## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010 Date of issue:14/10/2014 Revision date:28/07/2016 Supersedes:13/07/2015

	stance/mixture and of the company/undertaking	
1.1. Product identifier		
Product form	: Mixture	
Product name	: WOLF ANTI-FREEZE LONGLIFE G13	
Product code	: 50002	
Product group	: Blend	
1.2. Relevant identified uses of the subs	stance or mixture and uses advised against	
1.2.1. Relevant identified uses	Industrial use Desfersional use Consumer use	
Main use category	: Industrial use,Professional use,Consumer use	
Industrial/Professional use spec	: Non-dispersive use Used in closed systems	
Function or use category	: Liquid for car cooling circuit	
1.2.2. Uses advised against		
No additional information available		
1.3. Details of the supplier of the safety	data sheet	
WOLF OIL CORPORATION N.V.		
Georges Gilliotstraat, 52		
2620 Hemiksem - België		
T 0032 (0)3 870 00 00 - F 0032 (0)3 870 00 99 info@wolfoil.com		
1.4. Emergency telephone number		
Emergency number	: +32 14 58 45 45 (NL/EN/FR/DE)	
SECTION 2: Hazards identification		
2.1. Classification of the substance or n	nixture	
Classification according to Regulation (EC)	lo. 1272/2008 [CLP]	
Acute toxicity (oral), Category 4	H302	
Specific target organ toxicity — Repeated expos	ure, Category 2 H373	
Full text of H statements : see section 16		
2.2. Label elements		
2.2. Label elements		
Labelling according to Regulation (EC) No. 1	272/2008 [CLP]	
	272/2008 [CLP]	
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Labelling according to Regulation (EC) No. 1	272/2008 [CLP]	
Labelling according to Regulation (EC) No. 1 Hazard pictograms (CLP)	272/2008 [CLP] : : GHS07 GHS08	
Labelling according to Regulation (EC) No. 1 Hazard pictograms (CLP) Signal word (CLP)		
Labelling according to Regulation (EC) No. 1 Hazard pictograms (CLP)	: GHS07 GHS08	
Labelling according to Regulation (EC) No. 1 Hazard pictograms (CLP) Signal word (CLP)	: GHS07 GHS07 GHS08 : Warning : ethanediol : H302 - Harmful if swallowed	
Labelling according to Regulation (EC) No. 1 Hazard pictograms (CLP) Signal word (CLP) Hazardous ingredients	<ul> <li>: Warning</li> <li>: ethanediol</li> <li>: H302 - Harmful if swallowed H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (on</li> </ul>	
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Labelling according to Regulation (EC) No. 1 Hazard pictograms (CLP) Signal word (CLP) Hazardous ingredients Hazard statements (CLP) Precautionary statements (CLP)	<ul> <li>: Warning</li> <li>: ethanediol</li> <li>: H302 - Harmful if swallowed H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (on ingestion)</li> <li>: P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P270 - Do not eat, drink or smoke when using this product P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell P330 - Rinse mouth P501 - Dispose of contents/container in accordance with local/regional/national/international regulations</li> </ul>	
Labelling according to Regulation (EC) No. 1 Hazard pictograms (CLP) Signal word (CLP) Hazardous ingredients Hazard statements (CLP) Precautionary statements (CLP) Child-resistant fastening	<ul> <li>: i i i i i i i i i i i i i i i i i i</li></ul>	

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#### 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

## 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanediol	(CAS No) 107-21-1 (EC no) 203-473-3 (EC index no) 603-027-00-1 (REACH-no) 01- 2119456816-28	>= 95	Xn; R22	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
2-ethylhexoic acid	(CAS No) 149-57-5 (EC no) 205-743-6 (EC index no) 607-230-00-6	2,49	Repr.Cat.3; R63	Repr. 2, H361d

#### Full text of R- and H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Adverse effects not expected from this product. Allow breathing of fresh air. Place the victim in semi-seated position. Seek medical advice.
First-aid measures after skin contact	: Remove contaminated clothing. Wash skin with mild soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes. Contact lenses should be removed. Seek medical attention if ill effect or irritation develops.
First-aid measures after ingestion	: Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/injuries after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/injuries after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/injuries after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/injuries after ingestion	: Harmful if swallowed.
4.3. Indication of any immediate medica	al attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry chemical product.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the su	ibstance or mixture
No additional information available	
5.3. Advice for firefighters	
Precautionary measures fire	: Exercise caution when fighting any chemical fire.
Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release mea	sures
6.1. Personal precautions, protective e	quipment and emergency procedures
6.1.1. For non-emergency personnel	
Protective equipment	: Wear suitable protective clothing and gloves.
6.1.2 For omorgonou reconcidere	
6.1.2. For emergency responders	
Protective equipment	: Wear suitable protective clothing and gloves.

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6.2. Environmental precautions			
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.			
6.3. Methods and material for containm	ent and cleaning up		
For containment	: Impound and recover large spill by mixing it with inert granular solids.		
Methods for cleaning up	: Detergent. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.		
Other information	: Spill area may be slippery. Use suitable disposal containers.		
6.4. Reference to other sections			
No additional information available			
SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	<ul> <li>Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required. Remove ignition sources. No open flames. No smoking. Take precautionary measures against static discharges.</li> </ul>		
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.		
7.2. Conditions for safe storage, includ	7.2. Conditions for safe storage, including any incompatibilities		
Storage temperature	: 40 °C		
Prohibitions on mixed storage	: Food.		
Storage area	: Store in dry, cool, well-ventilated area.		
Special rules on packaging	: Packaging destined for the general public must be fitted with a tactile danger indication.		
7.3. Specific end use(s)			

Anti-Freeze and De-icing products.

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
WOLF ANTI-FREEZE LONGLIFE G13		
EU	IOELV STEL (mg/m <sup>3</sup> )	104 mg/m³ @ 15 min.
EU	IOELV STEL (ppm)	40 ppm @ 15 min.

8.2. Exposure controls	
Personal protective equipment	: Safety glasses. Gloves.
Hand protection	: Permeation time: minimum >480min long term exposure; material / thickness [mm]: >0,35 mm. Butyl rubber (IIR) /. Polyvinylchloride (PVC) /
Eye protection	: Safety glasses. Standard EN 166 - Personal eye-protection.
Skin and body protection	: No special clothing/skin protection equipment is recommended under normal conditions of use
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Appearance	: Liquid.	
Colour	: pink.	
Odour	: mild. slight.	
Odour threshold	: No data available	
рН	: 7,5 - 9,5	
pH solution	: ≥0	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: ≥ 198 °C	

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Flash point	: 111 °C
Auto-ignition temperature	: 320 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0,06 Pa @20°C
Vapour pressure at 50 °C	: 0,64 hPa @50°C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1108 kg/m <sup>3</sup> @ 20°C
Solubility	: Miscible.
Log Pow	: No data available
Viscosity, kinematic	: 19,03 cSt @20°C
Viscosity, dynamic	: 21,09 cP @20°C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

<b>SECTION 1</b>	0: Stability and reactivity
10.1. Read	tivity
None under no	rmal conditions.
10.2. Cher	nical stability
Stable under n	ormal conditions.
10.3. Poss	sibility of hazardous reactions
None under no	rmal conditions.
10.4. Cone	ditions to avoid
No additional in	nformation available
10.5. Inco	mpatible materials
	nformation available
10.6. Haza	Irdous decomposition products
None under no	rmal conditions.

SECTION 11: Toxicological informati	an	
11.1. Information on toxicological effects		
Acute toxicity	: Oral: Harmful if swallowed.	
ATE CLP (oral)	500,000 mg/kg bodyweight	
ethanediol (107-21-1)		
LD50 oral rat	500 mg/kg	
Skin corrosion/irritation	: Not classified	
	рН: 7,5 - 9,5	
Serious eye damage/irritation	: Not classified	
	рН: 7,5 - 9,5	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated exposure)	: May cause damage to organs (kidneys) through prolonged or repeated exposure (on ingestion).	
Aspiration hazard	: Not classified	
WOLF ANTI-FREEZE LONGLIFE G13		
Viscosity, kinematic	19,03 mm²/s @20°C	
Potential adverse human health effects and symptoms	: Ingestion may cause nausea, vomiting and diarrhea.	
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SECTION 12: Ecological information	SECTION 12: Ecological information		
12.1. Toxicity			
2-ethylhexoic acid (149-57-5)			
LC50 fish 1	180 mg/l @48h (Pimephales promelas)		
EC50 Daphnia 1	116,6 mg/l @24h (Daphnia magna)		
EC50 other aquatic organisms 1	61 mg/l @72h (Scenedesmus subspicatus)		
ethanediol (107-21-1)			
LC50 fish 1	53000 mg/l @96h - Pimephales promelas		
EC50 Daphnia 1	51000 mg/l @48h - Daphnia magna		
EC50 other aquatic organisms 1	24000 mg/l @168h - Selenastrum capricornutum		
12.2 Desciptones and degradability			
12.2. Persistence and degradability WOLF ANTI-FREEZE LONGLIFE G13			
Persistence and degradability	Prevent entry to sewers and public waters.		
- · ·	Trevent entry to sewers and public waters.		
2-ethylhexoic acid (149-57-5) Chemical oxygen demand (COD)			
Chemical oxygen demand (COD)	2,11 g O <sub>2</sub> /g substance		
ethanediol (107-21-1)			
Biochemical oxygen demand (BOD)	0,47 g O₂/g substance		
Chemical oxygen demand (COD)	1,29 g O₂/g substance		
Biodegradation	90 %		
12.3. Bioaccumulative potential			
-			
2-ethylhexoic acid (149-57-5)			
Bioconcentration factor (BCF REACH)	3 2.64		
<u> </u>	2,04		
ethanediol (107-21-1)	10		
Bioconcentration factor (BCF REACH) Log Pow	-1,36		
12.4. Mobility in soil	-1,30		
-			
ethanediol (107-21-1)			
Surface tension	49890 N/m @25°C		
12.5. Results of PBT and vPvB assessme	ent		
No additional information available			
12.6. Other adverse effects			
Additional information	: Presents no specific risk for the environment		
SECTION 13: Disposal consideration	ns		
13.1. Waste treatment methods			
Additional information	: Dispose in a safe manner in accordance with local/national regulations.		
SECTION 14: Transport information			
In accordance with ADR / RID / IMDG / IATA / A	DN		
14.1. UN number			
Not regulated for transport			
14.2. UN proper shipping name			
Proper Shipping Name (ADR)	: Not applicable		
Proper Shipping Name (IMDG)	: Not applicable		
Proper Shipping Name (IATA)	: Not applicable		
Proper Shipping Name (ADN)	: Not applicable		
Proper Shipping Name (RID)	: Not applicable		
14.3. Transport hazard class(es)			
ADR			
Transport hazard class(es) (ADR)	: Not applicable		
IMDG			

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Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

### 14.6. Special precautions for user

- Overland transport

No data available

### - Transport by sea

No data available

#### - Air transport

No data available

### - Inland waterway transport

No data available

### - Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### SECTION 15: Regulatory information

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

### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

#### Germany

VwVwS Annex reference	: Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)		
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)		
Netherlands			
SZW-lijst van kankerverwekkende stoffen	: None of the components are listed		
SZW-lijst van mutagene stoffen	: None of the components are listed		
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed		

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NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed		
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: 2-ethylhexoic acid is listed		
Denmark			
Classification remarks	: Emergency management guidelines for the storage of flammable liquids must be followed		
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product		
	Pregnant/breastfeeding women working with the product must not be in direct contact with the product		

#### 15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information Indication of changes:					
Other information	However, the in correctness. T beyond our con assume respon or in any way of was prepared a	nformation is provided with The conditions or methods ntrol and may be beyond o nsibility and expressly disc connected with the handlin	I from sources which we believe are reliable. Nout any warranty, express or implied, regarding its of handling, storage, use or disposal of the product are ur knowledge. For this and other reasons, we do not laim liability for loss, damage or expense arising out of g, storage, use or disposal of the product. This MSDS his product. If the product is used as a component in nay not be applicable.		

### Full text of R-, H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
R22	Harmful if swallowed
R63	Possible risk of harm to the unborn child
Xn	Harmful

#### SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product