrit. 2: H319 - Causes serious eye 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

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P211: Do not spray on an open flame or other ignition source

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 contents and / or their container according to the separated collection system used in your municipality

#### Substances that contribute to the classification

Propan-2-ol; 1-methoxy-2-propanol; N-hexane

#### 2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance:

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) **Page 1/12** 

<sup>\*\*</sup> Changes with regards to the previous version



# MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087



#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Non-applicable

#### 3.2 Mixture:

Chemical description: Miscellaneous products

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 67-63-0 EC: 200-661-7 Index: 603-117-00-0 REACH 01-2119457558-25-XXX	Propan-2-ol 1           Regulation 1272/2008         Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	ATP CLP00	24 - <50 %
CAS: 64742-47-8 EC: 265-149-8 Index: 649-422-00-2 REACH 01-2119484819-18-XXX	Distillates (petroleum), hydrotreated light ¹  Regulation 1272/2008   Asp. Tox. 1: H304 - Danger	ATP CLP00	24 - <50 %
CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH 01-2119457435-35-XXX	1-methoxy-2-propanol <sup>1</sup> Regulation 1272/2008   Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	ATP ATP01	0,9 - <2,4 %
CAS: 110-54-3 EC: 203-777-6 Index: 601-037-00-0 REACH 01-2119480412-44-XXX	N-hexane 1   Regulation 1272/2008   Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361f; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger	ATP CLP00	0,9 - <2,4 %

<sup>&</sup>lt;sup>1</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

#### **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 SDS 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:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or shower the person affected if necessary thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

### By eye contact:

Rinse eyes thoroughly with lukewarm 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 SDS of the product.

#### By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. 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 extinguishers (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:

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) **Page 2/12** 

According to 1907/2006/EC (REACH), 2015/830/EU



## MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner



#### SECTION 5: FIREFIGHTING MEASURES (continued)

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 inflammation, 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 inertization 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:

Avoid spillage into an aqueous medium as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into an aqueous medium notify the relevant authority.

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

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid projections and pulverizations. 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 °C

Maximum Temp.: 35 °C

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



# MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087



### SECTION 7: HANDLING AND STORAGE (continued)

#### 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			
1-methoxy-2-propanol	IOELV (8h)	100 ppm	375 mg/m <sup>3</sup>	
CAS: 107-98-2	IOELV (STEL)	150 ppm	563 mg/m <sup>3</sup>	
EC: 203-539-1	Year	2017		
N-hexane	IOELV (8h)	20 ppm	72 mg/m <sup>3</sup>	
CAS: 110-54-3	IOELV (STEL)			
EC: 203-777-6	Year	2017		

#### **DNEL (Workers):**

		Short	exposure	Long	exposure
Identification		Systemic	Local	Systemic	Local
Propan-2-ol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 67-63-0	Dermal	Non-applicable	Non-applicable	888 mg/kg	Non-applicable
EC: 200-661-7	Inhalation	Non-applicable	Non-applicable	500 mg/m <sup>3</sup>	Non-applicable
1-methoxy-2-propanol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 107-98-2	Dermal	Non-applicable	Non-applicable	50,6 mg/kg	Non-applicable
EC: 203-539-1	Inhalation	Non-applicable	553,5 mg/m <sup>3</sup>	369 mg/m <sup>3</sup>	Non-applicable
N-hexane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 110-54-3	Dermal	Non-applicable	Non-applicable	11 mg/kg	Non-applicable
EC: 203-777-6	Inhalation	Non-applicable	Non-applicable	75 mg/m <sup>3</sup>	Non-applicable

#### **DNEL (General population):**

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
Propan-2-ol	Oral	Non-applicable	Non-applicable	26 mg/kg	Non-applicable
CAS: 67-63-0	Dermal	Non-applicable	Non-applicable	319 mg/kg	Non-applicable
EC: 200-661-7	Inhalation	Non-applicable	Non-applicable	89 mg/m <sup>3</sup>	Non-applicable
1-methoxy-2-propanol	Oral	Non-applicable	Non-applicable	3,3 mg/kg	Non-applicable
CAS: 107-98-2	Dermal	Non-applicable	Non-applicable	18,1 mg/kg	Non-applicable
EC: 203-539-1	Inhalation	Non-applicable	Non-applicable	43,9 mg/m³	Non-applicable
N-hexane	Oral	Non-applicable	Non-applicable	4 mg/kg	Non-applicable
CAS: 110-54-3	Dermal	Non-applicable	Non-applicable	5,3 mg/kg	Non-applicable
EC: 203-777-6	Inhalation	Non-applicable	Non-applicable	16 mg/m³	Non-applicable

### PNEC:

Identification				
Propan-2-ol	STP	2251 mg/L	Fresh water	140,9 mg/L
CAS: 67-63-0	Soil	28 mg/kg	Marine water	140,9 mg/L
EC: 200-661-7	Intermittent	140,9 mg/L	Sediment (Fresh water)	552 mg/kg
	Oral	160 g/kg	Sediment (Marine water)	552 mg/kg
1-methoxy-2-propanol	STP	100 mg/L	Fresh water	10 mg/L
CAS: 107-98-2	Soil	5,49 mg/kg	Marine water	1 mg/L
EC: 203-539-1	Intermittent	100 mg/L	Sediment (Fresh water)	52,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	5,2 mg/kg

#### 8.2 Exposure controls:

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



According to 1907/2006/EC (REACH), 2015/830/EU



# MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<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 more 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	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	Protective gloves against minor risks	CATI		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application

#### D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	CATII	EN 166:2001 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

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory complete body protection	Antistatic and fireproof protective clothing	CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2001 EN ISO 14116:2008/AC:2009 EN 1149-5:2008	Limited protection against flames.
Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	CAT III	EN 13287:2008 EN ISO 20345:2011	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

#### **Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 100 % weight
V.O.C. density at 20 °C: 820 kg/m³ (820 g/L)

Average carbon number: 6,53

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) **Page 5/12** 



#### **MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner** 24-087



### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Average molecular weight: 103,62 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 °C: 820 kg/m3 (820 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 °C: Aerosol Appearance: **Transparent** Colour: Colourless Odour: Characteristic Odour threshold: Non-applicable \*

Volatility:

-42 °C (Propellant) Boiling point at atmospheric pressure: Non-applicable \* Vapour pressure at 20 °C: <300000 Pa (300 kPa) Vapour pressure at 50 °C: Non-applicable \*

Evaporation rate at 20 °C:

**Product description:** 

Density at 20 °C: 820 kg/m3 Non-applicable Relative density at 20 °C: Non-applicable \* Dynamic viscosity at 20 °C: Kinematic viscosity at 20 °C: Non-applicable \* Kinematic viscosity at 40 °C: Non-applicable \*

Concentration: 820 g/L (active ingredient)

Non-applicable \* pH: Vapour density at 20 °C: Non-applicable \* Partition coefficient n-octanol/water 20 °C: Non-applicable \* Solubility in water at 20 °C: Non-applicable \* Solubility properties: Non-applicable \* Non-applicable \* Decomposition temperature: Melting point/freezing point: Non-applicable \* Recipient pressure: Non-applicable \* Explosive properties: Non-applicable \* Non-applicable \* Oxidising properties:

Flammability:

Flash Point: -104 °C (Propellant) Flammability (solid, gas): Non-applicable \* Autoignition temperature: 410 °C (Propellant) Lower flammability limit: Non-applicable \* Upper flammability limit: Non-applicable \*

**Explosive:** 

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

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) Page 6/12

According to 1907/2006/EC (REACH), 2015/830/EU



## MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087



#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Lower explosive limit: Non-applicable \*
Upper explosive limit: Non-applicable \*

9.2 Other information:

Surface tension at 20 °C:

Refraction index:

Non-applicable \*

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 because the product is stable under recommended storage conditions. 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
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

#### 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:

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

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 (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: 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.

#### B- Inhalation (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
  - Contact with the skin: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for skin contact. For more information see section 3.
  - Contact with the eyes: Produces eye damage after contact.

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) **Page 7/12** 



According to 1907/2006/EC (REACH), 2015/830/EU



# MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087

#### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
  - Carcinogenicity: 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.
  - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
  - Reproductive toxicity: 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.

#### E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) single exposure:

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

- G- Specific target organ toxicity (STOT)-repeated exposure:
  - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, however, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
  - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- 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
Propan-2-ol		LD50 oral	5280 mg/kg	Rat
CAS: 67-63-0		LD50 dermal	12800 mg/kg	Rat
EC: 200-661-7		LC50 inhalation	72,6 mg/L (4 h)	Rat
N-hexane		LD50 oral	5100 mg/kg	Mouse
CAS: 110-54-3		LD50 dermal	3000 mg/kg	Rabbit
EC: 203-777-6		LC50 inhalation	Non-applicable	

#### SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

#### 12.1 Toxicity:

Identification		Acute toxicity	Species	Genus
Propan-2-ol		9640 mg/L (96 h)	Pimephales promelas	Fish
CAS: 67-63-0	EC50	13299 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-661-7	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
1-methoxy-2-propanol	LC50	20800 mg/L (96 h)	Pimephales promelas	Fish
CAS: 107-98-2	EC50	23300 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-539-1	EC50	1000 mg/L (168 h)	Selenastrum capricornutum	Algae
N-hexane	LC50	4 mg/L (96 h)	Carassius auratus	Fish
CAS: 110-54-3	EC50	Non-applicable		
EC: 203-777-6	EC50	Non-applicable		

- CONTINUED ON NEXT PAGE -

#### 12.2 Persistence and degradability:

According to 1907/2006/EC (REACH), 2015/830/EU



# MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087



#### SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	D	egradability	Biodegradability		
Propan-2-ol	BOD5	1.19 g O2/g	Concentration	100 mg/L	
CAS: 67-63-0	COD	2.23 g O2/g	Period	14 days	
EC: 200-661-7	BOD5/COD	0.53	% Biodegradable	86 %	
1-methoxy-2-propanol	BOD5	Non-applicable	Concentration	100 mg/L	
CAS: 107-98-2	COD	Non-applicable	Period	28 days	
EC: 203-539-1	BOD5/COD	Non-applicable	% Biodegradable	90 %	
N-hexane	BOD5	Non-applicable	Concentration	100 mg/L	
CAS: 110-54-3	COD	Non-applicable	Period	14 days	
EC: 203-777-6	BOD5/COD	Non-applicable	% Biodegradable	100 %	

#### 12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential		
Propan-2-ol	BCF	3	
CAS: 67-63-0	Pow Log	0.05	
EC: 200-661-7	Potential	Low	
Distillates (petroleum), hydrotreated light	BCF	130	
CAS: 64742-47-8	Pow Log	3.3	
EC: 265-149-8	Potential	High	
1-methoxy-2-propanol	BCF	3	
CAS: 107-98-2	Pow Log	-0.44	
EC: 203-539-1	Potential	Low	
N-hexane	BCF	542	
CAS: 110-54-3	Pow Log	3.9	
EC: 203-777-6	Potential	High	

#### 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Propan-2-ol	Koc	1.5	Henry	8,207E-1 Pa·m³/mol
CAS: 67-63-0	Conclusion	Very High	Dry soil	Yes
EC: 200-661-7	Surface tension	2,24E-2 N/m (25 °C)	Moist soil	Yes
N-hexane	Koc	150	Henry	185425 Pa·m³/mol
CAS: 110-54-3	Conclusion	High	Dry soil	Yes
EC: 203-777-6	Surface tension	1,798E-2 N/m (25 °C)	Moist soil	Yes

#### 12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

#### 12.6 Other adverse effects:

Not described

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 04*	Gases in pressure containers (including halons) containing dangerous substances	Dangerous

#### Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP4 Irritant — skin irritation and eye damage, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

#### 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 (2014/955/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:

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) **Page 9/12** 

According to 1907/2006/EC (REACH), 2015/830/EU

## **Evochem**<sup>®</sup>

#### **MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner** 24-087



#### SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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, 2014/955/EU, Regulation (EU) No 1357/2014

#### **SECTION 14: TRANSPORT INFORMATION**

#### Transport of dangerous goods by land:

With regard to ADR 2017 and RID 2017:



14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

Transport hazard class(es): 2 Labels: 2 1 14.4 Packing group: N/A 14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: 190, 327, 344, 625

Tunnel restriction code:

Physico-Chemical properties: see section 9 Limited quantities: 1 I

14.7 Transport in bulk according to Non-applicable Annex II of Marpol and the **IBC Code:** 

#### Transport of dangerous goods by sea:

With regard to IMDG 38-16:

UN1950 14.1 UN number:

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 Environmental hazards: No

14.6 Special precautions for user

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

EmS Codes: F-D, S-U Physico-Chemical properties: see section 9

Limited quantities: 1 L

**14.7** Transport in bulk according to Non-applicable

Annex II of Marpol and the IBC Code:

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2017:



14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

14.3 Transport hazard class(es): 2.1 Lahels: 14.4 Packing group: N/A **14.5** Environmental hazards: Nο

14.6 Special precautions for user

Physico-Chemical properties: see section 9

Transport in bulk according to Non-applicable

Annex II of Marpol and the

IBC Code:

#### SECTION 15: REGULATORY INFORMATION

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) Page 10/12

According to 1907/2006/EC (REACH), 2015/830/EU



## MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087



#### SECTION 15: REGULATORY INFORMATION (continued)

#### 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

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

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

Article 95, REGULATION (EU) No 528/2012: Propan-2-ol (Product-type 1, 2, 4)

REGULATION (EU) No 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, etc ....):

Shall not be used in:

- —ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- —tricks and jokes,
- —games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

#### 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 product could be affected by sectorial legislation

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 2015/830)

#### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

CLP Regulation (EC) no 1272/2008 (SECTION 2, SECTION 16):

Precautionary statements

### Texts of the legislative phrases mentioned in section 2:

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness

H229: Pressurised container: May burst if heated

H222: Extremely flammable aerosol

#### Texts of the legislative phrases mentioned 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

#### CLP Regulation (EC) no 1272/2008:

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects

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

Repr. 2: H361f - Suspected of damaging fertility.

Skin Irrit. 2: H315 - Causes skin irritation

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure

STOT SE 3: H336 - May cause drowsiness or dizziness

Date of compilation: 19/03/2015 Revised: 13/11/2017 Version: 2 (Replaced 1) Page 11/12



# MINOS TECH CONTACT CLEANER SPRAY - Contact cleaner 24-087



#### SECTION 16: OTHER INFORMATION (continued)

#### Classification procedure:

Eye Irrit. 2: Calculation method STOT SE 3: Calculation method Aerosol 1: Calculation method Aerosol 1: Calculation method

#### 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://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 LC50: Lethal Concentration 50 EC50: Effective concentration 50

Log-POW: Octanol—water partition coefficient Koc: Partition coefficient of organic carbon



The information contained in this safety 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 safety data sheet only refers to this product, which should not be used for needs other than those specified.