SAFETY DATA SHEET

Version #: 01
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture ALclean

Registration number -

Synonyms GAXALC1 * GAXALC25 * GAXALC5

Product code 1438

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

Identified uses Cleaning Agent.

Uses advised against Uses other than the recommended use.
Consumer, private households, general public.

1.3. Details of the supplier of the safety data sheet

Company name Howmet Aerospace
Howmet-Köfém Kft.

Address 1-15 Verseci út
8000 Székesfehérvár Hungary

Telephone number +1-412-553-4649

E-mail SDSRequests@howmet.com

1.4. Emergency telephone number

General in EU 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

CHEMTREC For Dangerous Goods Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC 24/7 at:

International +1-703-527-3887

Canada, USA (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards		
Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Skin corrosion/irritation	Category 1	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.
Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Phosphoric acid, 2-Butoxyethanol, Alcohols, C9-11, ethoxylated + 6EO, Potassium alkyl polyglycol ether phosphate

Hazard pictograms



Signal word Danger

Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P260	Do not breathe mist/vapours/spray.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE/doctor.

Storage Not assigned.

Disposal Not assigned.

Supplemental information on the label EUH208 - Contains Potassium alkyl polyglycol ether phosphate. May produce an allergic reaction.

2.3. Other hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight. The mixture does not contain any substances 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% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Phosphoric acid	15 - 20	7664-38-2 231-633-2	-	015-011-00-6	#
Classification:	Met. Corr. 1;H290, Acute Tox. 4;H302;(ATE: 2000 mg/kg bw), Acute Tox. 4;H312;(ATE: 1260 mg/kg bw), Skin Corr. 1B;H314, Eye Dam. 1;H318, STOT SE 3;H335				
Specific Concentration Limits:	Skin Corr. 1B;H314: C ≥ 25 %, Skin Irrit. 2;H315: 10 % ≤ C < 25 %, Eye Dam. 1;H314: C ≥ 25 %, Eye Irrit. 2;H319: 10 % ≤ C < 25 %				
2-Butoxyethanol	3 - 5	111-76-2 203-905-0	-	603-014-00-0	#
Classification:	Acute Tox. 4;H302;(ATE: 1200 mg/kg bw), Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Acute Tox. 3;H331;(ATE: 3 mg/l), Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335				
Alcohols, C9-11, ethoxylated + 6EO	3 - 5	68439-46-3 -	-	-	
Classification:	Acute Tox. 4;H302;(ATE: 300 mg/kg bw), Eye Dam. 1;H318				
Propane -1,2 -diol	1 - 2,5	57-55-6 200-338-0	-	-	
Classification:	-				
Bronopol	< 2,45	52-51-7 200-143-0	-	603-085-00-8	
Classification:	Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Acute 1;H400(M=10)				

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Alkyl (C=12-18) benzyl dimethyl ammonium chloride	0,2 - 0,5	68391-01-5 269-919-4	-	612-140-00-5	
Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400(M=1), Aquatic Chronic 1;H410(M=1)					
Potassium alkyl polyglycol ether phosphate	0,15 - 0,25	125301-87-3 -	-	-	
Classification: Eye Dam. 1;H318, Skin Sens. 1;H317					

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.
M: M-factor
#: This substance has been assigned Union workplace exposure limit(s).

Composition comments The full text for all H-statements is displayed in section 16.
All concentrations are in percent by weight.
Components not listed are either non-hazardous or are below reportable limits.

SECTION 4: First aid measures

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Call a poison control center or doctor for further treatment advice.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Harmful if swallowed. Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Material will burn in a fire.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO_2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides, nitrogen oxides, phosphorus oxides..

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Water runoff can cause environmental damage.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Do not breathe mist/vapours/spray. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not breathe mist/vapours/spray. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Should not be released into the environment. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Ensure adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Use neutralizing agents. Neutralise with alkaline material (Lime, crushed limestone, sodium bicarbonate or soda ash). Flush area with water.

Small Spills: Absorb spillage with suitable absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist/vapours/spray. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. Persons susceptible to allergic reactions should not handle this product.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Protect from freezing temperatures. Store at controlled room temperature 15-25°C. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s)

Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	MAK	98 mg/m3
		20 ppm
	STEL	200 mg/m3
		40 ppm
Phosphoric acid (CAS 7664-38-2)	MAK	1 mg/m3
	STEL	2 mg/m3

Belgium. OEL. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 - Chemical agents, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3

Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended

Components	Type	Value
	TWA	1 mg/m3

Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	MAC	98 mg/m3
		20 ppm
	STEL	246 mg/m3
		50 ppm
Phosphoric acid (CAS 7664-38-2)	MAC	1 mg/m3
	STEL	2 mg/m3
Propane -1,2 -diol (CAS 57-55-6)	MAC	10 mg/m3
		150 ppm

Cyprus. OELs. Occupational Exposure Limit Values of Chemicals at Work (Safety and Health at Work (Chem. Agents) Reg., Ann. 1, R.A.A. 268/2001, as amended)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	Ceiling	200 mg/m3
		40,7 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	Ceiling	2 mg/m3
		0,49 ppm
	TWA	1 mg/m3
		0,25 ppm

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TLV	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TLV	1 mg/m3

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value	Form
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	Vapour.
	TWA	1 mg/m3	Vapour.

Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	250 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

France. OELs. Indicative Occupational Exposure Limits as Prescribed by Order of 30 June 2004, as amended

Components	Type	Value
Phosphoric acid (CAS 7664-38-2)	VLE	2 mg/m3
		0,5 ppm
	VME	1 mg/m3
		0,2 ppm

France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	VLE	246 mg/m3
		50 ppm
	VME	49 mg/m3
		10 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	VLE	246 mg/m3
Regulatory status:	Binding regulatory limit values (article R. 4412-149 of the Labor Code)	
		50 ppm
Regulatory status:	Binding regulatory limit values (article R. 4412-149 of the Labor Code)	
Phosphoric acid (CAS 7664-38-2)	VLE	2 mg/m3
Regulatory status:	Indicative regulatory limit values (order of 30-06-2004 amended)	
		0,5 ppm
Regulatory status:	Indicative regulatory limit values (order of 30-06-2004 amended)	

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated

Components	Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	TWA	49 mg/m3	
		10 ppm	
Phosphoric acid (CAS 7664-38-2)	TWA	2 mg/m3	Inhalable fraction.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	AGW	49 mg/m3	

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
		10 ppm	
Phosphoric acid (CAS 7664-38-2)	AGW	2 mg/m3	Inhalable fraction.

Greece. OELs, Presidential Decree No. 307/1986, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	120 mg/m3
		25 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3

Hungary. OELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 1&2, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	100 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Ireland. OELVs, Schedules 1 & 2, Code of Practise for Chemical Agents and Carcinogens Regulations

Components	Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
Propane -1,2 -diol (CAS 57-55-6)	TWA	470 mg/m3	Total vapour and particulates.
		10 mg/m3	Particulate.
		150 ppm	Total vapour and particulates.

Italy. OELs

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm

Italy. OELs

Components	Type	Value
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Latvia. OELs. Occupational Exposure Limits of Chemical Substances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex 1), as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3
Propane -1,2 -diol (CAS 57-55-6)	TWA	7 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	100 mg/m3
		20 ppm
	TWA	50 mg/m3
		10 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3
Propane -1,2 -diol (CAS 57-55-6)	TWA	7 mg/m3

Luxembourg. OELs. Binding Occupational Exposure Limit Values (Annex I), G.D.R. of 14 November 2016, OJ Memorial A, n ° 235/2016, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Malta. OELs. Protection of Health and Safety of Workers from Risks related to Chemical Agents at Work (L.N 227/2003 Schedules I and V), as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Netherlands. OELs per Annex XIII of Working Conditions Regulation (Government Gazette no. 252, 29 December 2006), as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3

Netherlands. OELs per Annex XIII of Working Conditions Regulation (Government Gazette no. 252, 29 December 2006), as amended

Components	Type	Value
		50 ppm
	TWA	100 mg/m3
		20,4 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in the Work Environment and Infection Groups for Biological Factors, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TLV	50 mg/m3
		10 ppm
Phosphoric acid (CAS 7664-38-2)	TLV	1 mg/m3
Propane -1,2 -diol (CAS 57-55-6)	TLV	79 mg/m3
		25 ppm

Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)

Components	Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	200 mg/m3	
	TWA	98 mg/m3	
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
Propane -1,2 -diol (CAS 57-55-6)	TWA	100 mg/m3	Inhalable fraction and vapour.

Portugal. Decree-Law No. 24/2012, Occupational Exposure Limit Values, Annex II, as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796-2014)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3

Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm

Romania. OELs. Limit Values of Chemical Agents at Workplace (Regulation 1.218/2006, M.O 845, Annex 1, 3&4, as amended)

Components	Type	Value
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	TWA	1 mg/m3

Slovakia. OELs. Maximum permissible exposure limits for chemical factors in workplace air (Regulation No 355/2006, Annex 1, Table 1, as amended)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Ann. I 100/2001), as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	KTV	246 mg/m3
		50 ppm
Phosphoric acid (CAS 7664-38-2)	KTV	2 mg/m3

Slovenia. OELs. Occupational Exposure Limits of Chemicals at Workplace (Reg. on Protection of Workers from Risks due to Exp. to Chemicals at Work, Annex I), as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	TWA	1 mg/m3

Spain. OELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 1-Valores Límites Ambientales (VLAs)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	245 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	Ceiling	246 mg/m3
		50 ppm
	TWA	50 mg/m3
		10 ppm

Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended

Components	Type	Value
Phosphoric acid (CAS 7664-38-2)	Ceiling	2 mg/m3
	TWA	1 mg/m3

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte

Components	Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	98 mg/m3	
		20 ppm	
	TWA	49 mg/m3	
		10 ppm	
Phosphoric acid (CAS 7664-38-2)	STEL	4 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Components	Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	123 mg/m3	
		25 ppm	
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
Propane -1,2 -diol (CAS 57-55-6)	TWA	474 mg/m3	Total vapour and particulates.
		10 mg/m3	Particulate.
		150 ppm	Total vapour and particulates.

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Phosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Biological limit values

Czech Republic. BELs. Government Decree 432/2003 Sb., as amended

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (with hydrolysis)	Creatinine in urine	*
	0,17 mmol/mmol	Butoxyacetic acid (with hydrolysis)	Creatinine in urine	*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	150 mg/g	Butoxyessigsäure (nach Hydrolyse)	Creatinine in urine	*

* - For sampling details, please see the source document.

Spain. BELs. INSST, Límites de Exposición Profesional Para Agentes Químicos, Table 3-Valores Límite Biológicos (VLB)

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Ácido butoxiacético, con hidrólisis	Creatinine in urine	*

* - For sampling details, please see the source document.

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle BAT-Werte

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	150 mg/g	Butoxyessigsäure (nach Hydrolyse)	Creatinine in urine	*

* - For sampling details, please see the source document.

UK. BELs. Biological Monitoring Guidance Values (BMGVs) (EH40/2005 (Fourth Edition 2020)), Table 2

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	240 mmol/mol	Butoxyacetic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

Austria. MAK List

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Belgium OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Bulgaria OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Croatia ELVs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Czech Republic PELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Denmark GV: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Estonia OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

EU Exposure Limit Values: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Finland Exposure Limit Values: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

France Mandatory OELs (VLEP): Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Germany DFG MAK (advisory): Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.
Bronopol (CAS 52-51-7) Can be absorbed through the skin.

Germany TRGS 900 Limit Values: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Greece OEL: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Hungary OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Iceland OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Ireland Exposure Limit Values: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Italy OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Danger of cutaneous absorption

Latvia OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Lithuania OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Luxembourg OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Malta OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Netherlands OELs (binding): Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Norway Exposure Limit Values: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Portugal OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Romania OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Slovakia OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Spain OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Sweden Threshold Limit Values: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

Switzerland SUVA Limit Values at the Workplace: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

UK EH40 WEL: Skin designation

2-Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

Wear approved chemical safety goggles. Wear face shield if there is risk of splashes. Eye protection should meet standard EN 166.

Skin protection

- Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Wear suitable gloves tested to EN374. Glove material: butyl, chloroprene, natural rubber, nitrile. Use gloves with breakthrough time of > 240 minutes. Minimum glove thickness ≥ 0.5 mm.

- Other

Wear appropriate chemical resistant clothing. Wear acid-resistant non-porous overalls or aprons. Rubber boots if required.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Wear a CEN approved respirator, with appropriate cartridge or canister, suitable for airborne concentration levels present. Appropriate respirator selection should be made by a qualified professional. Recommended use: Wear CEN approved full facepiece respirator with filter type OV/P2 or equivalent protection. Follow guidance on selection, use, care and maintenance in accordance with EN 529.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

Keep away from food and drink. Remove and wash contaminated clothing promptly. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls

Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Form	Fluid.
Colour	Light yellow.
Odour	Characteristic.
Odour threshold	0,5 - 10 mg/m³ (approximate) Based on 2-Butoxyethanol.
Melting point/freezing point	Not determined.
Boiling point or initial boiling point and boiling range	> 100 °C (> 212 °F)
Flammability	Will burn if involved in a fire.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not determined.
Explosive limit – upper (%)	Not determined.
Flash point	> 100 °C (> 212 °F)
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not determined.
pH	< 1 (20 °C (68 °F))
Kinematic viscosity	11 s (DIN 53211/4) (20 °C (68 °F))
Solubility	
Solubility (water)	Soluble.
Partition coefficient (n-octanol/water) (log value)	Not applicable for mixtures.
Vapour pressure	Not determined.
Density and/or relative density	
Density	1,1 g/cm³ (20 °C (68 °F))
Vapour density	Not determined.
Particle characteristics	Not applicable material is a liquid.
9.2. Other information	
9.2.1. Information with regard to physical hazard classes	No relevant additional information available.
9.2.2. Other safety characteristics	
VOC	5,5 %
Other safety characteristics	Cloud point/clarification point: 52 ºC (125.6 °F).

SECTION 10: Stability and reactivity

10.1. Reactivity	Reacts violently with strong alkaline substances. This product may react with reducing agents.
10.2. Chemical stability	Material is stable under normal conditions. Stable up to boiling point.
10.3. Possibility of hazardous reactions	Contact with metals may evolve flammable hydrogen gas. May attack light-alloy metals and liberate hydrogen gas. May react violently with alkalis.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Bases. Strong oxidising agents. Reducing agents. Carbonates. Cyanides. Sulfides. Bronze. Brass. Contact with aluminium. This material reacts slowly with iron, copper and aluminum, resulting in corrosion and product degradation.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns. The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.

Symptoms Harmful if swallowed. Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

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

Acute toxicity Harmful if swallowed.

Components	Species	Test Results
Alcohols, C9-11, ethoxylated + 6EO (CAS 68439-46-3)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Oral		
LD50	Rat	300 - 2000 mg/kg
Phosphoric acid (CAS 7664-38-2)		
Acute		
Dermal		
LD50	Rabbit	> 1260 mg/kg, 24 Hours
Oral		
LD50	Rat	<= 2000 mg/kg
Propane -1,2 -diol (CAS 57-55-6)		
Acute		
Dermal		
LD50	Rabbit	20800 mg/kg
Oral		
LD50	Rat	22000 mg/kg

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory sensitisation Based on available data, the classification criteria are not met.

Skin sensitisation Based on available data, the classification criteria are not met.
The product contains a small amount of sensitizing substance which may pose a risk of sensitization by skin contact among sensitive individuals.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

Mixture versus substance information No information available.

11.2. Information on other hazards

Endocrine disrupting properties This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

Other information May be absorbed through the skin in harmful amounts.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
2-Butoxyethanol (CAS 111-76-2)			
Aquatic			
Algae	NOEC	Pseudokirchnerella subcapitata	286 mg/l, 72 hours

Components		Species	Test Results
Crustacea	EC50	Daphnia magna	835 mg/l, 48 hours
Acute			
Fish	LC50	Oncorhynchus mykiss	1474 mg/l, 96 Hours
Alcohols, C9-11, ethoxylated + 6EO (CAS 68439-46-3)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	> 1 - 10 mg/l, 48 Hours
Fish	LC50	Fish	> 1 - 10 mg/l, 96 Hours
Phosphoric acid (CAS 7664-38-2)			
Aquatic			
Acute			
Algae	EC50	Pseudokirchneriella subcapitata	32 mg/l, 72 Hours
Crustacea	EC50	Daphnia magna	> 376 mg/l, 48 Hours
Fish	LC50	Oryzias latipes	75,1 mg/l, 96 Hours
Propane -1,2 -diol (CAS 57-55-6)			
Aquatic			
Acute			
Algae	EC50	Selenastrum capricornutum	19000 mg/l, 72 hours
Crustacea	LC50	Ceriodaphnia	18340 mg/l, 48 hours
Fish	LC50	Pimephales promelas	46500 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow) Not applicable for mixtures.

2-Butoxyethanol (CAS 111-76-2) 0,83

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

12.7. Other adverse effects Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN3264

14.2. UN proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)

14.3. Transport hazard class(es)

Class	8
Subsidiary hazard	-
Label(s)	8
Hazard No. (ADR)	80
Tunnel restriction code	E
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN3264
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)

14.3. Transport hazard class(es)

Class	8
Subsidiary hazard	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN3264
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)

14.3. Transport hazard class(es)

Class	8
Subsidiary hazard	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number	UN3264
14.2. UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)

14.3. Transport hazard class(es)

Class	8
Subsidiary hazard	-
14.4. Packing group	III
14.5. Environmental hazards	No.
ERG Code	8L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

14.1. UN number	UN3264
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)

14.3. Transport hazard class(es)

Class	8
Subsidiary hazard	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments Not established.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex I, as amended

Not listed.

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex II, as amended

Not listed.

Other regulations The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

France regulations

France INRS Table of Occupational Diseases

Not regulated.

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
IMO: International Maritime Organization.
MAC: Maximum Allowed Concentration.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TLV: Threshold Limit Value.
TWA: Time Weighted Average.
VLE: Exposure Limit Value.
VME: Exposure Average Value.
vPvB: Very persistent and very bioaccumulative.

References	ECHA: European Chemicals Agency IARC Monographs. Overall Evaluation of Carcinogenicity NLM: Hazardous Substances Data Base
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any statements, which are not written out in full under sections 2 to 15	H290 May be corrosive to metals. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
Training information	Follow training instructions when handling this material.
Disclaimer	Howmet Aerospace cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

ALclean

Danger

Contains Phosphoric acid; 2-Butoxyethanol; Alcohols, C9-11, ethoxylated + 6EO; Potassium alkyl polyglycol ether phosphate



Hazard statements

H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H335 - May cause respiratory irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 - Do not breathe mist/vapours/spray.
P264 - Wash thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE/doctor.

EUH208 - Contains Potassium alkyl polyglycol ether phosphate. May produce an allergic reaction.
Additional information is given in the Safety Data Sheet.

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