A-0620VE - ORGANIC ANTIFREEZE G12 50% - GREEN ANTIFREEZE REFRIGERANT

Printing: 07/07/2020 Date of compilation: 28/06/2017 Revised: 04/06/2020 Version: 9 (Replaced 8)

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

1.1 Product identifier: A-0620VE - ORGANIC ANTIFREEZE G12 50% - GREEN ANTIFREEZE REFRIGERANT

UFI: Y84G-M9C6-F009-UK8T

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

Relevant uses: Antifreeze-coolant. For professional user/industrial user only.

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:

BALBOA CHEMICAL, S.L.
C/ Dinamismo, 3 - P.I. Los Olivos
28906 Getafe - Madrid - España
Phone.: +34918082529
info@flowquimica.es
https://www.flowquimica.es

1.4 Emergency telephone number: The information on the updated composition of the product has been sent to the Toxicological Information Service of Spain (National Institute of Toxicology and Forensic Scientists). In case of poisoning call the Toxicology Information Service 24 h: +34 91 562 04 20. Factory: +34 91 808 25 29 (8-14h).

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.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning

Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Skin Sens. 1A: H317 - May cause an allergic skin reaction

Precautionary statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+P352: IF ON SKIN: Wash with plenty of water
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

Substances that contribute to the classification

METHYLCHLOROISOTHIAZOLINONE / METHYLISOTHIAZOLINONE (CAS: 55965-84-9)

Additional Labelling (Annex XVII, REACH):

For use in industrial installations or professional treatment only

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Non-applicable

*** Changes with regards to the previous version*

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

3.2 Mixture:

Chemical description: Glycol/s

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 56-81-5 EC: 200-289-5 Index: Non-applicable REACH: 01-2119471987-18-XXXX	**Glycerol**(1)	Not classified	**50 - <60 %**
	Regulation 1272/2008		
CAS: 107-21-1 EC: 203-473-3 Index: 603-027-00-1 REACH: 01-2119456816-28-XXXX	**Ethanediol**(1)	ATP CLP00	**0,4 - <0,5 %**
	Regulation 1272/2008	Acute Tox. 4: H302 - Warning	
CAS: 29385-43-1 EC: 249-596-6 Index: Non-applicable REACH: 01-2119979081-35-XXXX	**Tolyltriazole**(1)	Self-classified	**<0,24 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Chronic 2: H411 - Warning	
CAS: 55965-84-9 EC: Non-applicable Index: 613-167-00-5 REACH: 01-2120764691-48-XXXX	**reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)**(2)	ATP ATP13	**<0,003 %**
	Regulation 1272/2008	Acute Tox. 2: H310+H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1C: H314; Skin Sens. 1A: H317; EUH071 - Danger	

(1) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830
(2) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

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

Other information:

Identification	M-factor	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Acute	100
CAS: 55965-84-9 EC: Non-applicable	Chronic	100

Identification	Specific concentration limit
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Non-applicable	% (w/w) >=0,6: Skin Corr. 1C - H314 0,06<= % (w/w) <0,6: Skin Irrit. 2 - H315 % (w/w) >=0,6: Eye Dam. 1 - H318 0,06<= % (w/w) <0,6: Eye Irrit. 2 - H319 % (w/w) >=0,0015: Skin Sens. 1A - H317

*** Changes with regards to the previous version*

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:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

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 water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

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SECTION 4: FIRST AID MEASURES (continued)

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:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet 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 self-contained breathing apparatus (SCBA). 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. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, 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. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

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

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SECTION 7: HANDLING AND STORAGE (continued)

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on 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

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: -20 ºC

Maximum Temp.: 40 ºC

Maximum time: 24 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 workplace

Identification	Occupational exposure limits		
Ethanediol	IOELV (8h)	20 ppm	52 mg/m³
CAS: 107-21-1 EC: 203-473-3	IOELV (STEL)	40 ppm	104 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Glycerol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 56-81-5	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 200-289-5	Inhalation	Non-applicable	Non-applicable	Non-applicable	56 mg/m³
Ethanediol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 107-21-1	Dermal	Non-applicable	Non-applicable	106 mg/kg	Non-applicable
EC: 203-473-3	Inhalation	Non-applicable	Non-applicable	Non-applicable	35 mg/m³
Tolyltriazole	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 29385-43-1	Dermal	Non-applicable	Non-applicable	0,5 mg/kg	Non-applicable
EC: 249-596-6	Inhalation	Non-applicable	Non-applicable	8,8 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Glycerol	Oral	Non-applicable	Non-applicable	229 mg/kg	Non-applicable
CAS: 56-81-5	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 200-289-5	Inhalation	Non-applicable	Non-applicable	Non-applicable	33 mg/m³
Ethanediol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 107-21-1	Dermal	Non-applicable	Non-applicable	53 mg/kg	Non-applicable
EC: 203-473-3	Inhalation	Non-applicable	Non-applicable	Non-applicable	7 mg/m³
Tolyltriazole	Oral	0,25 mg/kg	Non-applicable	0,25 mg/kg	Non-applicable
CAS: 29385-43-1	Dermal	Non-applicable	Non-applicable	0,25 mg/kg	Non-applicable
EC: 249-596-6	Inhalation	Non-applicable	Non-applicable	4,4 mg/m³	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

PNEC:

Identification				
Glycerol	STP	1000 mg/L	Fresh water	0,885 mg/L
CAS: 56-81-5	Soil	0,141 mg/kg	Marine water	0,0885 mg/L
EC: 200-289-5	Intermittent	8,85 mg/L	Sediment (Fresh water)	3,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,33 mg/kg
Tolyltriazole	STP	39,4 mg/L	Fresh water	0,008 mg/L
CAS: 29385-43-1	Soil	0,0024 mg/kg	Marine water	0,008 mg/L
EC: 249-596-6	Intermittent	0,086 mg/L	Sediment (Fresh water)	0,0025 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0025 mg/kg

8.2 Exposure controls:

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

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective 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 and vapours	CE CAT III	EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	CE CAT I		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 420:2003+A1:2009 and EN ISO 374-1:2016

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted 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.	CE CAT II	EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

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):	0 % weight
V.O.C. density at 20 ºC:	0 kg/m³ (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	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:	Liquid
Appearance:	Transparent
Colour:	Green
Odour:	Mild
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	≥150 ºC
Vapour pressure at 20 ºC:	2343 Pa
Vapour pressure at 50 ºC:	12344,4 Pa (12,34 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1095,3 - 1175,3 kg/m³
Relative density at 20 ºC:	1,135
Dynamic viscosity at 20 ºC:	606,58 cP
Kinematic viscosity at 20 ºC:	534,28 cSt
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	8,5 - 9,1
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 properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	≤-37 ºC
Explosive properties:	Non-applicable *

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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Oxidising properties:	Non-applicable *
Flammability:	
Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	400 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Explosive:	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

9.2 Other information:

Surface tension at 20 ºC:	Non-applicable *
Refraction index:	7 - 9

*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	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising 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. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

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

A- Ingestion (acute effect):

*** Changes with regards to the previous version*

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

- Acute toxicity : 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.
- 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. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

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: 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.

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.
  IARC: C.I.Acid Blue 1 (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, as it does not 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: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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

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.

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, as it does not contain substances classified as dangerous for this effect. 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, as it does not 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
Glycerol	LD50 oral	12600 mg/kg	Rat
CAS: 56-81-5	LD50 dermal	>2000 mg/kg	
EC: 200-289-5	LC50 inhalation	>20 mg/L (4 h)	
Ethanediol	LD50 oral	500 mg/kg	Rat
CAS: 107-21-1	LD50 dermal	9530 mg/kg	Rabbit
EC: 203-473-3	LC50 inhalation	>20 mg/L	
Tolyltriazole	LD50 oral	>2000 mg/kg	
CAS: 29385-43-1	LD50 dermal	>2000 mg/kg	
EC: 249-596-6	LC50 inhalation	>5 mg/L	

*** Changes with regards to the previous version*

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

Identification	Acute toxicity		Genus
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	LD50 oral	100 mg/kg	Rat
CAS: 55965-84-9	LD50 dermal	300 mg/kg	Rat
EC: Non-applicable	LC50 inhalation	Non-applicable	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

*** Changes with regards to the previous version*

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
Ethanediol	LC50	53000 mg/L (96 h)	Pimephales promelas	Fish
CAS: 107-21-1	EC50	51000 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-473-3	EC50	24000 mg/L (168 h)	Selenastrum capricornutum	Algae
Tolyltriazole	LC50	55 mg/L (96 h)	Cypronodon variegatus	Fish
CAS: 29385-43-1	EC50	9 mg/L (48 h)	Daphnia galeata	Crustacean
EC: 249-596-6	EC50	75 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	LC50	0.28 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 55965-84-9	EC50	0.16 mg/L (48 h)	Daphnia magna	Crustacean
EC: Non-applicable	EC50	0.018 mg/L (72 h)	Selenastrum capricornutum	Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Glycerol	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 56-81-5	COD	Non-applicable	Period	14 days
EC: 200-289-5	BOD5/COD	Non-applicable	% Biodegradable	63 %
Ethanediol	BOD5	0.47 g O2/g	Concentration	100 mg/L
CAS: 107-21-1	COD	1.29 g O2/g	Period	14 days
EC: 203-473-3	BOD5/COD	0.36	% Biodegradable	90 %
Tolyltriazole	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 29385-43-1	COD	Non-applicable	Period	28 days
EC: 249-596-6	BOD5/COD	Non-applicable	% Biodegradable	4 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Glycerol	BCF	3
CAS: 56-81-5	Pow Log	-1.76
EC: 200-289-5	Potential	Low
Ethanediol	BCF	10
CAS: 107-21-1	Pow Log	-1.36
EC: 203-473-3	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Glycerol	Koc	Non-applicable	Henry	Non-applicable
CAS: 56-81-5	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 200-289-5	Surface tension	6,516E-2 N/m (25 ºC)	Moist soil	Non-applicable

*** Changes with regards to the previous version*

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Identification	Absorption/desorption		Volatility	
Ethanediol	Koc	0	Henry	1,327E-1 Pa·m³/mol
CAS: 107-21-1	Conclusion	Very High	Dry soil	No
EC: 203-473-3	Surface tension	4,989E-2 N/m (25 ºC)	Moist soil	No
Tolyltriazole	Koc	90	Henry	Non-applicable
CAS: 29385-43-1	Conclusion	Very High	Dry soil	Non-applicable
EC: 249-596-6	Surface tension	Non-applicable	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

*** Changes with regards to the previous version*

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 01 15	antifreeze fluids other than those mentioned in 16 01 14	Dangerous

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

HP14 Ecotoxic

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:

In accordance with Annex II of Regulation (EC) No 1907/2006 (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 2019 and RID 2019:

14.1 UN number: Non-applicable
14.2 UN proper shipping name: Non-applicable
14.3 Transport hazard class(es): Non-applicable
Labels: Non-applicable
14.4 Packing group: Non-applicable
14.5 Environmental hazards: No
14.6 Special precautions for user
Special regulations: Non-applicable
Tunnel restriction code: Non-applicable
Physico-Chemical properties: see section 9
Limited quantities: Non-applicable
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

- CONTINUED ON NEXT PAGE -

SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
	Segregation group:	Non-applicable
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:

14.1	**UN number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

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

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (Product-type 2, 4, 6, 11, 12, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Non-applicable

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

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SECTION 15: REGULATORY INFORMATION (continued)

Contains more than 0.0015 % of reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) by weight. The placing on the market of treated articles is subject to the following conditions: | (1) | In view of the risks identified for human health, mixtures treated with or incorporating C(M)IT/MIT (3:1) and placed on the market for use by the general public shall not contain C(M)IT/MIT (3:1) at a concentration triggering classification as skin sensitiser, unless exposure can be avoided by other means than the wearing of personal protective equipment. | (2) | In view of the risks identified for human health, liquid detergents treated with or incorporating C(M)IT/MIT (3:1) and placed on the market for use by professional users shall not contain C(M)IT/MIT (3:1) at a concentration triggering classification as skin sensitiser, unless exposure can be avoided by other means than the wearing of personal protective equipment. | (3) | In view of the risks identified for human health, mixtures treated with or incorporating C(M)IT/MIT (3:1), other than liquid detergents, and placed on the market for use by professional users shall not contain C(M)IT/MIT (3:1) at a concentration triggering classification as skin sensitiser, unless exposure can be avoided, including by the wearing of personal protective equipment. | (4) | The person responsible for the placing on the market of a treated article treated with or incorporating C(M)IT/MIT (3:1) shall ensure that the label of that treated article provides the information listed in the second subparagraph of Article 58(3) of Regulation (EU) No 528/2012.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Relevant instructions for use:

Direct use, do not dilute. Its use is indicated in vehicles that circulate in a climate with extreme temperatures. Recommended use of 250,000 km in tourism vehicles, 650,000 km in trucks and buses, 32,000 hours in stationary engines, up to 5 years. Meets Standards: ASTM D3306; UNE 26-361-88 / 1; BS 6580; MAN 324 Type SNF; MB-325.3; VW TL-774D / F (G12 / G12 +); Renault Trucks 41-01-001 / S Type D; Ford WSS-M97B44-D / E; VOLVO AB -Renault Trucks, EURO VI, MB 325.0, MB 325.3, etc.

Other legislation:

The product could be affected by sectorial legislation

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.:

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

· New declared substances
Glycerol (56-81-5)
Tolyltriazole (29385-43-1)

Texts of the legislative phrases mentioned in section 2:

H412: Harmful to aquatic life with long lasting effects
H317: May cause an allergic skin reaction

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:

Acute Tox. 2: H310+H330 - Fatal in contact with skin or if inhaled
Acute Tox. 3: H301 - Toxic if swallowed
Acute Tox. 4: H302 - Harmful if swallowed
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
Eye Dam. 1: H318 - Causes serious eye damage
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage
Skin Sens. 1A: H317 - May cause an allergic skin reaction

Classification procedure:

Aquatic Chronic 3: Calculation method
Skin Sens. 1A: Calculation method

Advice related to training:

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SECTION 16: OTHER INFORMATION (continued)

Minimal training is recommended in order to prevent industrial risks for staff using this product and 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

- END OF SAFETY DATA SHEET -