

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
5503LM Veldhoven, The Netherlands
E-mail : info@servicebest.com
Website : www.servicebest.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE 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 : Acute toxicity, category 4. Specific target organ toxicity — repeated exposure, category 2.
(1272/2008/EC)

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/EC):

Hazard pictograms :



Signal word : Warning

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

Additional labelling

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Other information : Contains: Ethane-1,2-diol.
 Other information : 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	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

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 decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

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

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

- Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. 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 packaging : Steel (except stainless steel).

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	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments
Ethane-1,2-diol	GB	52	104	Skin
Ethane-1,2-diol	EC	52	104	Skin

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Ethane-1,2-diol	Dermal Inhalation			35 mg/m ³	106 mg/kg bw/day
Sodium 2-ethylhexanoate	Dermal Inhalation				2 mg/kg bw/day 14 mg/m ³

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Ethane-1,2-diol	Dermal Inhalation			7 mg/m ³	53 mg/kg bw/day
Sodium 2-ethylhexanoate	Dermal Inhalation Oral				1 mg/kg bw/day 3,5 mg/m ³ 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
Sodium 2-ethylhexanoate	Soil			1,53 mg/kg
	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 : Under normal conditions of use specific gloves are not required.
- Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.
- Thermal hazards : Not applicable.
- Environmental exposure controls : 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	: Characteristic.	
Odour threshold	: Not known.	
pH	: 7,5	
Solubility in water	: Soluble.	
Partition coefficient (n-octanol/water)	: < 3	
Flash point	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 398 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: -30 °C	
Explosive properties	: None known.	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 applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	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

Materials to avoid : Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

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 consciousness 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	OECD 406	Rabbit Guinea pig
	Genotoxicity - in vitro	Not genotoxic		
	Skin irritation	Non-irritant		
	Skin sensitisation	Not sensitizing		
	NOEL (inhalation)	71 mg/m3		

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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) - estimate	> 5000 mg/m3		
NOAEL (oral)	150 mg/kg bw/d	OECD 452	Rat
NOAEL (development, oral)	250 mg/kg bw/d		Rat
NOEL (carcinogenicity, oral)	1000 mg/kg bw/d		Rat
NOAEL (fertility) - estimate	Not reprotoxic	-----	-----
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

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

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.

SECTION 14 TRANSPORT INFORMATION *

14.1. UN number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (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 pollutant : No

IATA (air)

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 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

Community regulations : Regulation (EC) No 830/2015 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

Directive 2012/18/EU : Not regulated.

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

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	Harmful if swallowed.
H361	Suspected of damaging fertility or the unborn child.
H373	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.
Repr. 2	: 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

Number format : "," used as decimal separator.