

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 27/10/2023 Revision date: 10/09/2024 Supersedes version of: 20/12/2023 Version: 2.0

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

1.1. Product identifier

:	Mixture
:	WOLF ANTIFREEZE G11
:	HJFD-67GE-GN4D-H07W
:	50050
:	WOLF
:	Blend
	:

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

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

1.3. Details of the supplier of the safety data sheet

WOLF OIL CORPORATION N.V. Georges Gilliotstraat, 52 2620 Hemiksem, Antwerpen België T 0032 (0)3 870 00 00, F 0032 (0)3 870 00 99 msds@wolfoil.com, https://www.wolflubes.com/

1.4. Emergency telephone number

Emergency number

: 0032 (0)3 870 00 00

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096	+972 4 854 1900	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090	+356 2545 6508	
Sweden	Giftinformationscentralen	Box 60 500 171 76 Stockholm	112 – begär Giftinformation +46 10 456 6700 (Från utlandet)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4 H302 Specific target organ toxicity – Repeated exposure, Category 2 H373 Full text of H- and EUH-statements: see section 16

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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)
i iazai a	protogramo		,

	GHS07 GHS08
Signal word (CLP)	: Warning
Contains	: 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.
	P260 - Do not breathe spray, vapours.
	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.
	P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

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2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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	80 – 95	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) STOT RE 2, H373
Sodium 4(or 5)-methyl-1H-benzotriazolide	CAS-No.: 64665-57-2 EC-No.: 265-004-9	0.1 – 0.3	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361d Aquatic Chronic 2, H411

Full text of H- and EUH-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.

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First-aid measures after inhalation	: Adverse effects not expected from this product. Allow affected person to breathe 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 effects, both acute and delayed		
Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.	
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.	
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.	
Symptoms/effects 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 Unsuitable extinguishing media	Foam. Dry chemical product.Do not use a heavy water stream.
5.2. Special hazards arising from the subs	tance or mixture
Fire hazard Hazardous decomposition products in case of fire	Not flammable. Heating will cause a rise in pressure with a risk of bursting.Upon heating, toxic fumes are formed.
5.3. Advice for firefighters	
Precautionary measures fire Firefighting instructions Protection during firefighting	 Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures		
6.1. Personal precautions, prot	ctive equipment and emergency procedures	
For non-emergency personnel Protective equipment	: Wear suitable protective clothing and gloves.	
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.		
6.2 Mothede and motorial for a	internment and eleganing up	

0.5. Methous and material for contain	ment 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	

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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 open flames. No smoking. Take precautionary measures against static discharges.
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, including	g any incompatibilities
Storage temperature	: 40 °C
Heat and ignition sources	 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Information 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 child-proof closures and a tactile danger indication.
Germany	
Storage class (LGK, TRGS 510)	: LGK 10-13 - Other combustible and non-combustible substances
Switzerland	
Storage class (LK)	: LK 6.1 - Toxic materials
7.3. Specific end use(s)	

Anti-Freeze and De-icing products.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

ethanediol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	52 mg/m³
	20 ppm
IOEL STEL	104 mg/m ³
	40 ppm
Ireland - Occupational Exposure Limits	
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	40 mg/m ³
	104 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	25 mg/m³
	10 ppm
KTV (OEL STEL)	25 mg/m ³
	10 ppm

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8.2. Exposure controls

Personal protection equipment

Personal protective equipment:

Safety glasses. Gloves. Personal protective equipment symbol(s):



Eye and face protection

Eye protection: Safety glasses. Standard EN 166 - Personal eye-protection.

Skin protection

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

Hand protection:

Permeation time: minimum >480min long term exposure; material / thickness [mm]: >0,35 mm. Butyl rubber (IIR) /. Polyvinylchloride (PVC) /

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and ch	nemical properties	
Physical state Colour Appearance Odour Odour threshold Melting point	 Liquid Blue. Liquid. mild. slight. Not available Not available 	
Freezing point Boiling point Flammability Lower explosion limit Upper explosion limit Flash point Auto-ignition temperature	 Not available 165 °C (D1120) Not available 3 vol % 28 vol % 111 °C 398 °C 	
Decomposition temperature pH Viscosity, kinematic Solubility Partition coefficient n-octanol/water (Log Kow) Vapour pressure Vapour pressure at 50°C Density Relative density Relative vapour density at 20°C Particle characteristics	 Not available 8.4 @20°C (D1287) Not available In water, material soluble. Not available 0.1 hPa(a) @25°C Not available 1.12 g/cm³ @20°C (ASTM D4052) Not available 	

No additional information available

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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	
AL I DE	

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defin	ed in Regulation (EC) No 1272/2008
sute toxicity (oral) : Harmful if swallowed. sute toxicity (dermal) : Not classified sute toxicity (inhalation) : Not classified	
WOLF ANTIFREEZE G11	
LD50 dermal rabbit	>
ethanediol (107-21-1)	
LD50 oral rat	500 mg/kg
LD50 dermal rat	10000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 2.5 mg/l/4h @6h
Sodium 4(or 5)-methyl-1H-benzotriazolide (6	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met) pH: 8.4 @20°C (D1287)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 8.4 @20°C (D1287)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
ethanediol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1500 mg/kg bodyweight
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)

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STOT-repeated exposure	: May cause damage to organs (kidneys) through prolonged or repeated exposure (on ingestion).
ethanediol (107-21-1)	
NOAEL (oral, rat, 90 days)	220200 mg/kg bodyweight/day OECD 407
NOAEL (dermal, rat/rabbit, 90 days)	2220 mg/kg bodyweight/day OECD 410
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Sodium 4(or 5)-methyl-1H-benzotriazolide (6	4665-57-2)
NOAEL (oral, rat, 90 days)	≈ 150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28- Day Oral Toxicity Study in Rodents)
Aspiration hazard	Not classified (Based on available data, the classification criteria are not met)
11.2. Information on other hazards	
Endocrine disrupting properties	
Adverse health effects caused by endocrine disrupting properties	The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
Other information	
Potential adverse human health effects and symptoms	: Ingestion may cause nausea, vomiting and diarrhea

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : Not classified (acute)		
Hazardous to the aquatic environment, long-term : Not classified (chronic)		
ethanediol (107-21-1)		
LC50 - Fish [1]	72860 mg/l @96h; Pimephales promelas (EPA 600/4-90/027)	
EC50 - Crustacea [1]	> 100 mg/l @48h; Daphnia magna (OECD 202)	
EC50 96h - Algae [1] > 6500 - < 13000 mg/l (EPA 600/9-78-018)		
NOEC chronic fish 15380 mg/l @7d; Pimephales promelas (EPA 600/4-89/001)		
NOEC chronic crustacea 8590 mg/l Ceriodaphnia dubia (EPA 600/4-89/001)		
Sodium 4(or 5)-methyl-1H-benzotriazolide (64665-57-2)		
LC50 - Fish [1]	180 mg/l @96h; Danio rerio (OECD203)	
EC50 - Crustacea [1]	8.58 mg/I @48h; Daphnia magna (OECD 202)	
EC50 72h - Algae [1] 2.86 mg/l Desmodesmus subspicatus (OECD 201)		
LOEC (chronic) 37.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC (chronic) 18.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC chronic crustacea	0.4 mg/l @21d; Daphnia magna (OECD 211)	
12.2. Persistence and degradability		
WOLF ANTIFREEZE G11		

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ethanediol (107-21-1)		
Persistence and degradability	Rapidly degradable	
Biochemical oxygen demand (BOD)	0.47 g O_2/g substance	
Chemical oxygen demand (COD)	1.29 g O ₂ /g substance	
Biodegradation	90 %	
Sodium 4(or 5)-methyl-1H-benzotriazolide (64665-57-2)		
Persistence and degradability	Rapidly degradable	
12.3. Bioaccumulative potential		
ethanediol (107-21-1)		
Bioconcentration factor (BCF REACH)	10	
Partition coefficient n-octanol/water (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. Endocrine disrupting properties		
Adverse effects on the environment caused by : endocrine disrupting properties	The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.	
12.7. Other adverse effects		
Additional information :	Presents 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 inform	ation
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In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number		
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	 Not applicable Not applicable Not applicable Not applicable Not applicable 	
14.2. UN proper shipping name		
Proper Shipping Name (ADR) Proper Shipping Name (IMDG)	Not applicableNot applicable	

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Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID)	 Not applicable Not applicable Not applicable
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR)	: Not applicable
IMDG Transport hazard class(es) (IMDG)	: Not applicable
IATA 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) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	 Not applicable Not applicable Not applicable Not applicable Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available
14.6. Special precautions for user	
Overland transport Not applicable	
Transport by sea Not applicable	
Air transport Not applicable	
Inland waterway transport Not applicable	
Rail transport Not applicable	
14.7. Maritime transport in bulk accordin	ng to IMO instruments
Not applicable	

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

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REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

France

Occupational diseases		
Code Description		
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide	

Germany

Water hazard class (WGK) Hazardous Incident Ordinance (12. BImSchV)	 WGK nwg, Non-hazardous to water (Classification according to AwSV, Annex 1). Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen – Borstvoeding SZW-lijst van reprotoxische stoffen – Vruchtbaarheid SZW-lijst van reprotoxische stoffen – Ontwikkeling	 Sodium 4(or 5)-methyl-1H-benzotriazolide is listed Sodium 4(or 5)-methyl-1H-benzotriazolide is listed None of the components are listed None of the components are listed None of the components are listed
Denmark Danish National Regulations	: 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		
Section	Changed item	Comments
	Revision date	Modified

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Indication of changes		
Section	Changed item	Comments
1.1	UFI on SDS 1.1	Modified
3	Composition/information on ingredients	Modified
9	Flash point	Modified
9	Density	Modified
9	рН	Modified
9	Vapour pressure	Modified
9	Freezing point	Removed
9	Lower explosive limit (LEL)	Added
9	Auto-ignition temperature	Added
9	Boiling point	Added
9	Upper explosive limit (UEL)	Added

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 H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H361d	Suspected of damaging the unborn child.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H411	Toxic to aquatic life with long lasting effects.	
Repr. 2	Reproductive toxicity, Category 2	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	

Safety Data Sheet (SDS), EU

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.