

WOLF ANTI-FREEZE STANDARD G11

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 08/10/2014

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Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name. : WOLF ANTI-FREEZE STANDARD G11
Product code : 50000
Product group : Blend

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

1.2.1. Relevant identified uses

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 / 0476/23 33 14
info@wolfoil.com

1.4. Emergency telephone number

Emergency number : 0032 (0)70 245 245

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302

STOT RE 2 H373

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS08

Signal word (CLP) : Warning
Hazardous ingredients : ethanediol
Hazard statements (CLP) : H302 - Harmful if swallowed
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (on ingestion)
Precautionary statements (CLP) : 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 doctor if you feel unwell
P330 - Rinse mouth
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
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
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

Name	Product identifier	%	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	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. 2, H361d

Full text of R-, H- and EUH-phrases: 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. Assure fresh air breathing. 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 effects, 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 medical 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 substance 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 measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear suitable protective clothing and gloves.
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6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

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 containment 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 : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required. Remove ignition sources. No naked lights. No smoking. Take precautionary measures against static discharges.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

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

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EU	IOELV STEL (mg/m ³)	104 mg/m ³ @ 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 : Blue.
Odour : mild. slight.
Odour threshold : No data available
pH : 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
Self 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 ³ @ 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

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

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ATE (oral)	500,000 mg/kg bodyweight
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ethanediol (107-21-1)

LD50 oral rat	500 mg/kg
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Skin corrosion/irritation	: Not classified pH: 7,5 - 9,5
Serious eye damage/irritation	: Not classified pH: 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
Potential Adverse human health effects and symptoms	: Ingestion may cause nausea, vomiting and diarrhea.

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SECTION 12: Ecological information

12.1. Toxicity

2-ethylhexoic acid (149-57-5)	
LC50 fishes 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 fishes 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. Persistence and degradability

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Persistence and degradability	Prevent entry to sewers and public waters.

2-ethylhexoic acid (149-57-5)	
Chemical oxygen demand (COD)	2,11 g O ₂ /g substance

ethanediol (107-21-1)	
Biochemical oxygen demand (BOD)	0,47 g O ₂ /g substance
Chemical oxygen demand (COD)	1,29 g O ₂ /g substance
Biodegradation	90 %

12.3. Bioaccumulative potential

2-ethylhexoic acid (149-57-5)	
Bioconcentration factor (BCF REACH)	3
Log Pow	2,64

ethanediol (107-21-1)	
Bioconcentration factor (BCF REACH)	10
Log Pow	-1,36

12.4. Mobility in soil

ethanediol (107-21-1)	
Surface tension	49890 N/m @25°C

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

: No specific risk for the environment.

SECTION 13: Disposal considerations

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 / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in sense of transport regulations

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

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14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.6.4. Inland waterway transport

No additional information 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

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information : The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of R-, H- and EUH-phrases::

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.