

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 28-6-2011 Revision date: 25-10-2011 version: 1.5

1.1. Product ident Product form	fication of the substar			
	tifier		inputly/undortaining	
		<i>l</i> ixture		
		Antifreeze Premium Longlife Ren	ault / Nissan concentrate	
Product code		6000ARN		
1.2. Relevant iden	tified uses of the substance	e or mixture and uses advised	against	
1.2.1. Relevant iden	ntified uses			
Vain use category	: P	Professional use		
Function or use category	/ : A	anti-freezing agents		
1.2.2. Uses advised	against			
No additional information	n available			
1.3. Details of the	supplier of the safety data	sheet		
Cyclotronweg 1 2629 HN Delft - Nederlar T +31 (0)15 2514030 - F info@mpmoil.nl - www.m	<sup>-</sup> +31 (0)15 2514031			
1.4. Emergency te	elephone number			
Emergency number		31 (0)15 2514030 (08.00 - 17.00	) GMT+1)	
<u> </u>		Address	D GMT+1) Emergency number	Comment
Ireland Nat Cer	: +			Comment
Country Off Ireland Nat Ce Bea United Kingdom Gu Uni	ficial advisory body tional Poisons Information entre aumont Hospital Iy's & St Thomas' Poisons	Address Beaumont Hospital Beaumont Road	Emergency number	Comment
Country         Off           Ireland         Nat Cei Bea           United Kingdom         Gu Uni Med	+ ficial advisory body tional Poisons Information entre aumont Hospital ty's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St mas' Hospital Trust	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road	Emergency number : +353 1 8379964	Comment
Country     Off       Ireland     Nation       United Kingdom     Guidan       United Kingdom     United Kingdom       SECTION 2: Hazard	+ ficial advisory body tional Poisons Information entre aumont Hospital ty's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St mas' Hospital Trust	Address         Beaumont Hospital Beaumont Road         9 Dublin         Avonley Road         SE14 5ER London	Emergency number : +353 1 8379964	Comment
Country     Off       Ireland     Nat Cei Bea       United Kingdom     Gu Uni Med Tho       SECTION 2: Hazard       2.1.     Classification	<ul> <li>+</li> <li>ficial advisory body</li> <li>tional Poisons Information intre aumont Hospital</li> <li>ty's &amp; St Thomas' Poisons it dical Toxicology Unit, Guy's &amp; St mas' Hospital Trust</li> <li>tds identification</li> <li>the substance or mixture</li> </ul>	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road SE14 5ER London	Emergency number : +353 1 8379964	Comment
Country     Off       Ireland     Nat Cei Bea       United Kingdom     Gu Uni Med Tho       SECTION 2: Hazard       2.1.     Classification	+ ficial advisory body tional Poisons Information intre aumont Hospital uy's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St omas' Hospital Trust	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road SE14 5ER London	Emergency number : +353 1 8379964	Comment
Country     Off       Ireland     Nation       Ireland     Nation       Cein     Bea       United Kingdom     Guin       Meddit     Meddit       SECTION 2: Hazar     2.1.       Classification accordin       Acute toxicity (oral), Cate	+ ficial advisory body tional Poisons Information intre aumont Hospital ty's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St it dis identification to of the substance or mixtur ing to Regulation (EC) No. 12 egory 4 H302	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road SE14 5ER London	Emergency number : +353 1 8379964	Comment
Country     Off       Ireland     Nation       Ireland     Nation       United Kingdom     Gu       United Kingdom     Gu       Meddy     Meddy       SECTION 2: Hazar     Classification       Classification accordin     Acute toxicity (oral), Cate       Specific target organ toxi     Classification accordin	+ ficial advisory body tional Poisons Information intre aumont Hospital ty's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St it dical Toxicology Unit, Guy's & St dical Toxi	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road SE14 5ER London	Emergency number : +353 1 8379964	Comment
Country         Off           Ireland         Nation           Ireland         Nation           United Kingdom         Gu           United Kingdom         Gu           Med         Med           SECTION 2: Hazar         2.1.           Classification accordin         Acute toxicity (oral), Cate           Specific target organ toxi         Repeated exposure, Cate	+ ficial advisory body tional Poisons Information intre aumont Hospital ty's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St it dical Toxicology Unit, Guy's & St dical Toxi	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road SE14 5ER London	Emergency number : +353 1 8379964	Comment
Country       Off         Ireland       Nation         Ireland       Nation         United Kingdom       Gu         United Kingdom       Gu         Med       Thomage         SECTION 2: Hazar       2.1.         Classification accordin       Classification         Acute toxicity (oral), Cate       Specific target organ toxi         Repeated exposure, Cate       Cate	+ ficial advisory body tional Poisons Information intre aumont Hospital uy's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St omas' Hospital Trust ds identification to of the substance or mixtur ng to Regulation (EC) No. 12 egory 4 H302 icity — H373 iegory 2	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road SE14 5ER London	Emergency number : +353 1 8379964	Comment
Country     Off       Ireland     Nation       Ireland     Nation       United Kingdom     Gu       United Kingdom     Gu       Meddy     Meddy       SECTION 2: Hazar     Classification       Classification accordin     Classification       Acute toxicity (oral), Cate     Specific target organ toxi       Specific target organ toxi     Repeated exposure, Cate       Full text of hazard classed	+ ficial advisory body tional Poisons Information intre aumont Hospital uy's & St Thomas' Poisons it dical Toxicology Unit, Guy's & St omas' Hospital Trust ds identification to of the substance or mixtur ng to Regulation (EC) No. 12 egory 4 H302 icity — H373 iegory 2	Address Beaumont Hospital Beaumont Road 9 Dublin Avonley Road SE14 5ER London	Emergency number : +353 1 8379964	Comment

# Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) : Visit of the second second

2.2.

Label elements

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P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell P330 - Rinse mouth

P501 - Dispose of contents/container to officially registered waste disposal company.

# 2.3. Other hazards

No additional information available

# SECTION 3: Composition/information on ingredients

# 3.1. Substances

Not applicable

# 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2-Ethanediol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1 (REACH-no) 01-2119456816-28	60 - 99	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Sodium-2-ethylhexanoaat	(CAS-No.) 19766-89-3 (EC-No.) 243-283-8	1 - 2,9	Repr. 2, H361d

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
After inhalation	: Take victim to fresh air, in a quiet place and if necessary take medical advice. In case of unconsciousness place in unconscious position and seek medical advice.
After skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If irritation persists, consult a specialist.
After eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a specialist.
After ingestion	: Do NOT induce vomiting. Let water be swallowed in little sips (dilution effect). Get immediate medical advice/attention. If the person is fully conscious, make him/her drink plenty of water. Never give an unconscious person anything to drink.
4.2. Most important symptoms and effect	ts, both acute and delayed
Symptoms/effects	Ethylene glycol is harmful if swallowed. Symptoms may be delayed. Can include nausea, vomiting, cramps, can affect the level of consciousness. Can give damage to kidney.

4.3. Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: powder, alcohol-resistant foam, water spray, carbon dioxide. Sand.	
Unsuitable extinguishing media	: None known.	
5.2. Special hazards arising from the su	ubstance or mixture	
Explosion hazard	: Heat from a fire could result in drum bursting.	
5.3. Advice for firefighters		
Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection.	
Protection during firefighting	: Self-contained breathing apparatus with an air line.	
Other information	: Use water spray/stream to protect personnel and to cool endangered containers. Do not allow water used to extinguish fire to enter drains or waterways.	
SECTION 6: Accidental release measures		
6.1. Personal precautions, protective ed	quipment and emergency procedures	

General measures	: Plug the leak, cut off the supply. Do not breathe vapour or spray. Provide adequate ventilation.
6.1.1. For non-emergency personnel Protective equipment	: Wear suitable protective clothing and eye/face protection.

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6.1.2.	For emergency responders	
Protect	ive equipment	: Wear suitable protective clothing and eye/face protection.
6.2.	Environmental precautions	
	t spreading over great surfaces (e.g. b enters sewers or public waters.	y damming or installing oil booms). Do not flush into surface water or sewer system. Notify authorities
6.3.	Methods and material for contain	ment and cleaning up
For cor	tainment	: Stop leak if safe to do so. Prevent spreading over great surfaces (e.g. by damming or installing oil booms). Extinguish all ignition sources.
Method	s for cleaning up	: Clean up with absorbent material (for example sand, sawdust, neutral absorbent granule, silica gel).
6.4.	Reference to other sections	
Informa 7.	tion on disposal - see Section 13. Info	rmation on personal protective equipment - see Chapter 8. Information on safe handling - see Section
SECT	ION 7: Handling and storage	
7.1.	Precautions for safe handling	

7.1. Frecautions for sale nationing	
Precautions for safe handling	If suction of the immediate vicinity is impossible or insufficient, adequate airing of the working place must be ensured. Keep away from sources of ignition - No smoking. Avoid all eye and skin contact and do not breathe vapour and mist.
Hygiene measures	: When using do not eat, drink or smoke.
7.2. Conditions for safe storage, includi	ng any incompatibilities
Technical measures	: Store in a well-ventilated place. Keep container tightly closed.
Incompatible products	: Strong acid.
Information on mixed storage	: Keep in cool, well-ventilated place away from acids.
Storage area	: Keep container tightly closed in a cool, well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces No smoking.

# 7.3. Specific end use(s)

No additional information available

<b>SECTION 8: Exposure</b>	SECTION 8: Exposure controls/personal protection			
8.1. Control parameters	8.1. Control parameters			
1,2-Ethanediol (107-21-1)	1,2-Ethanediol (107-21-1)			
EU	Local name	Ethylene glycol		
EU	IOELV TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>		
EU	EU IOELV TWA (ppm) 20 ppm			
EU	EU IOELV STEL (mg/m <sup>3</sup> ) 104 mg/m <sup>3</sup>			
EU	EU IOELV STEL (ppm) 40 ppm			
EU	Notes	Skin		

# 8.2. Exposure controls

# Technical measures:

Ensure adequate ventilation of the storage area. Provide adequate ventilation.

### Materials for protective clothing:

Suitable material: NR (Natural rubber (caoutchouc), Natural latex). neoprene. nitrile rubber. PVC (Polyvinyl chloride).

### Hand protection:

Wear suitable gloves resistant to chemical penetration. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

# Eye protection:

No special eye protection equipment recommended under normal conditions of use. Eye protection should only be necessary where hot liquid could be splashed or sprayed

### Skin and body protection:

No special required clothing

### Respiratory protection:

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.

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# Other information:

The usual precautions for handling chemicals should be observed. Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and chemical properties			
Physical state	: Liquid		
Appearance	: Hygroscopic.		
Colour	: yellow.		
Odour	: odourless.		
Odour threshold	: No data available		
рН	: No data available		
Relative evaporation rate (butylacetate=1)	: No data available		
Melting point	: No data available		
Freezing point	: -23 °C		
Boiling point	: 165 °C 760 mm Hg		
Flash point	: 115 °C CC (closed cup)		
Auto-ignition temperature	: No data available		
Decomposition temperature	: No data available		
Flammability (solid, gas)	: No data available		
Vapour pressure	: 0,05 kPa 20°C		
Relative vapour density at 20 °C	: No data available		
Relative density	: No data available		
Density	: 1115 g/l 20°C		
Solubility	: Miscible with: Water. Alcohol. Acetone.		
Log Pow	: No data available		
Viscosity, kinematic	: No data available		
Viscosity, dynamic	: No data available		
Explosive properties	: No data available		
Oxidising properties	: No data available		
Explosive limits	: No data available		
9.2. Other information			
Miscibility	: water,acetone,alcohol		
<b>SECTION 10: Stability and reactivit</b>	y		
10.1. Reactivity			
On burning: release of harmful/irritant gases/va	apours e.g.: carbon monoxide - carbon dioxide.		
10.2. Chemical stability			
The product is stable at normal handling- and storage conditions.			
10.3. Possibility of hazardous reactions			
No dangerous reactions known under normal conditions of use.			
10.4. Conditions to avoid			
No naked flames, sparks, and do not smoke. n	noisture.		
40 E Incommotible meteriale			

**10.5. Incompatible materials** Strong acid. Oxidizing substances.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity	: Oral: Harmful if swallowed.	
ATE CLP (oral)	500,000 mg/kg	
1,2-Ethanediol (107-21-1)		
LD50 oral rat	7712 mg/kg	
LD50 dermal rat	> 3500 mg/kg Mouse	

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1,2-Ethanediol (107-21-1)	
LD50 dermal rabbit	10600 mg/kg
LC50 inhalation rat (mg/l)	> 2,5 mg/l/6Hrs
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
1,2-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
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs (kidneys) through prolonged or repeated exposure.
1,2-Ethanediol (107-21-1)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	<ul> <li>This product contains ethylene glycol (EG). The toxicity of EG via inhalation or skin contact is expected to be slight at room temperature. The estimated oral lethal dose is about 100 cc (3.3 oz.) for an adult human. Ethylene glycol is oxidized to oxalic acid which results in the deposition of calcium oxalate crystals mainly in the brain and kidneys. Early signs and symptoms of EG poisoning may resemble those of alcohol intoxication. Later, the victim may experience nausea, vomiting, weakness, abdominal and muscle pain, difficulty in breathing and decreased urine output. When EG was heated above the boiling point of water, vapors formed which reportedly caused unconsciousness, increased lymphocyte count, and a rapid, jerky movement of the eyes in persons chronically exposed. When EG was administered orally to pregnant rats and mice, there was an increase in fetal deaths and birth defects. Some of these effects occurred at dosee that had no toxic effects on the mothers. We are not aware of any reports that EG causes reproductive toxicity in human beings.</li> <li>2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet. When administered to pregnant rats by gavage or in drinking water, 2-EXA caused teratogenicity (birth defects) and delayed postnatal development of the pups. Additionally, 2-EXA impaired female fertility in rats. Birth defects were seen in the offspring of mice who were administered sodium 2-ethylhexanoate via intraperitoneal injection during pregnancy.</li> <li>Contains small amount Bitrex.</li> <li>Bitterant agent is a general description for chemical additives that are added to hazardous products to give it a bitter taste, which creates a strong aversion and as such avoids accidental poisonings for especially young children and household pets. It is often used in household cleaners, pesticides and also engine coolants. There are a number of possible chemicals that can be used, however, most commonly known is the</li></ul>
SECTION 12: Ecological information 12.1. Toxicity	
	: According to the criteria of the EC-classification and labelling "dangerous for the environment"
General	(93/21/EEC) the material/product is not to be classified as dangerous to the environment.
1,2-Ethanediol (107-21-1)	
LC50 fish 1	72860 mg/l 96 hrs / Pimephales promelas
EC50 Daphnia 1	> 100 mg/l 48 hrs
EC50 other aquatic organisms 2	> 9600 mg/l 96 hrs / Selenastrum capricornutum
NOEC (chronic)	15380 mg/l Fish Early Life Stage / Pimephales promelas / 7 days
12.2. Persistence and degradability	
17.7 Persistence and neorananity	

1,2-Ethanediol (107-21-1)		
Biodegradation	Readily biodegradable	
12.3. Bioaccumulative potential		
1,2-Ethanediol (107-21-1)		
Log Pow -1.36		
Bioaccumulative potential	There is no bioaccumulation.	

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12.4. Mobility in soil		
Antifreeze Premium Longlife Renault / Nissan concentrate		
Soil	Prevent soil and water pollution.	
1,2-Ethanediol (107-21-1)		
Soil	This material has low volatility and is water soluble hence the potential for mobility is high.	
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Other adverse effects		
No additional information available		
SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste disposal recommendations	Dispose as hazardous waste.	
Waste materials	Waste disposal according to official state regulations.	
European List of Waste (LoW) code	16 01 14* - antifreeze fluids containing dangerous substances	
SECTION 14: Transport information		
In accordance with ADR / RID / IMDG / IATA / ADN		
ADR	IMDG	
14.1. UN number		
Not applicable	Not applicable	
14.2. UN proper shipping name		
Not applicable	Not applicable	
14.3. Transport hazard class(es)		
Not applicable	Not applicable	
Not applicable	Not applicable	
14.4. Packing group		
Not applicable	Not applicable	
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	

No supplementary information available

# 14.6. Special precautions for user

- Overland transport

No data available

# - Transport by sea

No data available

14.7. Transport in bulk according to Annex II of Marpol 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

No additional information available

# 15.2. Chemical safety assessment

No additional information available

# **SECTION 16: Other information**

Full text of H- and EUH-statements:

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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

### SDS MPM REACH

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