

According to Regulation (EU) No 830/2015

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

1.1. Product identifier

Product name	:	VALMA KOELVLOEISTOF G12+ LONGLIFE KANT&KLAAR
Product code	:	W51/W52

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

Application : Consumer product (SU21). Anti-freeze and de-icing products (PC4). Coolant.

1.3. Details of the supplier of the safety data sheet

Supplier	:	Service Best International B.V. De Run 4271
E-mail Website		5503LM Veldhoven, The Netherlands info@servicebest.com www.servicebest.com

1.4. Emergency telephone number

EMERGENCY TELEPHO	NE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:	
NL - Telephone	: 040-2302300	(During office hours only)

EMERGENCY TELEPHONE NUMBER (in the UK and Ireland for healthcare professionals only):

(24/7)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC)	: Acute toxicity, category 4. Specific target organ toxicity — repeated exposure, category 2.
Human health hazards	· Harmful if swallowed. May cause damage to kidneys through prolonged or repeated exposure

Human health hazards	:	Harmful if swallowed. May cause damage to kidneys through prolonged or repeated exposure.
Physical/chemical hazards	:	Not classified as dangerous according to statutory EC-Directives.
Environmental hazards	:	Not classified as dangerous according to statutory EC-Directives.
Other information	:	Keep out of the reach of children. If swallowed, seek medical advice immediately and show this
		container or label.

2.2. Label elements

Label elements (1272/2008 Hazard pictograms	B/EC): : :	
Signal word	: Warning	
H- and P-phrases	: H302 H373 kidneys P101 P102 P301 + P312 P501	Harmful if swallowed. May cause damage to kidneys through prolonged or repeated exposure. If medical advice is needed, have product container or label at hand. Keep out of reach of children. IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. Dispose of contents/container to an approved waste disposal plant.

Additional labelling



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Other information	 Contains: Ethane-1,2-diol. According to Regulation (EC) No 1272/2008, the packaging of this product shall carry a tactile warning of danger.
2.3. Other hazards	
Other information	: Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	REACH nr.	OEL
Ethane-1,2-diol Acute Tox. 4; STOT RE 2 H302; H373	25 - 50	107-21-1	1 203-473-3	01-2119456816-28	#
Sodium 2-ethylhexanoate Repr. 2 H361d	1 - < 3	19766-89-3	243-283-8		

Reference is made to chapter 16 for full text of each relevant H phrase. Substance(s) with an Occupational Exposure Limit are marked with #. Occupational exposure limit(s) are listed in section 8.

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

First aid measures	
Inhalation	: Move victim into fresh air. Consult a doctor if victim feels unwell.
Skin contact	: Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries
	up.
Eye contact	: Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor if irritation persists.
Ingestion	: Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor immediately if victim feels unwell.

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

Effects and symptoms	
Inhalation	: May cause headache, dizziness and a feeling of sickness.
Skin contact	: May cause dry skin.
Eye contact	: May cause stinging of eyes and redness.
Ingestion	: May cause a feeling of sickness, vomiting and diarrhoea. May cause a feeling of sickness, malaise, shortness of breath and lack of breathe.

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

Note to physicians	:	
General	: Call a poison control centre for guidance. Risk of metabolic acidosis	

SECTION 5 FIREFIGHTING MEASURES



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5.1. Extinguishing media

Extinguishing media	
Suitable	: Carbondioxide (CO2). Alcohol resistant foam. Dry chemical. Water fog.
Not suitable	: None known.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	: None known.
Hazardous thermal	: Carbon monoxide may be evolved if incomplete combustion occurs.
decomposition products	

5.3. Advice for firefighters

Special protective	:	Use adequate respiratory equipment in case of insufficient ventilation.
equipment for fire-fighters		

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	: Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with
	spilled or released material. Vapours are heavier than air. Build up (of gasses) in low areas involves
	risk of suffocation.

6.2. Environmental precautions

Environmental precautions	:	Avoid release of product into sewers, surface water and/or ground water. Large spills: contain with
		dike.
Other information	:	Notify authorities if any exposure to the general public or the environment occurs or is likely to
		occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : For guidance on selection of personal protective equipment see section 8. For guidance on disposal of spilled material see section 13.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

: Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Handling Do not breathe vapour. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage	:	Keep in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents.
Recommended packaging	:	Keep only in the original container.
Non recommended	:	Steel (except stainless steel).
packaging		

7.3. Specific end use(s)

Use

: Use only as directed.



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SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

: Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Occupational exposure limits (mg/m³):

Chemical name			STEL 15 min (mg/m3)	Comments
Ethane-1,2-diol				Skin
Ethane-1,2-diol	EC	52	104	Skin

Derived no-effect level (DNEL) for workers:

Chemical name	Route of	DNEL, short-term		DNEL, long-term	
	exposure				
		Local effect	Systemic effect	Local effect	Systemic effect
Ethane-1,2-diol	Dermal				106 mg/kg bw/day
	Inhalation			35 mg/m3	
Sodium 2-ethylhexanoate	Dermal				2 mg/kg bw/day
	Inhalation				14 mg/m3

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of	DNEL, short-te	DNEL, short-term		DNEL, long-term	
	exposure					
	<i>'</i>	Local effect	Systemic effect	Local effect	Systemic effect	
Ethane-1,2-diol	Dermal				53 mg/kg bw/day	
	Inhalation			7 mg/m3		
Sodium 2-ethylhexanoate	Dermal				1 mg/kg bw/day	
	Inhalation				3,5 mg/m3	
	Oral				1 mg/kg bw/day	

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Ethane-1,2-diol	Water	10 mg/l	1 mg/l	
	Sediment	20,9 mg/kg		
	Intermittent water			10 mg/l
	STP			199,5 mg/l
	Soil			1,53 mg/kg
Sodium 2-ethylhexanoate	Water	0,36 mg/l	0,036 mg/l	
	Sediment	0,301 mg/kg	0,0301 mg/kg	
	Intermittent water			0,493 mg/l
	STP			71,7 mg/l
	Soil			0,0579 mg/kg

8.2. Exposure controls

Engineering measures	: Use only in well-ventilated areas. Comply with standard precautionary measures for working
	with chemicals. See Directive 2004/37/EG on the protection of workers from the risks related to
	exposure to carcinogens or mutagens at work.
Hygienic measures	: When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

Body protection

: Use of specific protective industrial clothing is not required under normal conditions of use.



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Respiratory protection	: Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.
Hand protection Eye protection Thermal hazards Environmental exposure controls	 Under normal conditions of use specific gloves are not required. Wear appropriate safety glasses when there is danger of possible eye contact. Not applicable. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance : Liquid.	
Colour : Colourless.	
Odour : Characteris	tic.
Odour threshold : Not known.	
pH : 7,5	
Solubility in water : Soluble.	
Partition coefficient (n- : < 3	
octanol/water)	
Flash point : > 100 °C	
Flammability (solid, gas) : Not applica	ble. Liquid. See flashpoint.
Auto ignition temperature : > 398 °C	
Boiling point/boiling range : > 100 °C	
Melting point/melting range : -30 °C	
Explosive properties : None know	n. Does not contain explosives.
Explosion limits (in air) : Not known.	Lower explosion limit in air (%): 3,2 (Ethane-1,2-diol)
:	Upper explosion limit in air (%): 15,3
Oxidising properties : Not applica	ble. Does not contain oxidizing substances.
Decomposition temperature : Not applica	ble.
Viscosity (20°C) : Not known.	
Viscosity (40°C) : Not relevan	t. The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C) : Not known.	
Vapour density (20°C) : > 1	(air = 1)
Relative density (20°C) : 1,1 g/ml	
Evaporation rate : < 1	(n-butyl acetate = 1)

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity			
Reactivity	: See sub-sections below.		
10.2. Chemical stability			
Stability	: Stable under normal conditions.		
10.3. Possibility of hazardous reactions			
Reactivity	: No other hazardous reactions known.		
10.4. Conditions to avoid			
Conditions to avoid	: See section 7.		
10.5. Incompatible materials			



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Materials to avoid : Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition : Not known. products

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation	
Acute toxicity	 Calculated LC50: > 4,794 mg/l. Ingredients of unknown toxicity: 2 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause headache, dizziness and a feeling of sickness.
Corrosion/irritation	: Not classified - based on available data, the classification criteria are not met.
Sensitisation	: Does not contain respiratory sensitisers. Not classified - based on available data, the classification criteria are not met.
Carcinogenicity	: Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	: Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.
Skin contact	
Acute toxicity	: Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation	 Prolonged contact may dry out and defat the skin. Not classified - based on available data, the classification criteria are not met.
Sensitisation	: Does not contain skin sensitisers. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	: Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.
Eye contact	
Corrosion/irritation	: Slight irritation possible. Not classified - based on available data, the classification criteria are not met.
Ingestion	
Acute toxicity	 May cause signs of intoxication and reduced consiousness after exposure to high concentrations. May cause a feeling of sickness, malaise, shortness of breath and lack of breathe. Calculated LD50: > 1118 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: 500 mg/kg.bw.
Chronic toxicity	: Possibility of organ or organ system damage due to prolonged exposure. Target organ(s): Kidneys. Effect: May cause nephrolithiasis.
Corrosion/irritation	: May cause a feeling of sickness, vomiting and diarrhoea. Not classified - based on available data, the classification criteria are not met.
Carcinogenicity	: Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	: Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Ethane-1,2-diol	Mutagenicity	Not mutagenic		
	Genotoxicity - in vitro	Not genotoxic		
	Skin irritation	Non-irritant		Rabbit
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	NOEL (inhalation)	71 mg/m3		



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1	LD50 (oral)	7712 mg/kg bw		Rat
	Eye irritation	Non-irritant		Rabbit
	LD50 (oral) - estimate	500 mg/kg bw		
	LC50 (inhalation)	> 2500 mg/m3		Rat
	LC50 (inhalation) -	> 5000 mg/m3		
	estimate			
	NOAEL (oral)	150 mg/kg bw/d	OECD 452	Rat
	NOAEL (development,	250 mg/kg bw/d		Rat
	oral)			
	NOEL (carcinogenicity,	1000 mg/kg bw/d		Rat
	oral)			
	NOAEL (fertility) -	Not reprotoxic		
	estimate			
	LD50 (dermal)	3500 mg/kg bw		Mouse

Other information

: Ethane-1,2-diol There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 100 millilitres (1/2 cup).

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity

: Calculated LC50 (fish): 5089 mg/l. Calculated EC50 (waterflea): 224 mg/l. Contains < 1 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Persistence - degradability : No specific information known.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

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

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Other adverse effects

Other information : Not applicable.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues	: Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.
Additional warning	: None.
European waste catalogue	: Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
Local legislation	: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.



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SECTION 14	TRANSPORT INFORMATION *				
14.1. UN number	r				
UN nr.	: None.				
14.2. UN proper	shipping name				
Transport name	: Not regulated.				
14.3/14.4/14.5. T	ransport hazard class(es)/Packing group/Environmental hazards				
ADR/RID/ADN (r	road/railway/inland waterways)				
Class	: This product is not classified according to ADR/RID/ADN.				
IMDG (sea)					
Class	: This product is not classified according to IMDG.				
Marine pollu	utant : No				
IATA (air) Class	: This product is not classified according to IATA.				
Class	. This product is not classified according to IATA.				
14.6. Special precautions for user					
Other information	: Country specific variations may apply.				
14.7. Transport i	in bulk according to Annex II of MARPOL and the IBC Code				
Marpol	: Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments.				

SECTION 15 REGULATORY INFORMATION

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

: Regulation (EC) No 830/2015 (REACH), Regulation (EC) No 1272/2008 (CLP) and other Community regulations regulations. Directive 2012/18/EU : Not regulated.

15.2. Chemical safety assessment

Chemical safety		Not applicable.
assessment		

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EC) No 830/2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

Full text of H-phrases mentioned in section 3:



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	H302 H361 H373	Harmful if swallowed. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.			
Full text of hazard classes mentioned in section 3:					
	Acute Tox. 4 :	Acute toxicity, category 4.			
		Reproductive toxicity, category 2.			
	STOT RE 2 :	Specific target organ toxicity — repeated exposure, category 2.			
List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:					
	ATE	Acute Toxicity Estimate			
	BCF	Bioconcentration factor			
	DNEL	Derived no-effect level			
	ECETOC TRA	European centre for ecotoxicology and toxicology of chemicals. Targeted risk assessment			
	EU	European Union			
	EUSES	European Union System for the Evaluation of Substances			
	IBC code	Intermediate Bulk Container			
	LD50 LC50	Lethal Dose/Concentration for 50% of a population			
	NOAEL	No Observed (Adverse) Effect Level			
	NOEC	No observed effect concentration			
	OEL	Occupational exposure limit			
	PBT	Persistent, Bioaccumulative and Toxic			
	PC	Chemical product category			
	PNEC	Predicted no-effect concentration			
	STP	Sewage Treatment Plant			
	SU	Sector of Use			
	SVHC	Substance of very high concern			
	TWA/STEL	Time-Weighted Average/Short Term Exposure Limit			
	vPvB	Very Persistent and Very Bioaccumulative			
Num	ber format :	"," used as decimal separator.			