

SAFETY DATA SHEET

Version #: 03 Issue date: 10-December-2021 Revision date: 16-November-2023 Supersedes date: 10-December-2021

	of the substance/mixture and of the company/undertaking
1.1. Product identifier Trade name or designation of the mixture	STEEL-IT 4907B Epoxy Topcoat, Part B
Registration number	-
Synonyms	None.
SDS number	SDS-4907B
Product code	FGPA4907B-P (pint), FGPA4907B-Q (quart), FGPA4907B-G (gallon), FGPA4907B-5G (5-gallon pail)
1.2. Relevant identified uses of t	he substance or mixture and uses advised against
Identified uses	Paint / Industrial coating (topcoat). Category: Pigmented metallic coating.
Uses advised against	Uses other than the recommended use.
1.3. Details of the supplier of the	e safety data sheet
Manufacturer	Stainless Steel Coatings, Inc.
Address	835 Sterling Road, Lancaster MA 01523-2915, USA
Telephone	+1 (978) 365-9828
E-mail	sds@STEEL-IT.com
Supplier	HM Industrieservice GmbH
Address	Großer Sand 3
	76698 Ubstadt-Weiher, Germany
Telephone	+49 7251 44127-0
Fax	+49 7251 44127-29
E-mail	info@hm-industrie.de
Website	www.hm-industrie.de
1.4. Emergency telephone number	CHEMTREC:
	+1-703-527-3887 (International)
General in EU	112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Austria National Poisons Information Centre	+431 406 4343 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Belgium National Poisons Control Centre	070 245 245 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Bulgaria National Toxicological Information Centre	+359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Croatia Poisons Information Centre	+385 1 2348 342 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Cyprus Poison Centre	1401 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Czech Republic National Poisons Information Centre	+420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Denmark National Poisons Control Centre	+45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Estonia National Poisons Information Centre	16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be available for the Emergency Service.)
Finland National Poison Information Centre	(09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
France National Poisons Control Centre	ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Greece Poison Information Centre telephone number	(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Hungary National Emergency Phone Number	+36-80-201-199 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Iceland Poison Centre	(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Latvia Emergency medical aid	113
Latvia Poison and Drug Information Centre	+371 67042473 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Lithuania Neatidėliotina informacija apsinuodijus	+370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Malta Accident and Emergency Department	2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)
Netherlands National Poisons Information Centre (NVIC)	NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications)
Norway Norwegian Poison Information Centre	22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Portugal Poison Centre	800 250 250
Romania Biroul RSI si Informare Toxicologica	021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be available for the Emergency Service.)
Slovakia National Toxicological Information Centre	+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Spain Toxicology Information Service	+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Sweden National Poison Information Centre	112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Switzerland Tox Info Suisse	145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
Ireland National Poisons Information Centre	353 (1) 809 2566 Healthcare Professionals: 24 hours, 7 days a week
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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

Physical hazards Flammable liquids	Category 3	H226 - Flammable liquid and vapour.
Health hazards		
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Carcinogenicity (inhalation)	Category 2	H351 - Suspected of causing cancer by inhalation.

Reproductive toxicity (inh	nalation)	Category 2	H361 - Suspected of damaging fertility or the unborn child by inhalation.	
Specific target organ toxi exposure	city - single	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.	
Specific target organ toxi exposure	city - single	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.	
Specific target organ toxi exposure	Specific target organ toxicity - repeated		H373 - May cause damage to organs (central nervous system, kidneys, liver, respiratory tract) through prolonged or repeated exposure.	
Environmental hazards Hazardous to the aquatic long-term aquatic hazard		Category 2	H411 - Toxic to aquatic life with long lasting effects.	
2.2. Label elements				
Label according to Regulation (EC) No. 1272/2008	as amended		
Contains:	2-Butoxyethanol 4-(1,1-dimethyle	, Benzene, 1-chloro-4-(trifluoromethyl)-, Ch thyl)-, polymer with (chloromethyl)oxirane a ylidene)bis[phenol], Xylene	romium, Nickel, Phenol, nd	
Hazard pictograms	\wedge			
Signal word	Danger			
Hazard statements				
H226	Flammable liquid	l and vapour.		
H315	Causes skin irrita			
H317		lergic skin reaction.		
H319	Causes serious eye irritation.			
H332	Harmful if inhaled.			
H335	May cause respiratory irritation. May cause drowsiness or dizziness.			
H336		using cancer by inhalation.		
H351		maging fertility or the unborn child by inhala	ation	
H361 H373				
П373	May cause damage to organs (central nervous system, kidneys, liver, respiratory tract) through prolonged or repeated exposure.			
H411	Toxic to aquatic	life with long lasting effects.		
Precautionary statements				
Prevention				
P210	Keep away from	heat, hot surfaces, sparks, open flames an	d other ignition sources. No smoking.	
P260		nist/vapours/spray.	5	
P273	Avoid release to	the environment.		
P280	Wear protective	gloves/protective clothing/eye protection/fa	ce protection.	
Response				
P308 + P313	IF exposed or co	ncerned: Get medical advice/attention.		
Storage				
P403 + P235	Store in a well-ve	entilated place. Keep cool.		
Disposal	Not assigned.			
Supplemental information on the label	None.			
2.3. Other hazards	bioaccumulative 0.1% or higher. The mixture doe: REACH Article 5 greater than 0.19 The mixture doe: accordance with Commission Reg	s not contain any substances having endoc the criteria set out in Commission Delegate gulation (EU) 2018/605 at a concentration e	y bioaccumulative (vPvB) at levels of e list established in accordance with ties at a concentration equal to or rine disrupting properties in ed Regulation (EU) 2017/2100 or	
SECTION 3: Composition	mormation of	i ingrealents		

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name		%	CAS-No. / EC No.	REACH Registration No	o. Index No.	Notes
Phenol, 4-(1,1-dimethylet polymer with (chloromethy and		40 - 50	67924-34-9 -	-	-	
4,4'-(1-methylethylidene)k	ois[phenol]					
Cla		Skin Irrit. 2 Chronic 2;		319, Skin Sens. 1;H317, Ao	quatic	
Xylene		15 - 25	1330-20-7 215-535-7	-	601-022-00-9	#
Cla	4	4;H332;(A		l;H312;(ATE: 1100 mg/kg l it. 2;H315, Eye Irrit. 2;H319 3, Asp. Tox. 1;H304		
2-Butoxyethanol		5 - 15	111-76-2 203-905-0	-	603-014-00-0	#
Cla	1	mg/kg bw)		mg/kg bw), Acute Tox. 4;⊦ (ATE: 11 mg/l), Skin Irrit. 2		
Benzene, 1-chloro-4-(triflu	oromethyl)-	5 - 15	98-56-6 202-681-1	-	-	
Cla			3;H226, Skin Sens. 1 hronic 2;H411	IB;H317, Carc. 2;H351, Re	epr. 2;H361,	
Chromium		1 - 5	7440-47-3 231-157-5	-	-	#
Cla	ssification:	-				
Nickel		1 - 5	7440-02-0 231-111-4	-	028-002-01-4	
Cla	ssification:	Skin Sens	. 1;H317, Carc. 2;H3	51, STOT RE 1;H372		
Ethylbenzene		< 2	100-41-4 202-849-4	-	601-023-00-4	#
Cla			2;H225, Acute Tox. 4 sp. Tox. 1;H304, Aqu	l;H332;(ATE: 17,4 mg/l), S atic Chronic 3;H412	TOT RE	
ist of abbreviations and sy	mbols that m	av be use	a above			
#: This substance has bee ATE: Acute toxicity estimation	en assigned U	-		s).		
composition comments	All cond	entrations	H-statements is disp are in percent by we ous or are below rep	eight unless otherwise indic	cated. Components	not listed a
ECTION 4: First aid m	easures					
eneral information	advice/a that me	attention. I dical perse	f you feel unwell, see	ediately. IF exposed or con ek medical advice (show th e material(s) involved, and ing before reuse.	e label where possi	ble). Ensui
.1. Description of first aid n						
Inhalation	Remove			rest in a position comforta		

rtificial respiration if needed. Call a poison centre or doctor/physician if you feel unwell.
emove contaminated clothing immediately and wash skin with soap and water. In case of czema or other skin disorders: Seek medical attention and take along these instructions.
nmediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if resent and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
inse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. The medical attention if symptoms occur.
lay cause drowsiness or dizziness. Narcosis. Headache. Nausea, vomiting. Behavioural changes. ecrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, edness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause edness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Jaundice. Prolonged sposure may cause chronic effects.
rovide general supportive measures and treat symptomatically. Thermal burns: Flush with water nmediately. While flushing, remove clothes which do not adhere to affected area. Call an mbulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under bservation. Symptoms may be delayed.

SECTION 5: Firefighting m	easures
General fire hazards	Flammable liquid and vapour.
5.1. Extinguishing media Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
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	Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed such as: Carbon oxides. Aldehydes. Fumes of metal oxides. Halogenated compounds.
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	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
SECTION 6: Accidental rel	ease measures
6.1. Personal precautions, protect	ctive equipment and emergency procedures
For non-emergency personnel	Wear appropriate protective equipment and clothing during clean-up. 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. Wear appropriate protective equipment and clothing during clean-up. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not breathe mist/vapours/spray. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.
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. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas. 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. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Retain and dispose of contaminated wash water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labelled containers.

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS. 6.4. Reference to other

sections

SECTION 7: Handling and storage

7.1. Precautions for safe Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of handling ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment.

> Do not breathe mist/vapours/spray. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Persons susceptible to allergic reactions should not handle this product. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see section 10 of the SDS).
	TRGS 510 storage class: 3.
	Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
	 ANNEX 1, PART 1 Categories of dangerous substances Hazard categories in accordance with Regulation (EC) No 1272/2008 P5a, b or c FLAMMABLE LIQUIDS (Lower-tier requirements = 50 tonnes; Upper-tier requirements = 200 tonnes) E2 Hazardous to the Aquatic Environment Chronic (Lower-tier requirements = 200 tonnes; Upper-tier requirements = 500 tonnes)
7.3. Specific end use(s)	Paint / Industrial coating (topcoat). Category: Pigmented metallic coating. Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List			
Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	МАК	98 mg/m3	
		20 ppm	
	STEL	200 mg/m3	
		40 ppm	
Chromium (CAS 7440-47-3)	MAK	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	Ceiling	880 mg/m3	
		200 ppm	
	MAK	440 mg/m3	
		100 ppm	
Xylene (CAS 1330-20-7)	MAK	221 mg/m3	
		50 ppm	
	STEL	442 mg/m3	
		100 ppm	

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	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	551 mg/m3	
		125 ppm	
	TWA	87 mg/m3	
		20 ppm	
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3	
	TWA	435 mg/m3	
Nickel (CAS 7440-02-0)	TWA	0,05 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	MAC	98 mg/m3	
		20 ppm	
	STEL	246 mg/m3	
		50 ppm	
Chromium (CAS 7440-47-3)	MAC	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	MAC	442 mg/m3	
		100 ppm	
	STEL	884 mg/m3	
		200 ppm	
Nickel (CAS 7440-02-0)	MAC	0,5 mg/m3	
Xylene (CAS 1330-20-7)	MAC	221 mg/m3	
		50 ppm	
	STEL	442 mg/m3	
		100 ppm	

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended Components Type Value

 Nickel (CAS 7440-02-0)
 TWA
 1 mg/m3

 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

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2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	

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	Туре	Value	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	Ceiling	200 mg/m3	
	TWA	100 mg/m3	
Chromium (CAS 7440-47-3)	Ceiling	1,5 mg/m3	Aerosol, inhalable.
	TWA	0,5 mg/m3	Dust.
		0,5 mg/m3	Aerosol, inhalable.
Ethylbenzene (CAS 100-41-4)	Ceiling	500 mg/m3	
	TWA	200 mg/m3	
Iron (Massive metal) (CAS 7439-89-6)	TWA	10 mg/m3	
Nickel (CAS 7440-02-0)	Ceiling	1 mg/m3	Aerosol, inhalable.
	TWA	0,5 mg/m3	Aerosol, inhalable.
Xylene (CAS 1330-20-7)	Ceiling	400 mg/m3	
	TWA	200 mg/m3	

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

Components	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	TLV	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TLV	0,5 mg/m3	Dust.
Ethylbenzene (CAS 100-41-4)	TLV	217 mg/m3	
		50 ppm	
Nickel (CAS 7440-02-0)	TLV	0,05 mg/m3	Dust.
Xylene (CAS 1330-20-7)	TLV	109 mg/m3	
		25 ppm	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	0,5 mg/m3	
Xylene (CAS 1330-20-7)	STEL	450 mg/m3	
		100 ppm	
	TWA	200 mg/m3	
		50 ppm	

Components	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	250 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	880 mg/m3	
		200 ppm	
	TWA	220 mg/m3	
		50 ppm	
Nickel (CAS 7440-02-0)	TWA	0,01 mg/m3	Respirable.
Xylene (CAS 1330-20-7)	STEL	440 mg/m3	
		100 ppm	
	TWA	220 mg/m3	
		50 ppm	

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

components	туре	Value	
Chromium (CAS 7440-47-3)	VME	2 mg/m3	
France. OELs. Occupational Expo Components	osure Limits as Prescribed by Type	⁷ Art. R.4412-149 of Labor Code, as amended Value	
2-Butoxyethanol (CAS 111-76-2)	VLE	246 mg/m3	
		50 ppm	
	VME	49 mg/m3	
		10 ppm	
Ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3	
		100 ppm	
	VME	88,4 mg/m3	
		20 ppm	
Xylene (CAS 1330-20-7)	VLE	442 mg/m3	
		100 ppm	
	VME	221 mg/m3	
		50 ppm	

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

Componenta	Type	Value	
2-Butoxyethanol (CAS 111-76-2)	VLE	246 mg/m3	
Regulatory status:	Regulatory binding (VRC)		
		50 ppm	
Regulatory status:	Regulatory binding (VRC)		
	VME	49 mg/m3	
Regulatory status:	Regulatory binding (VRC)		
		10 ppm	
Regulatory status:	Regulatory binding (VRC)		
Ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3	
Regulatory status:	Regulatory binding (VRC)		
		100 ppm	
Regulatory status:	Regulatory binding (VRC)		

Values (VLEP) for Occupational Exposu Type	Value	
VME	88,4 mg/m3	
Regulatory binding (VRC)		
	20 ppm	
Regulatory binding (VRC)		
VME	1 mg/m3	
. ,		
	442 mg/m3	
Regulatory binding (VRC)	100	
Pagulatan (hinding () (PC)	100 ppm	
	221 ma/m3	
	221119/110	
Regulatory binding (VRC)	50 ppm	
Regulatory binding (VRC)	oo ppin	
	vestigation of Health Hazards	s of Chemical Compound
	-	
TWA	49 mg/m3	
	10 ppm	
TWA		
	oo mg/mo	
	20 ppm	
TWA	220 mg/m3	
	50 ppm	
nit Values in the Ambient Air at the Work	place	
Туре	Value	Form
AGW	49 mg/m3	
	10 ppm	
3) AGW	2 mg/m3	Inhalable fraction.
3) AGW AGW		Inhalable fraction.
,	2 mg/m3 88 mg/m3	Inhalable fraction.
AGW	2 mg/m3 88 mg/m3 20 ppm	Inhalable fraction.
,	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3	Inhalable fraction.
AGW	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3	
AGW AGW AGW	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3	Inhalable fraction.
AGW	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 Value	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 Value 120 mg/m3	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 Value 120 mg/m3 25 ppm	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA 3) TWA	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 Value 120 mg/m3 25 ppm 1 mg/m3	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 Value 120 mg/m3 25 ppm	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA 3) TWA	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 Value 120 mg/m3 25 ppm 1 mg/m3 545 mg/m3	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA 3) TWA STEL	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 200 mg/m3 120 mg/m3 25 ppm 1 mg/m3 545 mg/m3 125 ppm	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA 3) TWA	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 200 mg/m3 Value 120 mg/m3 25 ppm 1 mg/m3 545 mg/m3 125 ppm 435 mg/m3	Inhalable fraction.
AGW AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA 3) TWA STEL TWA	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 200 mg/m3 200 mg/m3 25 ppm 1 mg/m3 545 mg/m3 125 ppm 435 mg/m3 100 ppm	Inhalable fraction.
AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA 3) TWA STEL	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 200 mg/m3 200 mg/m3 25 ppm 1 mg/m3 545 mg/m3 125 ppm 435 mg/m3 100 ppm 650 mg/m3	Inhalable fraction.
AGW AGW AGW AGW tial Decree No. 307/1986, as amended Type TWA 3) TWA STEL TWA	2 mg/m3 88 mg/m3 20 ppm 0,03 mg/m3 0,006 mg/m3 200 mg/m3 200 mg/m3 200 mg/m3 25 ppm 1 mg/m3 545 mg/m3 125 ppm 435 mg/m3 100 ppm	Inhalable fraction.
	VME Regulatory binding (VRC) Regulatory binding (VRC) VME Indicative limit (VL) VLE Regulatory binding (VRC) Regulatory binding (VRC) Regulatory binding (VRC) Regulatory binding (VRC) (advisory OELs). Commission for the Im Type TWA TWA TWA	VME88,4 mg/m3Regulatory binding (VRC)20 ppmRegulatory binding (VRC)1 mg/m3Indicative limit (VL)442 mg/m3Regulatory binding (VRC)100 ppmRegulatory binding (VRC)221 mg/m3Regulatory binding (VRC)50 ppmRegulatory binding (VRC)50 ppmRegulatory binding (VRC)10 ppmRegulatory binding (VRC)50 ppmTVPValueTVA49 mg/m3TWA20 ppmTWA20 ppmAGW49 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

Components	гуре	value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
	TWA	98 mg/m3	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
	TWA	442 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
	TWA	221 mg/m3	

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

Components	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	100 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	Dust.
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	200 mg/m3	
		50 ppm	
Nickel (CAS 7440-02-0)	TWA	0,05 mg/m3	Dust.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	109 mg/m3	
		25 ppm	

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

Components	Туре	Value
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3
		20 ppm
Chromium (CAS 7440-47-3)	TWA	2 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Nickel (CAS 7440-02-0)	TWA	0,5 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Italy. OELs		
Components	Туре	Value Form
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3
		50 ppm
	TWA	98 mg/m3

Italy. OELs Components	Туре	Value	Form
	- 7 -	20 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	1,5 mg/m3	Inhalable fraction.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	0,05 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	100 mg/m3	
		20 ppm	
	TWA	50 mg/m3	
		10 ppm	
Benzene, 1-chloro-4-(trifluoromethyl)- (CAS 98-56-6)	TWA	20 mg/m3	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	0,5 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
	TWA	100 mg/m3	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	430 mg/m3	
	TWA	215 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
	TWA	210 mg/m3	

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

Components	гуре	value
2-Butoxyethanol (CAS 111-76-2)	TLV	50 mg/m3
		10 ppm

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

Components	Туре	Value	
Ethylbenzene (CAS 100-41-4)	TLV	20 mg/m3	
		5 ppm	
Nickel (CAS 7440-02-0)	TLV	0,05 mg/m3	
Xylene (CAS 1330-20-7)	TLV	108 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	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	200 mg/m3	
	TWA	98 mg/m3	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	400 mg/m3	
	TWA	200 mg/m3	
Nickel (CAS 7440-02-0)	TWA	0,25 mg/m3	
Xylene (CAS 1330-20-7)	STEL	200 mg/m3	
	TWA	100 mg/m3	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	
Portugal. VLEs. Norm on occupati	onal exposure to chemical a	gents (NP 1796-2014)	
Components	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm	
Nickel (CAS 7440-02-0)	TWA	1,5 mg/m3	Inhalable fraction.
Xylene (CAS 1330-20-7)	STEL	150 ppm	

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

TWA

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

100 ppm

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

Components	Туре	Value	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	STEL	0,5 mg/m3	
	TWA	0,1 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

Slovakia. OELs for carcinogens and mutagens. Regulation No. 356/2006 on carcinogenic and mutagenic substances, as amended

Components	Туре	Value	Form	
Nickel (CAS 7440-02-0)	TWA	0,05 mg/m3	Inhalable fraction.	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	TWA	442 mg/m3	
		100 ppm	
Iron (Massive metal) (CAS 7439-89-6)	TWA	6 mg/m3	
Xylene (CAS 1330-20-7)	TWA	221 mg/m3	
		50 ppm	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	

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	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	KTV	246 mg/m3	
		50 ppm	
Chromium (CAS 7440-47-3)	KTV	2 mg/m3	Inhalable fraction.
Ethylbenzene (CAS 100-41-4)	KTV	884 mg/m3	
		200 ppm	
Nickel (CAS 7440-02-0)	KTV	0,048 mg/m3	Respirable fraction.

Components	Туре	Value	Form
Xylene (CAS 1330-20-7)	KTV	442 mg/m3	
		100 ppm	
Slovenia. OELs. Occupational Exp due to Exp. to Chemicals at Work,		Workplace (Reg. on Protectio	n of Workers from Risks
Components	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	Inhalable fraction.
Ethylbenzene (CAS 100-41-4)	TWA	442 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	0,006 mg/m3	Respirable fraction.
Xylene (CAS 1330-20-7)	TWA	221 mg/m3	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	245 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	441 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

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

amended			
Components	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	Ceiling	246 mg/m3	
		50 ppm	
	TWA	50 mg/m3	
		10 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	Total dust.
Ethylbenzene (CAS 100-41-4)	Ceiling	884 mg/m3	
		200 ppm	
	TWA	220 mg/m3	
		50 ppm	
Nickel (CAS 7440-02-0)	TWA	0,5 mg/m3	Total dust.
Xylene (CAS 1330-20-7)	Ceiling	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	

amended Components	Туре	Value	Form
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	50 ppm	
		50 ppm	
Switzerland. SUVA Grenzwerte am Components	Arbeitsplatz: Aktuelle MAK-Werte Type	Value	Form
2-Butoxyethanol (CAS 111-76-2)	STEL	98 mg/m3	
		20 ppm	
	TWA	49 mg/m3	
		10 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	Inhalable fraction.
Ethylbenzene (CAS 100-41-4)	STEL	220 mg/m3	
		50 ppm	
	TWA	220 mg/m3	
		50 ppm	
Nickel (CAS 7440-02-0)	TWA	0,5 mg/m3	Inhalable fraction.
Xylene (CAS 1330-20-7)	STEL	440 mg/m3	
		100 ppm	
	TWA	220 mg/m3	
		50 ppm	

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

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

Components	Гуре	value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	123 mg/m3	
		25 ppm	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	552 mg/m3	
		125 ppm	
	TWA	441 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	0,5 mg/m3	
Xylene (CAS 1330-20-7)	STEL	441 mg/m3	
		100 ppm	
	TWA	220 mg/m3	
		50 ppm	

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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	

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

oomponents	Туре	Value	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

Biological limit values

Croatia. BELs (BGV). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and BELs, Annex IV (NN 91/2018), as amended

Components	Value	Determinant	Specimen	Sampling Time	
Ethylbenzene (CAS 100-41-4)	1,5 g/g	Mandelic acid	Creatinine in urine	*	
	1,5 mg/l	ethylbenzene	Blood	*	
	1,12 mol/mol	Mandelic acid	Creatinine in urine	*	
	14,1 umol/l	ethylbenzene	Blood	*	
Xylene (CAS 1330-20-7)	1,5 g/g	Methylhippuric acids	Creatinine in urine	*	
	1,5 mg/l	xylene	Blood	*	
	0,88 mol/mol	Methylhippuric acids	Creatinine in urine	*	
	14,13 umol/l	xylene	Blood	*	

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

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	*
Chromium (CAS 7440-47-	3)0,065 µmol/mmol	Total chromium	Creatinine in urine	*
	0,03 mg/g	Total chromium	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	1100 µmol/mmol	Mandelic acid	Creatinine in urine	*
	1500 mg/g	Mandelic acid	Creatinine in urine	*
Nickel (CAS 7440-02-0)	0,077 µmol/mmol	Nickel	Creatinine in urine	*
	0,04 mg/g	Nickel	Creatinine in urine	*
Xylene (CAS 1330-20-7)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*

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

Finland. HTP-arvot, App 2., Biological Limit Values, Social Affairs and Ministry of Health

Components	Value	Determinant	Specimen	Sampling Time	
Ethylbenzene (CAS 100-41-4)	5,2 mmol/l	Mandelic acid	Urine	*	
Nickel (CAS 7440-02-0)	0,1 umol/l	Nickel	Urine	*	
Xylene (CAS 1330-20-7)	5 mmol/l	Methylhippuric acids	Urine	*	

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

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS), ND 2065) Components Value Determinant Specimen Sampling Time

Componenta	Value	Determinant	opecimen	
Ethylbenzene (CAS 100-41-4)	1500 mg/g	Acide mandélique	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1500 mg/g	Acides méthylhippuriq ues	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	Butoxyessigsä ure (nach Hydrolyse)	Creatinine in urine	*	
Ethylbenzene (CAS 100-41-4)	250 mg/g	Mandelsäure plus Phenylglyoxyls äure	Creatinine in urine	*	
Xylene (CAS 1330-20-7)	2000 mg/l	Methylhippur-(T olur-) säure (alle Isomere)	Urine	*	

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

Hungary. BELs. Decree on protection of workers exposed to chemical agents (5/2020. (II.6)), Annex 3&4, as amendedComponentsValueDeterminantSpecimenSampling Time

-			-		
Chromium (CAS 7440-47-3)0,022 µmol/mmol		chromium	Creatinine in urine	*	
	0,01 mg/g	chromium	Creatinine in urine	*	
Ethylbenzene (CAS 100-41-4)	1110 µmol/mmol	mandelic acid	Creatinine in urine	*	
	1500 mg/g	mandelic acid	Creatinine in urine	*	
Nickel (CAS 7440-02-0)	0,051 µmol/l	Nickel	Urine	*	
	0,003 mg/l	Nickel	Urine	*	
Xylene (CAS 1330-20-7)	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*	
	1500 mg/g	methyl hippuric acids	Creatinine in urine	*	

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

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents Annex 2

Components	Value	Determinant	Specimen	Sampling Time	
Ethylbenzene (CAS 100-41-4)	8,03 mg/g	2 and 4-ethylphenol	Creatinine in urine	*	
	12 mg/l	2 and 4-ethylphenol	Urine	*	
Xylene (CAS 1330-20-7)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*	
	2000 mg/l	Methylhippuric acids	Urine	*	
	1,5 mg/l	xylene	Blood	*	

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

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

2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Ácido butoxiacético, con hidrólisis	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	700 mg/g	Suma del acido mandélico y el ácido fenilglioxílico	Creatinine in urine	*

Components	Value	Determinant	Specimen	Fable 3-Valores Límite Biológicos (V Sampling Time
Xylene (CAS 1330-20-7)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*
* - For sampling details, ple	ease see the source o	locument.		
Switzerland. SUVA Grenz Components	zwerte am Arbeitspla Value	atz: Aktuelle BAT-We Determinant	rte Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	150 mg/g	Butoxyessigsä ure (nach Hydrolyse)	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	600 mg/g	Mandelsäure + Phenylglyoxyls äure	Creatinine in urine	*
Nickel (CAS 7440-02-0)	45 µg/l	Nickel	Urine	*
Xylene (CAS 1330-20-7)	2 g/l	Methylhippursä uren	Urine	*
* - For sampling details, pl	ease see the source o	locument.		
UK. BELs. Biological Mo Components	nitoring Guidance V Value	alues (BMGVs) (EH40 Determinant	/2005 (Fourth E Specimen	dition 2020)), Table 2 Sampling Time
2-Butoxyethanol (CAS 111-76-2)	240 mmol/mol	Butoxyacetic acid	Creatinine in urine	*
Chromium (CAS 7440-47-	3)10 umol/mol	Chromium	Creatinine in urine	*
Xylene (CAS 1330-20-7)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	*
* - For sampling details, plo ommended monitoring cedures	Follow standard	locument. monitoring procedures		
ived no effect levels ELs)	Not available.			
dicted no effect centrations (PNECs)	Not available.			
osure guidelines				
Austria. MAK List				
2-Butoxyethanol (CAS Ethylbenzene (CAS 10	,		absorbed throug absorbed throug	
Xylene (CAS 1330-20 Belgium OELs: Skin desi)-7)		absorbed throug	
2-Butoxyethanol (CAS	S 111-76-2)	Can be	absorbed throug	gh the skin.
Ethylbenzene (CAS 10			absorbed throug	
Xylene (CAS 1330-20 Bulgaria OELs: Skin des		Can be	absorbed throug	jn the skin.
2-Butoxyethanol (CAS	-	Can be	absorbed throug	ah the skin.
Ethylbenzene (CAS 10				
			absorbed throug	gh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig)-7)		absorbed throug absorbed throug	gh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig 2-Butoxyethanol (CAS)-7) gnation 6 111-76-2)	Can be Can be	absorbed throug	h the skin. Jh the skin. Jh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig 2-Butoxyethanol (CAS Ethylbenzene (CAS 10	0-7) gnation S 111-76-2) 00-41-4)	Can be Can be Can be	absorbed throug absorbed throug absorbed throug	h the skin. Jh the skin. Jh the skin. Jh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig 2-Butoxyethanol (CAS)-7) gnation 6 111-76-2) 00-41-4))-7)	Can be Can be Can be	absorbed throug	h the skin. Jh the skin. Jh the skin. Jh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig 2-Butoxyethanol (CAS Ethylbenzene (CAS 10 Xylene (CAS 1330-20 Czech Republic PELs: SI 2-Butoxyethanol (CAS)-7) gnation S 111-76-2) 00-41-4))-7) kin designation S 111-76-2)	Can be Can be Can be Can be Can be	absorbed throug absorbed throug absorbed throug absorbed throug absorbed throug	gh the skin. gh the skin. gh the skin. gh the skin. gh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig 2-Butoxyethanol (CAS Ethylbenzene (CAS 10 Xylene (CAS 1330-20 Czech Republic PELs: Sl)-7) gnation S 111-76-2) 00-41-4))-7) kin designation S 111-76-2) 00-41-4))-7)	Can be Can be Can be Can be Can be Can be	absorbed throug absorbed throug absorbed throug absorbed throug	gh the skin. gh the skin. gh the skin. gh the skin. gh the skin. gh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig 2-Butoxyethanol (CAS Ethylbenzene (CAS 10 Xylene (CAS 1330-20 Czech Republic PELs: SI 2-Butoxyethanol (CAS Ethylbenzene (CAS 11 Xylene (CAS 1330-20 Denmark GV: Skin desig 2-Butoxyethanol (CAS	D-7) gnation S 111-76-2) 00-41-4) D-7) kin designation S 111-76-2) 00-41-4) D-7) mation S 111-76-2)	Can be Can be Can be Can be Can be Can be Can be	absorbed throug absorbed throug absorbed throug absorbed throug absorbed throug absorbed throug absorbed throug	gh the skin. gh the skin. gh the skin. gh the skin. gh the skin. gh the skin. gh the skin.
Xylene (CAS 1330-20 Croatia ELVs: Skin desig 2-Butoxyethanol (CAS Ethylbenzene (CAS 10 Xylene (CAS 1330-20 Czech Republic PELs: Sl 2-Butoxyethanol (CAS Ethylbenzene (CAS 10 Xylene (CAS 1330-20 Denmark GV: Skin desig 2-Butoxyethanol (CAS Ethylbenzene (CAS 10 Xylene (CAS 1330-20	0-7) gnation S 111-76-2) 00-41-4) 0-7) kin designation S 111-76-2) 00-41-4) 00-41-4) S 111-76-2) 00-41-4) 00-41-4) 1-7)	Can be Can be Can be Can be Can be Can be Can be Can be Can be	absorbed throug absorbed throug absorbed throug absorbed throug absorbed throug absorbed throug absorbed throug	gh the skin. gh the skin.
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EU Exposure Limit Values: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Finland Exposure Limit Values: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) France INRS: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) France Mandatory OELs (VLEP): Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Germany DFG MAK (advisory): Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Germany TRGS 900 Limit Values: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Greece OEL: Skin designation 2-Butoxyethanol (CAS 111-76-2) Xylene (CAS 1330-20-7) Hungary OELs: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Iceland OELs: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Ireland Exposure Limit Values: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Italy OELs: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Latvia OELs: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Lithuania OELs: Skin designation 2-Butoxyethanol (CAS 111-76-2) Benzene, 1-chloro-4-(trifluoromethyl)- (CAS 98-56-6) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Luxembourg OELs: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Malta OELs: Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7) Netherlands OELs (binding): Skin designation 2-Butoxyethanol (CAS 111-76-2) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7)

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Danger of cutaneous absorption Danger of cutaneous absorption Danger of cutaneous absorption

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Norway Exposure Limit Valu	es: Skin designation			
2-Butoxyethanol (CAS 11	1-76-2)	Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4	.1-4)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)		Can be absorbed through the skin.		
Portugal OELs: Skin designa	ation			
2-Butoxyethanol (CAS 11		Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4	.1-4)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)		Can be absorbed through the skin.		
Romania OELs: Skin designa	ation			
2-Butoxyethanol (CAS 11		Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4	.1-4)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)		Can be absorbed through the skin.		
Slovakia OELs for Carcinoge	ens and Mutagens: Skin desig	gnation		
Nickel (CAS 7440-02-0)		Can be absorbed through the skin.		
Slovakia OELs: Skin designa	ation			
2-Butoxyethanol (CAS 11	1-76-2)	Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4	.1-4)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)		Can be absorbed through the skin.		
		rkers against risks due to exposure to chemicals while working		
(Official Gazette of the Reput				
2-Butoxyethanol (CAS 11		Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4	1-4)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)		Can be absorbed through the skin.		
Spain OELs: Skin designatio				
2-Butoxyethanol (CAS 11		Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4	1-4)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)		Can be absorbed through the skin.		
Sweden Threshold Limit Val	•			
2-Butoxyethanol (CAS 11	,	Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4	.1-4)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)	ues at the Workplace: Skin de	Can be absorbed through the skin.		
		-		
2-Butoxyethanol (CAS 11		Can be absorbed through the skin.		
Ethylbenzene (CAS 100-4 Xylene (CAS 1330-20-7)	-1-4)	Can be absorbed through the skin. Can be absorbed through the skin.		
UK EH40 WEL: Skin designa	tion	Can be absolbed through the skin.		
•		Can be abaarbad through the align		
2-Butoxyethanol (CAS 11 ⁻ Ethylbenzene (CAS 100-4		Can be absorbed through the skin. Can be absorbed through the skin.		
Nickel (CAS 7440-02-0)	-1-+)	Can be absorbed through the skin.		
Xylene (CAS 1330-20-7)		Can be absorbed through the skin.		
y ()				
8.2. Exposure controls	Employing and from and and b	and and another that an one descention that an aband does not		
Appropriate engineering		ocal exhaust ventilation. Good general ventilation should be used. atched to conditions. If applicable, use process enclosures, local		
controls		ngineering controls to maintain airborne levels below recommended		
		access to water supply and eye wash facilities.		
Individual protection measures,				
General information		ment as required. Personal protection equipment should be chosen		
Scherar mormation		ds and in discussion with the supplier of the personal protective		
	equipment.			
Eye/face protection		ar splash-proof chemical goggles and face shield unless full		
		on is worn. Eye protection should meet standard EN 166.		
Skin protection				
- Hand protection	Wear suitable gloves tested to	EN374. Glove material: Nitrile. Use gloves with breakthrough time		
- nand protection		minutes. Minimum glove thickness 0.381 (15 mil) mm. Be aware that		
		loves. Frequent change is advisable. The most suitable glove must		
	be chosen in consultation with	the gloves supplier, who can inform about the breakthrough time of		
	the glove material.			
- Other	Wear appropriate chemical res	sistant clothing. Use of an impervious apron is recommended.		
Pospiratory protection	If engineering controls do not	maintain airborne concentrations below recommended exposure		
Respiratory protection		an acceptable level (in countries where exposure limits have not		
		ed respirator must be worn. In case of inadequate ventilation or risk		
	of inhalation of vapors, use su	itable respiratory equipment with particulate filter (ABEK2/P3).		
		meet standard EN 14387. Check with respiratory protective		
	equipment suppliers.			
Thermal hazards	Wear appropriate thermal prot	tective clothing, when necessary.		

Hygiene measures	Observe any medical surveillance requirements. When using do not smoke. 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. Contaminated work clothing should not be allowed out of the workplace.
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 physic	al and chemical properties
Physical state	Liquid.
Form	Liquid.
Colour	Grey.
Odour	Characteristic of solvents.
Odour threshold	Property has not been measured.
Melting point/freezing point	Technically not possible to determine.
Boiling point or initial boiling point and boiling range	137 - 171 °C (278,6 - 339,8 °F)
Flammability	Flammable liquid and vapour.
Upper/lower flammability or exp	losive limits
Explosive limit - lower (%)	0,9 % (oxsol)
Explosive limit – upper (%)	7 % (xylene)
Flash point	25 °C (77 °F)
Auto-ignition temperature	> 500 °C (> 932 °F)
Decomposition temperature	387,6 °C (729,7 °F)
рН	Not applicable (material is insoluble in water).
Kinematic viscosity	1300 mm²/s (25 °C (77 °F))
Solubility	
Solubility (water)	(< 0,1%) Insoluble in water.
Partition coefficient (n-octanol/water) (log value)	Not applicable, product is a mixture.
Vapour pressure	60 mmHg (20 °C (68 °F))
Density and/or relative density	
Density	1,224 g/cm³ (25 °C (77 °F))
Relative density	1,224 (Water=1) (25 °C (77 °F))
Vapour density	> 1 (Air=1) (25 °C (77 °F))
Particle characteristics	
Particle size	Does not contain nanomaterials.
9.2. Other information	
9.2.1. Information with regard to physical hazard classes	No relevant additional information available.
9.2.2. Other safety characteristic	
Evaporation rate	Property has not been measured.
Flammability	Flammable liquid and vapour.
Viscosity	Property has not been measured.
VOC	541,1 g/l (EU VOC) 453,64 g/l (US VOC) 4,52 lb/gal (EU VOC) 3,79 lb/gal (US VOC)
Other safety characteristics	Total weight solids: 55.5 % w/w (Calculated for Part A + Part B) Total volume solids: 48.18 % v/v (Calculated for Part A + Part B)
SECTION 10: Stability and	l reactivity
10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Protect against direct sunlight. Contact with incompatible materials.
10.5. Incompatible materials	Strong acids. Strong oxidising agents. Strong reducing agents. Halogens.
10.6. Hazardous decomposition products	Thermal decomposition of this product can generate carbon monoxide and carbon dioxide. Aldehydes. Fumes of metal oxides. Halogenated compounds.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.	
Information on likely routes of exposure		
Inhalation	Harmful if inhaled. May cause drowsiness or dizziness. May cause respiratory irritation. Suspected of causing cancer by inhalation.	
Skin contact	Causes skin irritation. May cause an allergic skin reaction. May be harmful in contact with skin. May be absorbed through the skin.	
	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.	
Eye contact	Causes serious eye irritation.	
Ingestion	May cause discomfort if swallowed.	
Symptoms	May cause drowsiness or dizziness. Narcosis. Headache. Nausea, vomiting. Behavioural changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Jaundice. Prolonged exposure may cause chronic effects.	

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

Acute toxicity	Harmful if inhaled. May be harmful in contact with skin.	
Components	Species	Test Results
Ethylbenzene (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	15400 mg/kg
Inhalation		
LC50	Rat	17,4 mg/l, 4 hours
Oral		
LD50	Rat	3500 - 4700 mg/kg
Xylene (CAS 1330-20-7)		
<u>Acute</u>		
Oral		
LD50	Rat	3523 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitisation	Based on available data, the classification criteria are not met.	
Skin sensitisation	May cause an allergic skin reaction.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Suspected of causing cancer	by inhalation.
IARC Monographs. Overal	I Evaluation of Carcinogenicity	,
2-Butoxyethanol (CAS 111-76-2) Benzene, 1-chloro-4-(trifluoromethyl)- (CAS 98-56-6) Chromium (CAS 7440-47-3) Ethylbenzene (CAS 100-41-4) Nickel (CAS 7440-02-0) Xylene (CAS 1330-20-7) Slovenia. OELs. Regulations concerning protection of we (Official Gazette of the Republic of Slovenia)		 3 Not classifiable as to carcinogenicity to humans. 2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans. 2B Possibly carcinogenic to humans. 2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans. orkers against risks due to exposure to chemicals while working
Nickel (CAS 7440-02-0)	Carcinogenic, Category 2.

Reproductive toxicity	Suspected of damaging fertility or the unborn child by inhalation.
Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	May cause damage to organs (central nervous system, kidneys, liver, respiratory tract) through prolonged or repeated exposure.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	No information available.
11.2. Information on other hazar	ds
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 Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity	Toxic to aquatic life with long lasting effects.			
Components		Species		Test Results
2-Butoxyethanol (CAS 111-76-2)				
Aquatic				
Algae	NOEC	Pseudokirchnere	lla subcapitata	286 mg/l, 72 hours
Crustacea	EC50	Daphnia magna		835 mg/l, 48 hours
Acute				
Fish	LC50	Oncorhynchus m	iykiss	1474 mg/l, 96 Hours
Ethylbenzene (CAS 100-41-4)				
Aquatic				
Acute				
Crustacea	EC50	Water flea (Daph	inia magna)	1,81 - 2,38 mg/l, 48 hours
Fish	LC50	Rainbow trout,dc (Oncorhynchus r		4,2 mg/l, 96 hours
Chronic				
Crustacea	EC50	Ceriodaphnia du	bia	3,6 mg/l, 7 days
Nickel (CAS 7440-02-0)				
Aquatic				
Acute				
Crustacea	EC50	Water flea (Daph	- ,	1 mg/l, 48 hours
	LC50	Calanoid copepo	d (Eurytemora affinis)	>= 7,35 - <= 12,12 mg/l, 96 hours
Xylene (CAS 1330-20-7)				
Aquatic				
Fish	LC50	Rainbow trout,do (Oncorhynchus r		2,6 mg/l, 96 hours
12.2. Persistence and degradability	No data is av	vailable on the degra	adability of this product.	
12.3. Bioaccumulative potentia	al			
Partition coefficient n-octanol/water (log Kow)	Not applicab	le, product is a mixt	ure.	
2-Butoxyethanol (CAS 111-7 Benzene, 1-chloro-4-(trifluor Ethylbenzene (CAS 100-41-	omethyl)- (CAS	98-56-6)	0,83 3,6 3,15	
Bioconcentration factor (BCF)	Not available	Э.		
12.4. Mobility in soil	The product	is insoluble in water	. Not expected to be mo	obile in soil.
12.5. Results of PBT and vPvB assessment	bioaccumula	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	to the enviro 1907/2006, (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

The product contains volatile organic compounds which have a photochemical ozone creation potential.

12.8. Additional information

Estonia Dangerous substances in soil Data	
Chromium (CAS 7440-47-3)	Chromium (Cr) 100 mg/kg
	Chromium (Cr) 300 mg/kg
	Chromium (Cr) 800 mg/kg
Ethylbenzene (CAS 100-41-4)	ETHYLBENZENE 0,1 mg/kg
	ETHYLBENZENE 5 mg/kg
	ETHYLBENZENE 50 mg/kg
Nickel (CAS 7440-02-0)	Nickel (Ni) 150 mg/kg
	Nickel (Ni) 50 mg/kg
	Nickel (Ni) 500 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods **Residual waste** Dispose 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. Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. The Waste code should be assigned in discussion between the user, the producer and the waste EU waste code disposal company. 08 01 11* Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the **Disposal methods/information** material under controlled conditions in an approved incinerator. 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	UN1263
14.2. UN proper shipping	Paint
name	
14.3. Transport hazard cla	ass(es)
Class	3
Subsidiary risk	-
Label(s)	3
Hazard No. (ADR)	30
Tunnel restriction co	de D/E
14.4. Packing group	III
14.5. Environmental haza	rds Yes
14.6. Special precautions	Read safety instructions, SDS and emergency procedures before handling.
for user	
RID	
14.1. UN number	UN1263
14.2. UN proper shipping	Paint
name	
14.3. Transport hazard cla	ass(es)
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	III
14.5. Environmental haza	rds Yes
14.6. Special precautions	Read safety instructions, SDS and emergency procedures before handling.
for user	
ADN	
14.1. UN number	UN1263
14.2. UN proper shipping	Paint
name	
14.3. Transport hazard cla	ass(es)
Class	3
Subsidiary risk	-
Label(s)	3

14.4. Packing group ш 14.5. Environmental hazards Yes 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user ΙΑΤΑ UN1263 14.1. UN number 14.2. UN proper shipping Paint name 14.3. Transport hazard class(es) Class 3 Subsidiary risk _ 3 Label(s) 14.4. Packing group Ш 14.5. Environmental hazards Yes ERG Code 31 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user IMDG 14.1. UN number UN1263 14.2. UN proper shipping PAINT name 14.3. Transport hazard class(es) Class 3 Subsidiary risk Ш 14.4. Packing group 14.5. Environmental hazards Marine pollutant Yes F-E, <u>S-E</u> EmS 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user 14.7. Maritime transport in bulk Not established.

according to IMO instruments

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

Chromium (CAS 7440-47-3) Nickel (CAS 7440-02-0) Ethylbenzene (CAS 100-41-4) Xylene (CAS 1330-20-7)

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 authorization, as amended Not listed.

Restrictions on use

- Conditions of restriction g	06, REACH Annex XVII Substances subject to restriction on marketing and use, as amended iven for the associated entry number should be considered
work, as amended.	75 e protection of workers from the risks related to exposure to carcinogens and mutagens at
Not listed.	rketing and Use of Explosive Precursors, Annex I, as amended rketing and Use of Explosive Precursors, Annex II, as amended
Not listed.	
Other EU regulations	Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
	ANNEX 1, PART 1 Categories of dangerous substances Hazard categories in accordance with Regulation (EC) No 1272/2008 - P5a, b or c FLAMMABLE LIQUIDS - E2 Hazardous to the Aquatic Environment Chronic
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	According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure.
	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.
Contains a substance which	n is included on the TRGS 907 list of registry of sensitizing substances
Nickel (CAS 7440-02-0)	Nickelverbindungen, Wasserlösliche insbesondere Ni-sulfat und Ni-dichlorid
France regulations	
France INRS Table of Occup Not regulated.	pational Diseases
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.
SECTION 16: Other inform	ation
List of abbreviations	
	AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany). ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
	ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road. EC50: Effective Concentration 50%.
	IATA: International Air Transport Association. IMDG Code: International Maritime Dangerous Goods Code.
	IMDC local: International Maritime Organization.
	KTV: Short term exposure limit.
	LC50: Lethal Concentration 50%. LD50: Lethal Dose 50%.
	MAC: Maximum Allowed Concentration.
	PBT: Persistent, bioaccumulative, toxic. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
	STEL: Short-Term Exposure Limit.
	TLV: Threshold Limit Value. TWA : Time Weighed Average Value.
	VLE: Exposure Limit Value. VME: Exposure Average Value.
	vPvB: very Persistent, very Bioaccumulative.
References	ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices ECHA: European Chemical Agency. EPA: AQUIRE database
	HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens 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	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed.
	H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin.
	H315 Causes skin irritation.
	H317 May cause an allergic skin reaction.
	H319 Causes serious eye irritation.
	H332 Harmful if inhaled.
	H335 May cause respiratory irritation.
	H336 May cause drowsiness or dizziness.
	H351 Suspected of causing cancer.
	H361 Suspected of damaging fertility or the unborn child.
	H372 Causes damage to organs through prolonged or repeated exposure.
	H373 May cause damage to organs through prolonged or repeated exposure.
	H411 Toxic to aquatic life with long lasting effects.
	H412 Harmful to aquatic life with long lasting effects.
Training information	Follow training instructions when handling this material.
Disclaimer	Stainless Steel Coatings, Inc. 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.