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

1.1. Product identifier

Product form : Mixture
Trade name : Long Life Coolant Concentrated Red
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Coolant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Toyota Motor Europe
Bourgetlaan 60
B 1140 Brussel
Belgium
T +32 (0)2 745 20 11
hazmat@toyota-europe.com

National representative : Reference to other sections 16

1.4. Emergency telephone number

Emergency number : + 32 3 575 55 55 (24/7)

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

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

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 : Warning

Contains : ethanediol; ethylene glycol

Hazard statements (CLP) : H302 - Harmful if swallowed.
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Precautionary statements (CLP) : P260 - Do not breathe vapours.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P301+P312 - IF SWALLOWED: Call a POISON CENTER, a doctor if you feel unwell.
P330 - Rinse mouth.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Other hazards : Results of PBT and vPvB assessment : Contains no PBT and/or 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 substance(s) are 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

3.1. Substances

Not applicable

3.2. Mixtures

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanediol; ethylene glycol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index: 603-027-00-1 REACH-no: 01-2119456816-28-xxxx	85 – 95	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) STOT RE 2, H373

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice	:	First aider: Pay attention to self-protection!. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance.
Inhalation	:	Remove casualty to fresh air and keep warm and at rest. In case of doubt or persistent symptoms, consult always a physician.
Skin contact	:	Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, consult always a physician. Wash contaminated clothing before reuse.
Eyes contact	:	Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of doubt or persistent symptoms, consult always a physician.
Ingestion	:	Rinse mouth thoroughly with water. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	:	The following symptoms may occur: Cough. Dizziness. Headache.
Skin contact	:	The following symptoms may occur: Dry skin.
Eyes contact	:	The following symptoms may occur: Redness, pain.
Ingestion	:	Harmful if swallowed. The following symptoms may occur: Vomiting. Nausea. Unconsciousness. Abdominal pain.
Chronic symptoms	:	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

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

Treat symptomatically. Symptoms may be delayed. Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.
Unsuitable extinguishing media	:	Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards	:	Not flammable. Heating will cause a rise in pressure with a risk of bursting.
Hazardous decomposition products in case of fire	:	Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Firefighting instructions	:	Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.
Other information	:	Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel : Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Dam up the liquid spill.

Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment.

Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep out of direct sunlight.

Packaging materials : Keep only in the original container.

7.3. Specific end use(s)

Reference to other sections : 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ethanediol; ethylene glycol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m³
	20 ppm
IOEL STEL	104 mg/m³
	40 ppm
Remark	Possibility of significant uptake through the skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Albania - Occupational Exposure Limits	
Local name	Etilenglikol
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	Lëkurë (tregon mundësinë e një marrjeje të rëndësishme nëpërmjet lëkurës)
Regulatory reference	VENDIM Nr. 522, datë 6.8.2014 PËR MIRATIMIN E RREGULLORES "PËR MBROJTJEN E SIGURISË DHE SHËNDETIT TË PUNËMARRËSVE NGA RISQET E LIDHURA ME AGJENTËT KIMIKË NË PUNË"
Austria - Occupational Exposure Limits	
Local name	Ethylenglykol (Ethandiol; Glykol)
MAK (OEL TWA)	26 mg/m³
	10 ppm

ethanediol; ethylene glycol (107-21-1)	
MAK (OEL STEL)	52 mg/m³
	20 ppm
Remark	H
OEL chemical category	Skin notation
Regulatory reference	BGBl. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Ethylèneglycol (en aérosol) # Ethyleenglycol
OEL TWA	52 mg/m³ (aerosol)
	20 ppm (aerosol)
OEL STEL	104 mg/m³ (aerosol)
	40 ppm (aerosol)
Remark	D: la mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air, M: la mention “M” indique que lors d’une exposition supérieure à la valeur limite, des irritations apparaissent ou un danger d’intoxication aiguë existe. Le procédé de travail doit être conçu de telle façon que l’exposition ne dépasse jamais la valeur limite. Lors des mesurages, la période d’échantillonnage doit être aussi courte que possible afin de pouvoir effectuer des mesurages fiables. Le résultat des mesurages est calculé en fonction de la période d’échantillonnage. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht, M: de vermelding “M” duidt aan dat bij de blootstelling boven de grenswaarde irritatie optreedt of er gevaar bestaat voor acute vergiftiging. Het werkprocédé moet zo zijn ontworpen dat de blootstelling de grenswaarde nooit overschrijdt. Bij een controle geldt dat de bemonsterde periode zo kort mogelijk moet zijn om een betrouwbare meting te kunnen verrichten. Het meetresultaat wordt dan gerelateerd aan de beschouwde periode.
OEL chemical category	Skin, Skin notation
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Bulgaria - Occupational Exposure Limits	
Local name	Етиленгликол
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	Кожа (възможна е значителна резорбция чрез кожата); • (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)

ethanediol; ethylene glycol (107-21-1)	
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Croatia - Occupational Exposure Limits	
Local name	Etandiol; etilen-glikol
GVI (OEL TWA)	52 mg/m³
	20 ppm
KGVI (OEL STEL)	104 mg/m³
	40 ppm
Remark	Direktiva: 2000/39/EZ. Napomena: Koža (razvrstana kao tvar koja nadražuje kožu (H315))
OEL chemical category	Skin notation
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 148/2023)
Cyprus - Occupational Exposure Limits	
Local name	Αιθυλενογλυκόλη
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
OEL chemical category	Skin-potential for cutaneous absorption
Remark	δέρμα
Regulatory reference	Κανονισμοί του 2007 (Κ.Δ.Π. 295/2007)
Czech Republic - Occupational Exposure Limits	
Local name	Ethylenglykol (Ethan-1,2-diol)
PEL (OEL TWA)	50 mg/m³
	19,38 ppm
NPK-P (OEL C)	100 mg/m³
	38,77 ppm
Remark	D - při expozici se významně uplatňuje pronikání faktoru kůží.
OEL chemical category	Potential for cutaneous absorption
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 330/2023 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Ethylenglycol (1,2-Ethandiol; Glycol)
OEL TWA	26 mg/m³ 10 mg/m³ (atomized)

ethanediol; ethylene glycol (107-21-1)	
	10 ppm
OEL STEL	104 mg/m³ 20 mg/m³ (atomized)
	40 ppm
Remark	E (betyder, at stoffet har en EF-grænseværdi); H (betyder, at stoffet kan optages gennem huden)
OEL chemical category	Potential for cutaneous absorption
Regulatory reference	BEK nr 202 af 21/02/2023
Estonia - Occupational Exposure Limits	
Local name	1,2-etaandiool (etüleenglükool)
OEL TWA	52 mg/m³ (total concentration of aerosol and vapor)
	20 ppm (total concentration of aerosol and vapor)
OEL STEL	104 mg/m³ (total concentration of aerosol and vapor)
	40 ppm (total concentration of aerosol and vapor)
Remark	A (Naha kaudu kergesti imenduv aine), 18 (Piirnorm kehtib auru ja aerosooli summaarse sisalduse kohta)
OEL chemical category	Skin notation
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 21.12.2022, 3)
Finland - Occupational Exposure Limits	
Local name	1,2-Etaanidioli
HTP (OEL TWA)	50 mg/m³
	20 ppm
HTP (OEL STEL)	100 mg/m³
	40 ppm
Remark	Iho
OEL chemical category	Potential for cutaneous absorption
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Ethylèneglycol (vapeur)
VME (OEL TWA)	52 mg/m³ (indicative limit-vapor)
	20 ppm (indicative limit-vapor)
VLE (OEL C/STEL)	104 mg/m³ (indicative limit-vapor)
	40 ppm (indicative limit-vapor)
Remark	Valeurs règlementaires indicatives. Risque de pénétration percutanée
OEL chemical category	Risk of cutaneous absorption
Regulatory reference	Arrêté du 30 juin 2004 modifié (réf.: INRS ED 6443, 2022; Outil65)

ethanediol; ethylene glycol (107-21-1)	
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Ethandiol
Occupational exposure limit value (mg/m³) (TRGS900)	26 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Occupational exposure limit value (ppm) (TRGS900)	10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Peak exposure limitation factor	2(I)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich); H - hautresorptiv; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; 11 - Summe aus Dampf und Aerosolen
Chemical category	Skin notation
Regulatory reference	TRGS900
Gibraltar - Occupational Exposure Limits	
Local name	Ethylene glycol
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	Skin
OEL chemical category	Skin notation
Regulatory reference	Factories (Control of Chemical Agents at Work) Regulations 2003 (LN. 2018/181)
Greece - Occupational Exposure Limits	
Local name	Αιθυλενογλυκόλη (στμοί)
OEL TWA	125 mg/m³ (vapor)
	50 ppm (vapor)
OEL STEL	125 mg/m³ (vapor)
	50 ppm (vapor)
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
Local name	ETILÉNGLIKOL
AK (OEL TWA)	52 mg/m³
CK (OEL STEL)	104 mg/m³

ethanediol; ethylene glycol (107-21-1)	
Remark	b (Bőrön át is felszívódik), i (ingerlő anyag, amely izgatja a bőrt, nyálkahártyát, szemet vagy mindhármat); EU1 (2000/39/EK irányelvben közölt érték); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
OEL chemical category	Potential for cutaneous absorption
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	Ethane-1,2-diol [Ethylene glycol]
OEL TWA	10 mg/m³ (particulate) 52 mg/m³ (vapour)
	20 ppm (vapour)
OEL STEL	30 mg/m³ (calculated-particulate) 104 mg/m³ (vapour)
	40 ppm (vapour)
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
OEL chemical category	Potential for cutaneous absorption
Regulatory reference	Chemical Agents Code of Practice 2021
Italy - Occupational Exposure Limits	
Local name	Etilen glicol
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	Cute
OEL chemical category	skin - potential for cutaneous absorption
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Etilēnglikols, (1,2-etāndiols)
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	Āda
OEL chemical category	skin - potential for cutaneous exposure
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325

ethanediol; ethylene glycol (107-21-1)	
Lithuania - Occupational Exposure Limits	
Local name	Etilenglikolis (1,2-etandiolis, glikolis)
IPRV (OEL TWA)	25 mg/m³ (aerosol and vapor)
	10 ppm (aerosol and vapor)
TPRV (OEL STEL)	50 mg/m³ (aerosol and vapor)
	20 ppm (aerosol and vapor)
Remark	O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą); Šis RD taikomas bendrai garų ir aerozolio koncentracijai.
OEL chemical category	Skin notation
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Luxembourg - Occupational Exposure Limits	
Local name	Éthylène-glycol
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
OEL chemical category	Possibility of significant uptake through the skin
Remark	Peau
Regulatory reference	Mémorial A N° 226 de 2021 concernant la protection de la sécurité et de la santé des salariés contre les risques liés à des agents chimiques sur le lieu de travail
Malta - Occupational Exposure Limits	
Local name	Ethylene glycol
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	Skin # Ġilda
OEL chemical category	Possibility of significant uptake through the skin
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.356 of 2021)
Netherlands - Occupational Exposure Limits	
Local name	Ethaan-1,2-diol
TGG-8u (OEL TWA)	52 mg/m³ (fume) 10 mg/m³ (droplets)
	20 ppm (damp)
TGG-15min (OEL STEL)	104 mg/m³

ethanediol; ethylene glycol (107-21-1)	
	40 ppm (vapour)
Remark	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
MAC chemical category	Skin notation vapour
Regulatory reference	Arbeidsomstandighedenregeling 2024
Poland - Occupational Exposure Limits	
Local name	Glikol etylenowy
NDS (OEL TWA)	15 mg/m³
NDSCh (OEL STEL)	50 mg/m³
Remark	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową).
Regulatory reference	Dz. U. 2018 poz. 1286 wraz z późn. zm.
Portugal - Indicative Occupational Exposure Limit (IOEL)	
Local name	Etilenoglicol
IOEL TWA	52 mg/m³
	20 ppm
IOEL STEL	104 mg/m³
	40 ppm
Remark	Cutânea.
Regulatory reference	Decreto-Lei n.º 1/2021 de 6 de janeiro
Portugal - Occupational Exposure Limits	
Local name	Etilenoglicol
OEL TWA	52 mg/m³ (indicative limit value)
	20 ppm (indicative limit value)
OEL STEL	104 mg/m³ (indicative limit value)
	40 ppm (indicative limit value)
OEL C	100 mg/m³ (aerosol only)
	100 ppm H (Apenas aerossol)
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure indicative limit value
Remark	A4 (Agente não classificável como carcinogénico no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014

ethanediol; ethylene glycol (107-21-1)	
Romania - Occupational Exposure Limits	
Local name	Etilenglicol/Etandiol
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
OEL chemical category	Skin notation
Remark	P - posibilitatea unei penetrări cutanate importante
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Serbia - Occupational Exposure Limits	
Local name	етилен гликол; етандиол
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	ЕУ* – напомена да се ради о хемијским материјама за које су утврђене индикативне граничне вредности изложености према Директиви 2000/39/ЕЗ (прва листа); К – напомена да хемијска материја може штетно деловати на кожу
Regulatory reference	ПРАВИЛНИК о превентивним мерама за безбедан и здрав рад при излагању хемијским материјама („Службени гласник РС”, бр. 106/09, 117/17 и 107/21)
Slovakia - Occupational Exposure Limits	
Local name	Etylénglykol (etán-1,2-diol)
NPHV (OEL TWA)	52 mg/m³
	20 ppm
NPHV (OEL STEL)	104 mg/m³
	40 ppm
NPHV (OEL C)	104 mg/m³
Remark	K - znamená, že faktor môže byť ľahko absorbovaný kožou
OEL chemical category	Potential for cutaneous absorption
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovenia - Occupational Exposure Limits	
Local name	etandiol (glikol)
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³

ethanediol; ethylene glycol (107-21-1)	
	40 ppm
Remark	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti), EU
OEL chemical category	Potential for cutaneous absorption
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Etilenglicol
VLA-ED (OEL TWA)	52 mg/m³ (indicative limit value)
	20 ppm (indicative limit value)
VLA-EC (OEL STEL)	104 mg/m³
	40 ppm
Remark	Vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo).
OEL chemical category	skin - potential for cutaneous absorption
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2023. INSHT
Sweden - Occupational Exposure Limits	
Local name	Etylenglykol (Glykol)
NGV (OEL TWA)	25 mg/m³ (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
	10 ppm (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
KGV (OEL STEL)	104 mg/m³ (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
	40 ppm (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
Remark	H (Ämnet kan lätt upptas genom huden. Det föreskrivna gränsvärdet bedöms ge tillräckligt skydd endast under förutsättning att huden är skyddad mot exponering för ämnet ifråga); 26 (Gränsvärdet gäller den sammanlagda koncentrationen av ånga och aerosol)
OEL chemical category	Skin notation
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Ethane-1,2-diol
WEL TWA (OEL TWA)	10 mg/m³ (particulates) 52 mg/m³ (vapour)

ethanediol; ethylene glycol (107-21-1)	
	20 ppm (vapour)
WEL STEL (OEL STEL)	104 mg/m³ (vapour) 30 mg/m³ (calculated-particulate)
	40 ppm (vapour)
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
WEL chemical category	Potential for cutaneous absorption
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Etýlenglýkól (1,2-etandíól, glýkól, mónóetýlenglýkól)
OEL TWA	26 mg/m³ 26 mg/m³ úði
	10 ppm 10 ppm úði
OEL STEL	104 mg/m³
	40 ppm
Remark	H (efnið getur auðveldlega borist inn í líkamann gegnum húð)
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 1296/2012)
Norway - Occupational Exposure Limits	
Local name	1,2-etandiol (Etylenglykol)
Grenseverdi (OEL TWA)	52 mg/m³ (total sum of gas and particulate matter (aerosol) of the substance-total dust and vapor)
	20 ppm (total sum of gas and particulate matter (aerosol) of the substance-total dust and vapor)
Korttidsverdi (OEL STEL)	104 mg/m³ (total sum of gas and particulate matter (aerosol) of the substance-dust)
	40 ppm (total sum of gas and particulate matter (aerosol) of the substance)
Remark	H: Kjemikalier som kan tas opp gjennom huden; E: EU har en veiledende grenseverdi og/eller anmerkning for stoffet; 5) Grenseverdien er basert på beregning av summen av gass- og partikkelform (aerosol) av stoffet.
OEL chemical category	Skin notation
Regulatory reference	FOR-2023-12-18-2278
North Macedonia - Occupational Exposure Limits	
Local name	етандиол (гликол)
OEL TWA	52 mg/m³
	20 ppm
KTV	2

ethanediol; ethylene glycol (107-21-1)	
Short time value [mg/m³]	104 mg/m³
Short time value	40 ppm
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанци во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусо време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m3 или во ml/m3(ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (K) својство на полесно пренесување на супстанците во организмот преку кожата; (EU) European Union – гранична вредност, определена на ниво на Европската унија
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанци („Службен весник на Република Македонија" бр.46/10)
Switzerland - Occupational Exposure Limits	
Local name	Ethylèneglycol / Ethylenglykol
MAK (OEL TWA)	26 mg/m³ (aerosol, vapour)
	10 ppm (aerosol, vapour)
KZGW (OEL STEL)	52 mg/m³ (aerosol, vapour)
	20 ppm (aerosol, vapour)
Notation	R, SS_C / H, SS_C
Remark	La substance peut être présente sous forme de vapeur et d'aérosol en même temps / Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen
OEL chemical category	Skin notation
Regulatory reference	www.suva.ch, 01.01.2024
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethylene glycol
ACGIH OEL TWA	25 ppm (vapor fraction)
ACGIH OEL STEL	10 mg/m³ (inhalable particulate matter, aerosol only)
	50 ppm (vapor fraction)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2024

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Personal air monitoring. Room air monitoring.

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Additional information : Recommended monitoring procedures :. Personal air monitoring. Room air monitoring

8.1.5. Control banding

No additional information available

8.2. Exposure controls

Engineering measure(s) : Provide adequate ventilation. Organisational measures to prevent/limit releases, dispersion and exposure. See Section 7 for information on safe handling .

Personal protective equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hand protection : Wear chemically resistant gloves (tested to EN374) . Suitable material: NR (natural rubber, natural latex) (BTT > 480', > 0,3 mm). Neoprene (BTT > 480', > 0,3 mm). Nitrile rubber (BTT > 480', > 0,3 mm). PVC (Polyvinyl chloride) (BTT > 480', > 0,3 mm). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection : Use suitable eye protection (EN166): Safety goggles recommended during refilling. Safety glasses with side-shields

Body protection : Wear suitable protective clothing. Overalls, apron and boots recommended.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140). full face mask (DIN EN 136). Filter type: A/P (EN 14387). The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)

Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : red.

Appearance : liquid.

Odour : mild.

Odour threshold	:	No data available
Melting / freezing point	:	Not available
Freezing point	:	Not available
Initial boiling point and boiling range	:	170 °C (ASTM D1120)
Flammability	:	Not applicable,liquid
Explosive properties	:	Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	:	Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	124 °C (ASTM D93)
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
pH	:	7,5 (ASTM D1287)
Kinematic viscosity	:	No data available
Solubility	:	No additional information available. Water: completely miscible
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water	:	-1,93 ethanediol; ethylene glycol
Vapour pressure	:	No data available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1,13 g/cm³ (ASTM D1122)
Vapour density	:	No data available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions. Reference to other sections : 10.4 & 10.5.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Direct sunlight. See Section 7 for information on safe handling.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses. Reference to other sections 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Long Life Coolant Concentrated Red	
ATE CLP (oral)	526,316 mg/kg bodyweight

ethanediol; ethylene glycol (107-21-1)	
LD50/oral/rat	4700 mg/kg
LD50 oral	4700 mg/kg
LD50/dermal/rat	10600 mg/kg
LD50 dermal	10600 mg/kg
LC50/inhalation/4h/rat	> 2,5 mg/l (6h)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 7,5 (ASTM D1287)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 7,5 (ASTM 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)

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)

STOT-repeated exposure : May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

ethanediol; ethylene glycol (107-21-1)	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure.

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Long Life Coolant Concentrated Red	
Kinematic viscosity	No data available

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects 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 substance(s) are 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 %

11.2.2. Other information

Other information : Symptoms related to the physical, chemical and toxicological characteristics,For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : Not classified (CLP).

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

ethanediol; ethylene glycol (107-21-1)	
LC50 - Fish [1]	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 - Fish [2]	14 – 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [1]	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 96h - Algae [1]	6500 – 13000 mg/l (Species: Pseudokirchneriella subcapitata)
ErC50 algae	6500 – 1300 mg/l Selenastrum capricornutum
NOEC (chronic)	(7d) 15380 mg/l Pimephales promelas (fathead minnow)
NOEC chronic crustacea	(7d) 8590 mg/l Ceriodaphnia spec

12.2. Persistence and degradability

Long Life Coolant Concentrated Red	
Persistence and degradability	No additional information available.

ethanediol; ethylene glycol (107-21-1)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Long Life Coolant Concentrated Red	
Partition coefficient n-octanol/water	-1,93 ethanediol; ethylene glycol
Bioaccumulative potential	No additional information available.

ethanediol; ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water	-1,93

12.4. Mobility in soil

Long Life Coolant Concentrated Red	
Mobility in soil	No data available

12.5. Results of PBT and vPvB assessment

Long Life Coolant Concentrated Red	
Results of PBT assessment	Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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 substance(s) are 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

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations. Beware of residues or vapours which remain in the drums.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Special precautions for user : No data available

- 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 according to IMO instruments

Code: IBC : 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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(b)	Long Life Coolant Concentrated Red ; ethanediol; ethylene glycol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

REACH Annex XIV (Authorisation List)

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

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)

15.1.2. 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

Installations classées			
No ICPE	Désignation de la rubrique	Code Régime	Rayon
na	Not Applicable	na	na

No ICPE

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

Waterbezwaarlijkheid : B (5) - Weinig schadelijk voor in het water levende organismen

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : 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

Not applicable.

SECTION 16: Other information

Indication of changes:

1	SDS EU format according to COMMISSION REGULATION (EU) 2020/878	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.3	ED text	Added	
11.2	Adverse health effects caused by endocrine disrupting properties	Added	

12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added	

Abbreviations and acronyms:

	ABM = Algemene beoordelingsmethodiek
	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	BTT = Breakthrough time (maximum wearing time)
	DMEL = Derived Minimal Effect level
	DNEL = Derived No Effect Level
	EC50 = Median Effective Concentration
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	EWC = European waste catalogue
	LC50 = Median lethal concentration
	LD50 = Median lethal dose
	LL50 = Median lethal level
	NA = Not applicable
	NOEC = No observed effect concentration
	NOEL: no-observed-effect level
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	N.O.S. = Not Otherwise Specified
	OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	PNEC = Predicted No Effect Concentration
	Quantitative structure-activity relationship (QSAR)
	STOT = Specific Target Organ Toxicity
	TWA = time weighted average
	VOC = Volatile organic compounds
	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the datasheet : ECHA (European Chemicals Agency). Supplier information : Toyota Long Life Coolant Concentrated Red, 13.12.2021, CCI Manufacturing Germany GmbH . LOLI.

Training advice : Training staff on good practice.

Other information : Classification - Assessment method: CLP Calculation method (Article 9). Physicochemical hazard assessment: Information given is based on tests on the mixture itself.

National representative

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Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Labelling according to Regulation (EC) No. 1272/2008 [CLP]