Cooling fluid UNIVERSEL -35°C TECHNI-POWER

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Reference number: 070172109
Issue date: 11/01/2024 Revision date: 11/01/2024 Supersedes version of: 13/11/2023 Version: 12.3

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

1.1. Product identifier

Product form : Mixture
Name : Cooling fluid UNIVERSEL -35°C TECHNI-POWER
UFI : RK00-P0WW-T001-SGX9
Product code : 070172109

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Professional use,Consumer use
Use of the substance/mixture : Automotive cooling fluid

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Sotragal Mont Blanc - SMB
20 rue de Bourgogne - CS 10165
69800 SAINT-PRIEST
France
T +33 (0) 4 72 28 13 00, F +33 (0) 4 72 28 13 41
contactfds@smb-auto.com

1.4. Emergency telephone number

Emergency number : +33 (0) 1 72 11 00 03 - 24h/24 7j/7
INRS/ORFILA (France) : 33 1 45 42 59 59

Country/Area	Organisation/Company	Address	Emergency number	Comment
Europe	UE Tel		112	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Oral) H302
STOT RE 2 H373
Full text of hazard classes, 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 (CLP) : Warning
Contains : Ethane-1,2-diol

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

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P264 - Wash hands thoroughly after handling.
P301+P312 - IF SWALLOWED: Call a POISON CENTER, doctor if you feel unwell.
P501 - Dispose of contents and container to hazardous or special waste collection point in accordance with national regulation..

Nordic countries regulation

Denmark

MAL code : 00-3 (Executive Order No. 301 from 1993)

2.3. Other hazards

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 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethane-1,2-diol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	30-60	Acute Tox. 4 (Oral), H302 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

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Remove all contaminated clothing and footwear. Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not give the affected person anything to drink, even if he is fully conscious. Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor. If possible show him this sheet. Failing this, show him the packaging or label.

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

Symptoms/effects after inhalation : Irritation of the respiratory tract.

Symptoms/effects after eye contact : Eye irritation. Lacrimation.

Symptoms/effects after ingestion : Harmful if swallowed. Headache. Nausea. GCM – Vietnam sequence. Vomiting. CNS depression.

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

No supplementary information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Carbon dioxide.
Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Cool down the containers exposed to heat with a water spray.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.
Emergency procedures : Stop leak if safe to do so. Contain the spilled material by bunding.

6.2. Environmental precautions

Do not discharge into drains or rivers. Do not allow product to spread into the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Transfer the product into a spare container: suitably labelled.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Vapour extraction at source. Ensure good ventilation of the work station. Do not breathe vapours, spray. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place.
Incompatible products : Strong oxidizing agents.
Storage temperature : Store at ambient temperature

Packaging materials : Recommended materials Coated steels, Aluminium, Plastic materials. Unsuitable materials: Galvanized steel.

Switzerland

Storage class (LK) : LK 6.1 - Toxic materials

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Ethane-1,2-diol (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	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
MAK (OEL STEL)	52 mg/m³ (8x 5(Mow) min)
	20 ppm (8x 5(Mow) min)
Remark	H
Regulatory reference	BGBl. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Ethylèneglycol (en aérosol) # Ethyleenglycol
OEL TWA	52 mg/m³
	20 ppm

Ethane-1,2-diol (107-21-1)	
OEL STEL	104 mg/m³
	40 ppm
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.
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
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)
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))
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
Cyprus - Occupational Exposure Limits	
Local name	Αιθυλενογλυκόλη
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm

Ethane-1,2-diol (107-21-1)	
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
	20 ppm
NPK-P (OEL C)	100 mg/m³
	39 ppm
Remark	D - při expozici se významně uplatňuje pronikání faktoru kůží.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Ethylenglycol (1,2-Ethandiol; Glycol)
OEL TWA	26 mg/m³ 10 mg/m³ forstøvet
	10 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	E (betyder, at stoffet har en EF-grænseværdi); H (betyder, at stoffet kan optages gennem huden)
Regulatory reference	BEK nr 1054 af 28/06/2022
Estonia - Occupational Exposure Limits	
Local name	1,2-etaandiool (etüleenglükool)
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
Remark	A (Naha kaudu kergesti imenduv aine), 18 (Piirnorm kehtib auru ja aerosooli summaarse sisalduse kohta)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 15.05.2021, 1)
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
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Ethylèneglycol (vapeur)
VME (OEL TWA)	52 mg/m³

Ethane-1,2-diol (107-21-1)	
	20 ppm
VLE (OEL C/STEL)	104 mg/m³
	40 ppm
Remark	Valeurs règlementaires indicatives; risque de pénétration percutanée
Regulatory reference	Arrêté du 30 juin 2004 modifié (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Ethandiol
AGW (OEL TWA)	26 mg/m³
	10 ppm
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
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
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
	50 ppm
OEL STEL	125 mg/m³
	50 ppm
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
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)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről

Ethane-1,2-diol (107-21-1)	
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	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)
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
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
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325
Lithuania - Occupational Exposure Limits	
Local name	Etilenglikolis (1,2-etandiolis, glikolis)
IPRV (OEL TWA)	25 mg/m³
	10 ppm
TPRV (OEL STEL)	50 mg/m³
	20 ppm
Remark	O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą); Šis RD taikomas bendrai garų ir aerozolio koncentracijai.
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

Ethane-1,2-diol (107-21-1)	
OEL STEL	104 mg/m³
	40 ppm
Remark	Peau
Regulatory reference	Mémorial A Nº 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
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
	20 ppm (damp)
TGG-15min (OEL STEL)	104 mg/m³
	40 ppm (damp)
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.
Regulatory reference	Arbeidsomstandighedenregeling 2023
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
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

Ethane-1,2-diol (107-21-1)	
OEL C	100 ppm H (Apenas aerossol)
Remark	A4 (Agente não classificável como carcinogénico no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Etilenglicol/Etandiol
OEL TWA	52 mg/m³
	20 ppm
OEL STEL	104 mg/m³
	40 ppm
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
Remark	K - znamená, že faktor môže byť ľahko absorbovaný kožou
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
	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
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021

Ethane-1,2-diol (107-21-1)	
Spain - Occupational Exposure Limits	
Local name	Etilenglicol
VLA-ED (OEL TWA)	52 mg/m³
	20 ppm
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 elcontenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización delcontrol biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 deeste documento.), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados,estos valores tienen la misma validez que el resto de los valores adoptados por el país.)
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
	10 ppm
KTV (OEL STEL)	104 mg/m³
	40 ppm
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)
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 particulate 52 mg/m³ vapour
	20 ppm vapour
WEL STEL (OEL STEL)	104 mg/m³ vapour
	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)
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

Ethane-1,2-diol (107-21-1)	
	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
	20 ppm
Korttidsverdi (OEL STEL)	104 mg/m³
	40 ppm
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.
Regulatory reference	FOR-2021-06-28-2248
North Macedonia - Occupational Exposure Limits	
Local name	етандиол (гликол)
OEL TWA	52 mg/m³
	20 ppm
KTV	2
Short time value [mg/m³]	104 mg/m³
Short time value [ppm]	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
	10 ppm
KZGW (OEL STEL)	52 mg/m³
	20 ppm
Critical toxicity	VRS, Yeux / OAW, Auge
Notation	R, SS_C / H, SS_C
Regulatory reference	www.suva.ch, 01.01.2023

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses with side shields

8.2.2.2. Skin protection

Skin and body protection:
Majority cotton protective clothing

Hand protection:
natural rubber gloves. Nitrile-rubber protective gloves. neoprene gloves.

8.2.2.3. Respiratory protection

Respiratory protection:
If the ventilation is suitable, it is not essential to wear respiratory equipment. In the event of insufficient ventilation: Mask with {0} canister A

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Yellow.
Odour	:	odourless.
Odour threshold	:	Not available
Melting point	:	-35 °C
Freezing point	:	Not available
Boiling point	:	≈ 107 °C
Flammability	:	Non flammable.
Explosive properties	:	Not explosive material according to EC criteria.
Oxidising properties	:	Non oxidizing material according to EC criteria.
Lower explosion limit	:	3,2 vol % ethylene glycol
Upper explosion limit	:	15,3 vol % ethylene glycol
Flash point	:	Not applicable.
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	7,5 – 9

Viscosity, kinematic	:	Not available
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	-1,93 ethylene glycol
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	≈ 1,066 g/cm³ (20°C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not 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

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Reacts with (strong) oxidizers.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

On thermal decomposition (pyrolysis), releases : Carbon oxides (CO, CO2), Acetic aldehyde.

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

Cooling fluid UNIVERSEL -35°C TECHNI-POWER	
ATE CLP (oral)	1297,353 mg/kg bodyweight

Ethane-1,2-diol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight
LD50 oral	7712 mg/kg bodyweight
LD50 dermal	3500 mg/kg mouse
LC50 Inhalation - Rat	> 2,5 mg/l

Ethane-1,2-diol (107-21-1)	
LC50 Inhalation - Rat (Dust/Mist)	> 2500 mg/l

Skin corrosion/irritation : Not classified
pH: 7,5 – 9

Serious eye damage/irritation : Not classified
pH: 7,5 – 9

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Ethane-1,2-diol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight mouse

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

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

Ethane-1,2-diol (107-21-1)	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure (inhalation, oral, in contact with skin, if swallowed, if inhaled).

Aspiration hazard : Not classified

Ethane-1,2-diol (107-21-1)	
Viscosity, kinematic	14,505 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Do not allow product to spread into the environment.

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

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

Ethane-1,2-diol (107-21-1)	
LC50 - Fish [1]	72860 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (Water flea)
EC50 - Other aquatic organisms [1]	> 100 mg/l waterflea
EC50 - Other aquatic organisms [2]	6500 mg/l
EC50 72h - Algae [1]	6500 – 13000 mg/l (96 Hours)
EC50 96h - Algae [1]	3536 mg/l aquatic algae
EC50 96h - Algae [2]	6500 – 13000 mg/l Pseudokirchneriella subcapitata
NOEC (chronic)	≥ 1000 mg/l Americamysis bahia
NOEC chronic fish	15380 mg/l 7 days (Pimephales promelas)
NOEC chronic crustacea	8590 mg/l 7 days (Daphnia)

12.2. Persistence and degradability

Cooling fluid UNIVERSEL -35°C TECHNI-POWER	
Persistence and degradability	Readily biodegradable.

Ethane-1,2-diol (107-21-1)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Cooling fluid UNIVERSEL -35°C TECHNI-POWER	
Partition coefficient n-octanol/water (Log Pow)	-1,93 ethylene glycol

Ethane-1,2-diol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1,4
Partition coefficient n-octanol/water (Log Kow)	-1,36 (23°C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Ecological information : Do not discharge into drains or the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

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)

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)

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

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 of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

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

MAL code : 00-3 (Executive Order No. 301 from 1993)
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 chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:
All chapters have been modified since the previous version.

Other information : Product for professional use or for general public.

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

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.