


# SAFETY DATA SHEET

**Product: VALEO PROTECT ULTRA 100 ORGANIC EXFR CONCENTRATED ADDITIVE**

1- Product and company identification	
Product name	VALEO PROTECT ULTRA 100 ORGANIC EXFR CONCENTRATED ADDITIVE
1.2 Other ways of identification	
Product code	819114
1.3 Recommended uses of the chemical and restrictions on use	
Recommended use	Concentrated organic additive for automotive cooling systems.
1.4 Company identification	
Company name	VALEO AUTOMOTIVE SYSTEMS LTDA
Address	AV. Pereira Barreto, 1479 Sala 1501 Andar 15, Baeta Neves São Bernardo do Campo ZIP CODE: 097151-00
1.5 Emergency telephone number	
SAC	(11) 4393-3325 / Fax: (11) 4393-3330
Emergency phone	0800 11 8270 - ABQUIM (Emergency Support Center), for leaks, spills and other accidents requiring emergency support.
Website	www.valeoservice.com

2 - Hazard identification	
2.1 Classification of the substance or mixture	
Classification according to GHS BR (ABNT NBR 14725 : 2023)	Acute toxicity (Oral), Category 4 Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 1 Reproductive toxicity, Category 2 Specific target organ toxicity - Repeated exposure, Category 2
2.2 Appropriate labeling elements	
GHS BR labeling	
Danger pictograms (GHS BR)	
Word of warning (GHS BR)	DANGER
Danger phrases (GHS BR)	H302 - Harmful if swallowed H315 - Causes skin irritation

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	<p>H318 - Causes serious eye damage</p> <p>H361 - Suspected of damaging fertility or the unborn child.</p> <p>H373 - May cause damage to organs through prolonged or repeated exposure.</p>
<b>Precautionary statements (GHS BR)</b>	<p>P201 - Obtain specific instructions before use.</p> <p>P202 - Do not handle the product until you have read and understood all the safety precautions.</p> <p>P260 - Do not inhale mists and vapors.</p> <p>P264 - Wash exposed areas thoroughly after handling. P270 - Do not eat, drink or smoke while using this product. P280 - Wear protective gloves, protective clothing and eye protection.</p>
<b>Emergency Response</b>	<p>P301+P312 - If swallowed: if you feel unwell, contact a health center. toxicological information or a doctor.</p> <p>P302+P352 - In case of skin contact: Wash with plenty of soap and water.</p> <p>P305+P351+P338 - In case of contact with eyes: Rinse thoroughly with water for several minutes. If wearing contact lenses, remove them if easy to do so. Continue rinsing.</p> <p>P308+P313 - In case of exposure or suspected exposure: Consult a doctor.</p> <p>P310 - Contact a toxicology information center or doctor immediately.</p> <p>P314 - If you feel unwell, consult a doctor.</p> <p>P321 - Specific treatment: In case of spillage contact on 0800 0244433. P330 - Rinse your mouth.</p> <p>P332+P313 - In case of skin irritation: Get medical advice. P362+P364 - Remove contaminated clothing and wash before reuse.</p>
<b>Storage</b>	P405 - Store under lock and key.
<b>Disposition</b>	P501 - Dispose of contents and container in accordance with local regulations.
<b>2.3 Other hazards that do not result in a classification</b>	
No additional information available	

### 3 - Composition and information on ingredients

#### 3.1 Substances not applicable

#### 3.2 Mixtures

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Name	Product identification	%	Classification according to GHS BR (ABNT NBR 14725: 2023)
Ethane-1,2-diol	CAS no.: 107-21-1	90,00	Tox. Acute 4 (Oral), H302 STOT RE 2, H373 Per. Aspiration 2, H305
Potassium hydroxide	CAS no.: 1310-58-3	1,00	Tox. Acute 4 (Oral), H302 Corr. Skin 1A, H314 Aq. Acute 3, H402
2-ethylhexanoic acid	CAS no.: 149-57-5	6,00	Tox. Acute 4 (Dermal), H312 Aq. Acute 3, H402
Denatonium benzoate	CAS no.: 3734-33-6	0,02	Tox. Acute 4 (Oral), H302

### 4 - First-aid measures

#### 4.1 Description of the necessary first aid measures

<b>General first aid measures</b>	In case of exposure or suspected exposure: Consult a doctor.
<b>First aid measures after inhalation</b>	Remove the person to a ventilated area and keep them at rest in a position that does not hinder breathing.
<b>First aid measures after skin contact</b>	After contact with skin, immediately remove all contaminated clothing and rinse with plenty of water. Be careful, the product can remain trapped under clothing, shoes or a wristwatch.
<b>First aid measures after eye contact</b>	In case of contact with eyes, rinse thoroughly with water for several minutes. If you wear contact lenses, remove them if it is easy to do so. Continue rinsing.
<b>First aid measures after ingestion</b>	If swallowed, seek medical advice immediately and show this package or the label.

#### 4.2 Most important symptoms and effects, acute or delayed

<b>Symptoms/effects</b>	May cause damage to organs through repeated or prolonged exposure. Ingestion of a small amount of this material presents some danger to health. May cause severe burns. Causes serious eye damage.
<b>Symptoms/effects in case of inhalation</b>	May cause irritation of the respiratory tract, sneezing, coughing, burning sensation in the throat with a feeling of constriction of the larynx and difficulty breathing.
<b>Symptoms/effects in case of skin contact</b>	Causes skin irritation. Irritation (itching, redness, blistering). Causes severe burns.
<b>Symptoms/effects in case of eye contact</b>	Causes serious eye damage. Redness, itching, tears.

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<b>Symptoms/effects in case of ingestion</b>	Harmful if swallowed. Ingestion may cause nausea and vomiting. Burns or irritation to the tissues of the mouth, throat and gastrointestinal tract.
<b>Chronic symptoms</b>	Suspected of damaging fertility. Suspected of harming the fetus
<b>4.3 Indications of immediate medical attention and special treatments required, if necessary</b>	
<b>Notes to the doctor</b>	Treat symptomatically

### 5 - Fire-fighting measures

#### 5.1 Means of extinction

<b>Suitable extinguishing media</b>	Water spray, dry chemical powder, foam for use on hydrocarbons, carbon dioxide (CO <sub>2</sub> ).
<b>Inadequate extinguishing media</b>	Do not use a strong jet of water.

#### 5.2 Specific hazards arising from the substance or mixture

<b>Danger of fire</b>	In case of fire and/or explosion, do not breathe the fumes.
<b>Danger of explosion</b>	No direct danger of explosion.

#### 5.3 Special protective measures for the firefighting team

<b>Firefighting instructions</b>	Fight the fire taking normal precautions at a reasonable distance. Do not enter the fire area without suitable protective equipment, including respiratory protection.
<b>Protection during firefighting</b>	Use self-contained breathing equipment with positive pressure and protective clothing against chemical products.
<b>Other information</b>	In the event of a fire, corrosive and harmful gases are released.

### 6 - Control measures for spills or leaks

#### 6.1 Personal precautions, protective equipment and emergency procedures

<b>General measures</b>	Avoid contact with skin and eyes. Contain the leak if it can be done safely. Notify authorities if product enters drains or public waters. Absorb spilled product to prevent material damage.
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##### 6.1.1. for personnel who are not part of the emergency services

<b>Protective equipment</b>	Wear the recommended personal protective equipment.
<b>Emergency procedures</b>	Leave the area. Only qualified personnel equipped with suitable protective equipment may intervene. Notify the fire department and environmental authorities.

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<b>6.1.2 For emergency service personnel</b>	
<b>Protective equipment</b>	Self-contained breathing apparatus. Full impermeable protective clothing, gloves and boots must be worn to avoid any contact with the product. Corrosion-proof clothing. Equip cleaning staff with suitable protection.
<b>Emergency procedures</b>	Evacuate unnecessary personnel. Contain the leak if it can be done safely.
<b>6.2 Environmental precautions</b>	
Do not allow to enter drains or watercourses. Notify the authorities if the product enters drains or public waters.	
<b>6.3 Containment and cleaning methods and materials</b>	
<b>For containment</b>	Absorb spilled material with sand or earth. Contain any spillage with barriers or absorbent materials to prevent migration and entry into drains or streams. Stop the leak, if possible without risk.
<b>Cleaning methods</b>	Absorb spilled material with sand or earth. Clean contaminated surfaces with plenty of water. Absorb spilled product to prevent material damage.

<b>7- Handling and storage</b>	
<b>7.1 Precautions for safe handling</b>	
<b>Additional hazards when processed</b>	Not expected to present a significant hazard under normal conditions of use.
<b>Precautions for safe handling</b>	Obtain specific instructions before use. Take all necessary technical measures to avoid or minimize the release of the product into the workplace. Limit quantities of the product to the minimum necessary for handling and limit the number of workers exposed. Wear personal protective equipment. Do not eat, drink or smoke while using this product. When heated, the material emits highly irritating vapors that affect the eyes. Store only in the original container. Do not handle the product until you have read and understood all the safety precautions.
<b>Hygiene measures</b>	Always wash your hands after handling the product. Remove contaminated clothing. Do not eat, drink or smoke while using this product.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	
<b>Technical measures</b>	Store under lock and key.
<b>Storage conditions</b>	Keep in a cool place. Keep away from sunlight.
<b>Packaging materials</b>	Always store the product in a container made of the same material as the original container.

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8- Exposure control and personal protection	
8.1. Control parameters	
Ethane-1,2-diol (107-21-1)	
USA - ACGIH - Occupational exposure limits	
Local name	Ethylene Glycol - CAS# 107-21-1
ACGIH OEL TWA	100 mg/m <sup>3</sup>
ACGIH OEL TWA [ppm]	25 ppm (V - Vapor fraction)
ACGIH OEL STEL	10 mg/m <sup>3</sup>
ACGIH OEL STEL [ppm]	50 ppm
Observation (ACGIH)	URT irr; A4
Regulatory reference	(aerosol only)
Potassium hydroxide (1310-58-3)	
USA - ACGIH - Occupational exposure limits	
Local name	Potassium Hydroxide - CAS 1310-58-3
ACGIH OEL TWA	2 mg/m <sup>3</sup>
Potassium hydroxide (1310-58-3)	
Regulatory reference	(Ceiling Value)
2-ethylhexanoic acid (149-57-5)	
USA - ACGIH - Occupational exposure limits	
Local name	2- Ethylhexanoic Acid - CAS 149-57-5
ACGIH OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	(inhalable fraction and vapor)
Exposure limit for mists/aerosols that may form when using this product:	
8.2 Engineering control measures	
Appropriate engineering controls	Eye wash fountains and emergency safety showers must be available in the vicinity of any potential exposure.
8.3 Individual protection measures	
Personal protective equipment:	
Wear the recommended personal protective equipment.	
Hand protection:	

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PVC protective gloves. nitrile rubber gloves
<b>Eye protection:</b>
Wear airtight safety glasses
<b>Protection for skin and body:</b>
Wear waterproof rubber safety shoes
<b>Respiratory protection:</b>
The use of respiratory protection equipment is recommended in cases where inhalation may occur during use.
<b>Personal protective equipment symbol(s):</b>



9 - Physical and chemical properties	
9.1 Information on basic physical and chemical properties	
Physical state	Liquid
Appearance	Liquid.
Color	Yellow, Pink, Orange
Odor	Lightweight
Odor cleaning	Not available
pH	8,5
Melting point	Not available
Freezing point	-42°C.
Boiling point	164 °C
Flash point	118°C (PM)
Relative evaporation rate (butyl acetate = 1)	Not available.
Flammability	Not available.
Explosion limits	3,2 - 15,3



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Vapor pressure	< 0.1 mm Hg (20°C)
Relative vapor density at 20°C	Not available.
Relative density	1,125 (20/4°C)
Density	1.125 g/cm <sup>3</sup>
Solubility	Water: Full
Partition coefficient n-octanol/water (Log Kow)	Not available.
Auto-ignition temperature	≥ 398 °C (P/ 100% EG)
Decomposition temperature	Not available.
Kinematic viscosity (40°C)	Not available.
Viscosity, dynamics	Not available.
<b>9.2 Other information</b>	
VOC content	1113.38 g/l (Vapor Pressure 0.06 mmHG at 20°C)

<b>10- Stability and reactivity</b>	
10.1 Reactivity	The product is not reactive under normal conditions of use, storage and transportation.
10.2 Chemical stability	Stable under normal conditions of use.
10.3 Possibility of dangerous reactions	None, under normal conditions of use.
10.4 Conditions to avoid	Extremely high or low temperatures. Keep away from heat, sparks, open flames, hot surfaces. - Do not smoke.
10.5 Incompatible materials	Strong acids, Strong bases, Oxidizing agents.
10.6 Hazardous decomposition products	At room temperature, there are no known dangerous decomposition products.
10.7 Handling temperature	No additional information available

<b>11- Toxicological information</b>	
<b>11.1 Information on toxicological effects</b>	
<b>a. Acute toxicity</b>	
(oral)	Harmful if swallowed.
(dermal)	Not available



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(inhalation)	Not available
<b>VALEO PROTECT ULTRA 100 ORGANIC EXFR CONCENTRATED ADDITIVE</b>	
ETA BR (oral)	500 mg/kg body weight
<b>Ethane-1,2-diol (107-21-1)</b>	
Oral LD50, rat	4000 mg/kg
Dermal LD50, rat	9530 µl/kg
ETA BR (oral)	500 mg/kg body weight
ETA BR (cutaneous)	9530 mg/kg body weight
<b>Potassium hydroxide (1310-58-3)</b>	
ETA BR (oral)	500 mg/kg body weight
<b>2-ethylhexanoic acid (149-57-5)</b>	
Dermal LD50, rat	1260 mg/kg
ETA BR (cutaneous)	1260 mg/kg body weight
<b>Denatonium benzoate (3734-33-6)</b>	
Oral LD50, rat	584 mg/kg
ETA BR (oral)	584 mg/kg body weight
Corrosion/skin irritation	Causes skin irritation. pH: 8
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	Not available.
Germ cell mutagenicity	Not available
Carcinogenicity	Not available.
<b>Ethane-1,2-diol (107-21-1)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg body weight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
Reproductive toxicity	It is suspected of damaging fertility or the unborn child.
Toxicity to target organs specific - Single exposure	Not available.
Toxicity to target organs specific Repeated exposure	May cause damage to organs through repeated or prolonged exposure.

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<b>Ethane-1,2-diol (107-21-1)</b>	
Specific target organ toxicity - Repeated exposure	May cause damage to organs through repeated or prolonged exposure.
Danger of aspiration	Not available.
<b>Ethane-1,2-diol (107-21-1)</b>	
Kinematic viscosity (40°C)	14.505 mm <sup>2</sup> /s
<b>11.2 Most important symptoms and effects, acute or delayed</b>	
<b>Symptoms/effects</b>	May cause damage to organs through repeated or prolonged exposure. Ingestion of a small amount of this material presents some danger to health. May cause severe burns. Causes serious eye damage.
<b>Symptoms/effects in case of inhalation</b>	It can cause irritation of the respiratory tract, sneezing, coughing, a burning sensation in the throat with a feeling of constriction of the larynx and difficulty breathing.
<b>Symptoms/effects in case of skin contact</b>	Causes skin irritation. Irritation (itching, redness, blistering). Causes severe burns.
<b>Symptoms/effects in case of eye contact</b>	Causes serious eye damage. Redness, itching, tears.
<b>Symptoms/effects in case of ingestion</b>	Harmful if swallowed. Ingestion may cause nausea and vomiting. Burns or irritation to the tissues of the mouth, throat and gastrointestinal tract.
<b>Chronic symptoms</b>	Suspected of damaging fertility. Suspected of harming the fetus.

<b>12 - Ecological information</b>	
<b>12.1 Ecotoxicity</b>	
Hazardous to the aquatic environment, acute	Not classified.
Dangerous to the aquatic environment, chronic	Not available.
<b>Ethane-1,2-diol (107-21-1)</b>	
CL50 - Fish [1]	72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustaceans [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other:greenn algae
EC50 96h - Algae [2]	6500 - 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum).

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<b>Potassium hydroxide (1310-58-3)</b>	
CL50 - Fish [1]	80 mg/l Gambusia affinis
<b>2-ethylhexanoic acid (149-57-5)</b>	
CL50 - Fish [1]	70 Pimephales promelas
<b>12.2 Persistence and degradability</b>	
No additional information available	
<b>12.3 Bioaccumulative potential</b>	
No additional information available	
<b>12.4 Mobility in the soil</b>	
No additional information available	
<b>12.5 Other adverse effects</b>	
Dangerous for the ozone layer	Not available
Other adverse effects	May cause pH changes in aqueous ecological systems. Before neutralization the product can be dangerous for aquatic organisms.

<b>13 - Final disposal considerations</b>	
<b>Regional legislation (waste)</b>	Law No. 12.305, of August 2, 2010 (National Solid Waste Policy).
<b>Waste treatment methods</b>	It must be treated in accordance with local legislation.
<b>Wastewater disposal recommendations</b>	Disposal must be carried out in accordance with official legislation.
<b>Product/packaging disposal recommendations</b>	Disposal must be carried out in accordance with official legislation.
<b>Additional information</b>	Do not reuse empty containers.

<b>14 - Transport information</b>	
<b>14.1 National and international regulations</b>	
Not classified as dangerous for transportation in the different modes, but may be harmful in the event of accident. For more details, please refer to Section 2 of this SDS.	
<b>a. Land (railroads and roads)</b>	Not Regulated for Ground Transportation ANTT No. 5.947/2021 and its updates (National Land Transportation Agency).

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<b>b. Waterway (sea, river and lake)</b>	Not Regulated for Marine Transportation according to the IMDG code International Maritime Dangerous Goods Code. Dangerous Goods (IMDG Code); Standard 5 of the DPC (Department of Ports and Coasts of the Ministry of the Navy); ANTAQ (National Waterway Transportation Agency).
<b>c. Air</b>	Not Regulated for Air Transport Dangerous Goods Regulation (DGR IATA); DAC - Civil Aviation Department of the Ministry of Aeronautics.

**15 - Information on regulations****15.1 National regulations**

<b>Local regulations in Brazil</b>	ABNT Standard NBR 14725. Federal Decree No. 10.088, of November 5, 2019 - Consolidates normative acts issued by the Federal Executive Branch that provide for the promulgation of conventions and recommendations of the International Labor Organization - ILO ratified by the Federative Republic of Brazil. Ordinance No. 2,770, of September 5, 2022 - Approves the new wording of Regulatory Standard No. 26 Federal Decree No. 96.044 of May 18, 1988 - Approves the Regulations for the Road Transport of Dangerous Products Resolution No. 5998 of November 3, 2022 - Updates the Regulations for the Road Transport of Dangerous Products, approves its Complementary Instructions, and makes other provisions.
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**16 - Other information****No additional information available**

**This information is based on our current knowledge and is intended to describe the product solely with a view to health, safety and environmental requirements. It should therefore not be interpreted as a guarantee of any specific product property.**