

1.1. Product identifier

SAFETY DATA SHEET

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

STEEL-IT 1012 Polyurethane Topcoat - Black Trade name or designation of the mixture **Registration number** Synonyms None. Product code FGPA1012-P (pint), FGPA1012-Q (quart), FGPA1012-G (gallon), FGPA1012-5G (5-gallon pail) 1.2. Relevant identified uses of the 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 safety data sheet Manufacturer Stainless Steel Coatings, Inc. Address 835 Sterling Road, Lancaster MA 01523-2915, USA Telephone +1 (978) 365-9828 F-mail sds@STEEL-IT.com Supplier HM Industrieservice GmbH Address Großer Sand 3 76698 Ubstadt-Weiher, Germany +49 7251 44127-0 Telephone +49 7251 44127-29 Fax E-mail info@hm-industrie.de Website www.hm-industrie.de 1.4. Emergency telephone CHEMTREC: number +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** +431 406 4343 (Available 24 hours a day. SDS/Product information may not be Information Centre available for the Emergency Service.) **Belgium National Poisons** 070 245 245 (Available 24 hours a day. SDS/Product information may not be **Control Centre** available for the Emergency Service.) **Bulgaria National** +359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) **Toxicological Information** Centre +385 1 2348 342 (Hours of operation not provided. SDS/Product information may **Croatia Poisons** Information Centre not be available for the Emergency Service.) 1401 (Available 24 hours a day. SDS/Product information may not be available **Cyprus Poison Centre** for the Emergency Service.)

Czech Republic National
Poisons Information+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.)Centre

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

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		
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Skin sensitisation	Category 1B	H317 - May cause an allergic skin reaction.
Carcinogenicity	Category 1B	H350 - May cause cancer.
Reproductive toxicity	Category 2	H361 - Suspected of damaging fertility or the unborn child.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

2.2. Label elements	
Label according to Regulation (EC) No. 1272/2008 as amended
Contains:	2-Butanone oxime, Benzene, 1-chloro-4-(trifluoromethyl)-, Distillates (petroleum), hydrotreated light, Nickel, Xylene
Hazard pictograms	
Signal word	Danger
Hazard statements	
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	
P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	
P308 + P311	IF exposed or concerned: Call a POISON CENTRE/doctor.
Storage	
P403 + P235	Store in a well-ventilated place. Keep cool.
Disposal	Not assigned.
Supplemental information on the label	Restricted to professional users.
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.

Category 2

H411 - Toxic to aquatic life with

long lasting effects.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Environmental hazards

long-term aquatic hazard

Hazardous to the aquatic environment,

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Benzene, 1-chloro-4-(trifluoromethyl)-	15 - 25	98-56-6 202-681-1	-	-	
Classification:		3;H226, Skin Sens. 1 1ronic 2;H411	B;H317, Carc. 2;H351, Repr	. 2;H361,	
C.I. Pigment black 028	15 - 25	68186-91-4 269-053-7	-	-	#
Classification:	-				
Distillates (petroleum), hydrotreated light	15 - 25	64742-47-8 265-149-8	-	649-422-00-2	
Classification:		3;H226, Skin Irrit. 2;F quatic Chronic 2;H41	I315, STOT SE 3;H336, Asp 1	. Tox.	

Chemical name	%		. REACH Registration No		Notes
Xylene	< 2	1330-20-7 215-535-7	-	601-022-00-9	#
	4;H332;(A		4;H312;(ATE: 1100 mg/kg b it. 2;H315, Eye Irrit. 2;H319 ′3, Asp. Tox. 1;H304		
Chromium	< 0,8	7440-47-3 231-157-5	-	-	#
	Classification: -				
Ethylbenzene	< 0,7	100-41-4 202-849-4	-	601-023-00-4	#
		2;H225, Acute Tox. .sp. Tox. 1;H304, Aqu	4;H332;(ATE: 17,4 mg/l), S atic Chronic 3;H412	TOT RE	
Nickel	< 0,6	7440-02-0 231-111-4	-	028-002-01-4	
	Classification: Skin Sens	s. 1;H317, Carc. 2;H3	51, STOT RE 1;H372		
2-Butanone oxime	< 0,2	96-29-7 202-496-6	-	616-014-00-0	
	mg/kg bw), Skin Irrit. 2;H315, E	ng/kg bw), Acute Tox. 4;H3 Eye Dam. 1;H318, Skin Sen 370, STOT SE 3;H336, STC	s. 1;H317,	
2-Ethylhexanoic Acid 2	Zirconium Salt < 0,2	22464-99-9 245-018-1	-	-	
	Classification: Repr. 2;H	361			
Quartz	< 0,2	14808-60-7	-	-	#
		238-878-4			
st of abbreviations and	Classification: STOT RE symbols that may be use been assigned Union work	1;H372 ed above	(s).		
st of abbreviations and	symbols that may be us been assigned Union work timate. The full text for al All concentrations	1;H372 ed above «place exposure limit II H-statements is dis s are in percent by w	played in section 16. eight unless ingredient is a s		
st of abbreviations and #: This substance has ATE: Acute toxicity est omposition comments	symbols that may be use been assigned Union work timate. The full text for al All concentrations percent by volum	1;H372 ed above «place exposure limit II H-statements is dis s are in percent by w	played in section 16.		
st of abbreviations and #: This substance has ATE: Acute toxicity est	symbols that may be use been assigned Union work timate. The full text for al All concentrations percent by volum i measures Take off all conta advice/attention. that medical pers	1;H372 ed above cplace exposure limit II H-statements is dis s are in percent by w le. Components not li minated clothing imm If you feel unwell, se connel are aware of th	played in section 16. eight unless ingredient is a s	us or are below rep acerned: Get medic a label where possil take precautions to	oortable lir al ole). Ensu protect
st of abbreviations and #: This substance has ATE: Acute toxicity est omposition comments ECTION 4: First aid	symbols that may be use been assigned Union work timate. The full text for al All concentrations percent by volum i measures Take off all conta advice/attention. that medical pers themselves. Show before reuse. id measures Remove victim to	1;H372 ed above cplace exposure limit II H-statements is dis is are in percent by w the. Components not limit imminated clothing imm If you feel unwell, se connel are aware of the w this safety data sho of fresh air and keep a	played in section 16. eight unless ingredient is a sisted are either non-hazardo nediately. IF exposed or cor ek medical advice (show the ne material(s) involved, and set to the doctor in attendan t rest in a position comforta	ncerned: Get medica label where possil take precautions to ce. Wash contamin	oortable lir al ple). Ensu protect ated cloth
st of abbreviations and #: This substance has ATE: Acute toxicity est omposition comments ECTION 4: First aid eneral information	symbols that may be use been assigned Union work timate. The full text for all All concentrations percent by volum is measures Take off all conta advice/attention. that medical pers themselves. Show before reuse. id measures Remove victim to centre or doctor/p Remove contami	1;H372 ed above cplace exposure limit II H-statements is dis s are in percent by w le. Components not li minated clothing imm If you feel unwell, se connel are aware of th w this safety data sho of fresh air and keep a ohysician if you feel u nated clothing immed	played in section 16. eight unless ingredient is a sted are either non-hazardo nediately. IF exposed or cor ek medical advice (show the ne material(s) involved, and set to the doctor in attendan t rest in a position comforta inwell. diately and wash skin with s	ncerned: Get medica e label where possil take precautions to ce. Wash contamin ble for breathing. C oap and water. In c	oortable lir al ole). Ensu protect ated cloth all a poiso ase of
st of abbreviations and #: This substance has ATE: Acute toxicity est omposition comments ECTION 4: First aid eneral information	symbols that may be use been assigned Union work timate. The full text for al All concentrations percent by volum I measures Take off all conta advice/attention. that medical pers themselves. Show before reuse. id measures Remove victim to centre or doctor/p Remove contami eczema or other Immediately flush	1;H372 ed above cplace exposure limit II H-statements is dis s are in percent by w e. Components not li uminated clothing imm If you feel unwell, se connel are aware of the w this safety data she of fresh air and keep a ohysician if you feel u nated clothing immed skin disorders: Seek of eyes with plenty of the	played in section 16. eight unless ingredient is a sisted are either non-hazardo nediately. IF exposed or cor ek medical advice (show the ne material(s) involved, and set to the doctor in attendan t rest in a position comforta inwell.	bus or are below rep accerned: Get medica e label where possil take precautions to ce. Wash contamin ble for breathing. C oap and water. In c along these instruct s. Remove contact l	oortable lir al ole). Ensu protect ated cloth all a poiso ase of ions.
st of abbreviations and #: This substance has ATE: Acute toxicity est omposition comments ECTION 4: First aid eneral information 1. Description of first ai Inhalation Skin contact	symbols that may be use been assigned Union work timate. The full text for al All concentrations percent by volum I measures Take off all conta advice/attention. that medical pers themselves. Sho before reuse. id measures Remove victim to centre or doctor/p Remove contami eczema or other Immediately flush present and easy Rinse mouth. Do	1;H372 ed above cplace exposure limit II H-statements is dis a are in percent by w e. Components not li minated clothing imm If you feel unwell, se connel are aware of th w this safety data she of fresh air and keep a ohysician if you feel u nated clothing immed skin disorders: Seek n eyes with plenty of of to do. Get medical a not induce vomiting o that stomach conter	played in section 16. eight unless ingredient is a sted are either non-hazardo nediately. IF exposed or cor ek medical advice (show the ne material(s) involved, and set to the doctor in attendan t rest in a position comforta inwell. diately and wash skin with s medical attention and take water for at least 15 minutes	bus or are below rep accerned: Get medica e label where possil take precautions to ce. Wash contamin ble for breathing. C oap and water. In c along these instruct s. Remove contact l s and persists. control centre. If vo	al obe). Ensu protect ated cloth all a poiso ase of ions. enses, if miting occ
st of abbreviations and #: This substance has ATE: Acute toxicity est omposition comments ECTION 4: First aid eneral information 1. Description of first ai Inhalation Skin contact Eye contact	symbols that may be use been assigned Union work timate. The full text for al All concentrations percent by volum is measures Take off all conta advice/attention. that medical pers themselves. Show before reuse. id measures Remove victim to centre or doctor/p Remove contami eczema or other Immediately flush present and easy Rinse mouth. Do keep head low so symptoms occur.	1;H372 ed above cplace exposure limit II H-statements is dis a re in percent by w e. Components not li minated clothing imm If you feel unwell, se connel are aware of th w this safety data she of fresh air and keep a ohysician if you feel u nated clothing immed skin disorders: Seek n eyes with plenty of y to do. Get medical a not induce vomiting o that stomach conter siness and dizziness. irritation. Skin irritation	played in section 16. eight unless ingredient is a sted are either non-hazardo nediately. IF exposed or correk medical advice (show the me material(s) involved, and bet to the doctor in attendan t rest in a position comforta inwell. diately and wash skin with s medical attention and take a water for at least 15 minutes attention if irritation develops without advice from poison of	bus or are below rep acerned: Get medica e label where possil take precautions to ce. Wash contamin ble for breathing. C oap and water. In c along these instruct s. Remove contact I s and persists. control centre. If voi Get medical attent mg. Direct contact w pain. May cause al	al ble). Ensu protect ated cloth all a poiso ase of ions. enses, if miting occ ion if

SECTION 5: Firefighting measures

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. Chlorine compounds. Fluorine compounds. Fumes of metal 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	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 release measures

6.1. Personal precautions, protective equipment and emergency procedures					
For non-emergency personnel	Wear appropriate protective equipment and clothing during clean-up. Avoid breathing 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing 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.				
	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.				
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

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 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.

Avoid breathing 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. Use only in well-ventilated areas. 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 and sources of ignition. 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	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	МАК	5 mg/m3	Inhalable fraction.
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	
Quartz (CAS 14808-60-7)	MAK	0,05 mg/m3	Respirable dust.
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	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 mg/m3	
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	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

Bulgaria. OEL values of carcinogens and mutagens at work (Reg. 10/2003 on prot. from carcinogens and mutagens at work, Ann. 1), as amended Components Type Value Form

	components	i ype	Value	
(Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction and dust

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

Components	Туре	Value	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	2 mg/m3	
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	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	MAC	5 mg/m3	
	STEL	10 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	MAC	0,2 mg/m3	Total dust.
		0,05 mg/m3	Respirable dust.
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	
Quartz (CAS 14808-60-7)	MAC	0,1 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

	.) •		
2-Ethylhexanoic Acid	TWA	5 mg/m3	
Zirconium Salt (CAS			
22464-99-9)			
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	
Cyprus, OELs, Occupational Exp	osure Limit Values of Chemic	als at Work (Safety and Health at Work (Chem, A	aents)

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	
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	

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	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		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
C.I. Pigment black 028 (CAS 68186-91-4)	Ceiling	1,5 mg/m3	Aerosol, inhalable.
	TWA	0,5 mg/m3	Aerosol, inhalable.
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.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
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-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	TLV	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TLV	0,5 mg/m3	
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.
Quartz (CAS 14808-60-7)	TLV	0,3 mg/m3	Total
		0,1 mg/m3	Respirable.
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	Form
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	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Fine dust, respiratory fraction
Xylene (CAS 1330-20-7)	STEL	450 mg/m3	
		100 ppm	

Components	imits of Hazardous Substances (R Type	Value	Form
	TWA	200 mg/m3	
		50 ppm	
Finland. HTP-arvot, App 3., Binding Limit Components	t Values, Social Affairs and Ministr Type	y of Health Value	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	TWA	1 mg/m3	
C.I. Pigment black 028 CAS 68186-91-4)	TWA	0,5 mg/m3	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Distillates (petroleum), nydrotreated light (CAS 64742-47-8)	TWA	500 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.
Quartz (CAS 14808-60-7)	TWA	0,05 mg/m3	Respirable.
(ylene (CAS 1330-20-7)	STEL	440 mg/m3	
		100 ppm	
	TWA	220 mg/m3	
		50 ppm	
France. OELs. Indicative Occupational Ex Components	xposure Limits as Prescribed by O Type	order of 30 June 2004 Value	, as amended Form
C.I. Pigment black 028 CAS 68186-91-4)	VME	0,2 mg/m3	Inhalable fraction.
		0,05 mg/m3	Respirable fraction.
Chromium (CAS 7440-47-3)	VME	2 mg/m3	
France. OELs. Occupational Exposure Li	mits as Prescribed by Art. R.4412- Type	149 of Labor Code, a Value	s amended Form
•	-	value	
Ethylbenzene (CAS	VLE	442 mg/m3	
Ethylbenzene (CAS	-		
Ethylbenzene (CAS	-	442 mg/m3	
Ethylbenzene (CAS	VLE	442 mg/m3 100 ppm	
Ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3 100 ppm 88,4 mg/m3	Respirable dust.
Ethylbenzene (CAS 100-41-4) Quartz (CAS 14808-60-7)	VLE VME	442 mg/m3 100 ppm 88,4 mg/m3 20 ppm	Respirable dust.
Ethylbenzene (CAS 100-41-4) Quartz (CAS 14808-60-7)	VLE VME VME	442 mg/m3 100 ppm 88,4 mg/m3 20 ppm 0,1 mg/m3	Respirable dust.
Ethylbenzene (CAS 100-41-4) Quartz (CAS 14808-60-7)	VLE VME VME	442 mg/m3 100 ppm 88,4 mg/m3 20 ppm 0,1 mg/m3 442 mg/m3 100 ppm	Respirable dust.
Ethylbenzene (CAS 100-41-4) Quartz (CAS 14808-60-7)	VLE VME VME VLE	442 mg/m3 100 ppm 88,4 mg/m3 20 ppm 0,1 mg/m3 442 mg/m3 100 ppm 221 mg/m3	Respirable dust.
Components Ethylbenzene (CAS 100-41-4) Quartz (CAS 14808-60-7) Xylene (CAS 1330-20-7) France. Threshold Limit Values (VLEP) fo Components	VLE VME VME VLE VME	442 mg/m3 100 ppm 88,4 mg/m3 20 ppm 0,1 mg/m3 442 mg/m3 100 ppm 221 mg/m3 50 ppm	

(CAS 68186-91-4)	VME	2 mg/m3
Regulatory status:	Regulatory indicative (VRI)	
Ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3
Regulatory status:	Regulatory binding (VRC)	100 ppm
Regulatory status:	Regulatory binding (VRC)	

Components	Values (VLEP) for Occupational Exposu Type	Value	Form
	VME	88,4 mg/m3	
Regulatory status:	Regulatory binding (VRC)		
		20 ppm	
Regulatory status:	Regulatory binding (VRC)		
Nickel (CAS 7440-02-0)	VME	1 mg/m3	
Regulatory status:	Indicative limit (VL)		
Quartz (CAS 14808-60-7)	VME	0,1 mg/m3	Respirable fraction.
Regulatory status:	Regulatory binding (VRC)		
Xylene (CAS 1330-20-7)	VLE	442 mg/m3	
Regulatory status:	Regulatory binding (VRC)		
		100 ppm	
Regulatory status:	Regulatory binding (VRC)		
	VME	221 mg/m3	
Regulatory status:	Regulatory binding (VRC)		
		50 ppm	
Regulatory status:	Regulatory binding (VRC)		

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

Components	Туре	Value	Form
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	TWA	5 mg/m3	Respirable aerosol fraction
		350 mg/m3	Vapour.
		50 ppm	Vapour.
Ethylbenzene (CAS 100-41-4)	TWA	88 mg/m3	
		20 ppm	
Xylene (CAS 1330-20-7)	TWA	220 mg/m3	
		50 ppm	

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

Components	Туре	Value	Form
2-Butanone oxime (CAS 96-29-7)	AGW	1 mg/m3	
		0,3 ppm	
C.I. Pigment black 028 (CAS 68186-91-4)	AGW	2 mg/m3	Inhalable fraction.
Chromium (CAS 7440-47-3)	AGW	2 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	AGW	300 mg/m3	
Ethylbenzene (CAS 100-41-4)	AGW	88 mg/m3	
		20 ppm	
Nickel (CAS 7440-02-0)	AGW	0,03 mg/m3	Inhalable fraction.
		0,006 mg/m3	Respirable fraction.
Xylene (CAS 1330-20-7)	AGW	200 mg/m3	
Greece. OELs, Presidential Decree	No. 307/1986, as amended		
Components	Туре	Value	
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	0,5 mg/m3	

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

Components	Туре	Value	
Chromium (CAS 7440-47-3)	TWA	1 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3	
		125 ppm	
	TWA	435 mg/m3	
		100 ppm	
Xylene (CAS 1330-20-7)	STEL	650 mg/m3	
		150 ppm	
	TWA	435 mg/m3	
		100 ppm	

Hungary. OELs. Decree on	protection of workers exposed to che	emical agents (5/2020. (II.6)), Annex 1&2, as amended	t
Components	Type	Value	Form	

components	туре	Value	1 OIIII
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	20 mg/m3	
	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	STEL	2 mg/m3	
	TWA	0,1 mg/m3	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
	TWA	442 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
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	Гуре	value	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	STEL	5 mg/m3	Total dust.
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.
Quartz (CAS 14808-60-7)	TWA	0,3 mg/m3	Total dust.
		0,1 mg/m3	Respirable 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 Value Form

Components	гуре	value Form
2-Butanone oxime (CAS 96-29-7)	STEL	33 mg/m3
		10 ppm
	TWA	10 mg/m3
		3 ppm

Ireland. OELVs, Schedules 1 & 2, C Components	ode of Practise for Chemica Type	l Agents and Carcinogens Reg Value	ulations Form
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	2 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	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	
Italy. OELs Components	Туре	Value	Form
-			1 onn
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	0,5 mg/m3	
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.
Quartz (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
	IVVA	22 T Hig/113	

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

Components	Туре	Value	Form
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	2 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	0,05 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

Components	Туре	Value	Form
Benzene, -chloro-4-(trifluoromethyl)- CAS 98-56-6)	TWA	20 mg/m3	
C.I. Pigment black 028 CAS 68186-91-4)	TWA	2 mg/m3	
Chromium (CAS 7440-47-3)	TWA	2 mg/m3	
Distillates (petroleum), nydrotreated light (CAS 94742-47-8)	STEL	500 mg/m3	
	TWA	350 mg/m3	
Ethylbenzene (CAS 00-41-4)	STEL	884 mg/m3	
		200 ppm	
	TWA	442 mg/m3	
		100 ppm	
lickel (CAS 7440-02-0)	TWA	0,5 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.
(ylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

Luxembourg. Chemical Sub	stances Prohibited at Work (Ann	nex III), G.D.R. of 14 November	2016, OJ Memorial A, n °
235/2016, as amended			
-	_		_

Components	Туре	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

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	
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	
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	Form
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	430 mg/m3	
	TWA	215 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0,075 mg/m3	Respirable dust.
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	Туре	Value	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	TLV	5 mg/m3	
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	TLV	275 mg/m3	
		40 ppm	
Ethylbenzene (CAS 100-41-4)	TLV	20 mg/m3	
		5 ppm	
Nickel (CAS 7440-02-0)	TLV	0,05 mg/m3	
Quartz (CAS 14808-60-7)	TLV	0,3 mg/m3	Total dust.
		0,05 mg/m3	Respirable dust.
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	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	0,5 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	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.
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	
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 occupatio Components	Туре	Value	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	0,1 mg/m3	Inhalable fraction.
		0,02 mg/m3	Respirable fraction.
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.
Quartz (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.
(ylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	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	
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 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)	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.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

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

Components	Туре	Value	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	TWA	1 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	0,2 mg/m3	Inhalable fraction.
		0,05 mg/m3	Respirable fraction.
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	

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

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	
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-Butanone oxime (CAS 96-29-7)	KTV	8 mg/m3	
		2,4 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.
Xylene (CAS 1330-20-7)	KTV	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, Annex I), as amended

Components	Туре	Value	Form
2-Butanone oxime (CAS 96-29-7)	TWA	1 mg/m3	
		0,3 ppm	
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	TWA	1 mg/m3	Inhalable fraction.
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	2 mg/m3	Inhalable fraction.
		0,2 mg/m3	Inhalable fraction.
		0,05 mg/m3	Respirable fraction.
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	
		50 ppm	

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

Components	Туре	Value Form	
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	2 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
		200 ppm	

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

Components	Туре	Value	Form
	TWA	441 mg/m3	
		100 ppm	
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0,05 mg/m3	Respirable fraction.
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

Components	Туре	Value	Form
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	Total dust.
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	STEL	500 mg/m3	
	TWA	350 mg/m3	
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.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Xylene (CAS 1330-20-7)	Ceiling	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte

Components	Туре	Value	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	Inhalable fraction.
	TWA	5 mg/m3	Inhalable fraction.
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	0,5 mg/m3	Inhalable fraction.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	STEL	700 mg/m3	Vapour.
		100 ppm	Vapour.
	TWA	5 mg/m3	Aerosol
		350 mg/m3	Vapour.
		50 ppm	Vapour.
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.
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable fraction.
Xylene (CAS 1330-20-7)	STEL	440 mg/m3	
		100 ppm	

Components	Туре	Value	Form
	TWA	220 mg/m3	
		50 ppm	
UK. OELs. Workplace Exposure Li	mits (WELs) (EH40/2005 (Fou	rth Edition 2020)), Table 1	
Components	Туре	Value	Form
2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)	STEL	10 mg/m3	
	TWA	5 mg/m3	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	0,5 mg/m3	
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	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable.
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	
C.I. Pigment black 028 (CAS 68186-91-4)	TWA	2 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	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
		100 ppm	
	TWA	221 mg/m3	
		50 ppm	
EU. OELs, Directive 2004/37/EC or			_
Components	Туре	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction and dust

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	*	

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	
	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
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

components	Value	Determinant	opecimen	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

Componente	, and o	201011111	opeenien	eamping mie	
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.

Components	Value	Determinant	Specimen	Sampling Time
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

C.I. Pigment black 028 (CAS 68186-91-4)	0,022 µmol/mmol	chromium	Creatinine in urine	*
	0,01 mg/g	chromium	Creatinine in urine	*

Hungary. BELs. Decree or	n protection of workers	exposed to chemi	cal agents (5/20	020. (II.6)), Annex 3&4, as amended
Components	Value	Determinant	Specimen	Sampling Time

components	value	Determinant	Specimen	Sampling 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) Components Value Determinant Specimen Sampling Time

Ethylbenzene (CAS 100-41-4)	700 mg/g	Suma del acido mandélico y el ácido fenilglioxílico	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1 g/g	Ácidos metilhipúricos	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
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, 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

Xylene (CAS 1330-20-7) 650 mmol/mol Methyl hippuric Creatinine in * acid urine	Chromium (CAS 7440-47-3)10 umol/mol	Chromium	Creatinine in urine	*
	Xylene (CAS 1330-20-7) 650 mmol/mol	, , , ,		*

* - 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		
Xylene (CAS 1330-2	,	Can be absorbed through the skin.
Belgium OELs: Skin de Xylene (CAS 1330-2	•	Can be absorbed through the skin.
Bulgaria OELs: Skin de Xylene (CAS 1330-2	•	Can be absorbed through the skin.
Croatia ELVs: Skin des	signation	
Xylene (CAS 1330-2 Czech Republic PELs:		Can be absorbed through the skin.
Xylene (CAS 1330-2 Denmark GV: Skin des		Can be absorbed through the skin.
Xylene (CAS 1330-2	-	Can be absorbed through the skin.
Estonia OELs: Skin de	signation	-
Xylene (CAS 1330-2 EU Exposure Limit Val		Can be absorbed through the skin.
Xylene (CAS 1330-2 Finland Exposure Limit	20-7) t Values: Skin designation	Can be absorbed through the skin.
		Con he sheathed through the skin
Xylene (CAS 1330-2 France INRS: Skin desi		Can be absorbed through the skin.
Xylene (CAS 1330-2 France Mandatory OEL	20-7) .s (VLEP): Skin designation	Can be absorbed through the skin.
Xylene (CAS 1330-2		Can be absorbed through the skin.
	dvisory): Skin designation	
2-Butanone oxime (Xylene (CAS 1330-2		Can be absorbed through the skin. Can be absorbed through the skin.
	nit Values: Skin designation	Can be absorbed through the skin.
2-Butanone oxime (-	Can be absorbed through the skin.
Xylene (CAS 1330-2		Can be absorbed through the skin.
Greece OEL: Skin desig	-	
Xylene (CAS 1330-2 Hungary OELs: Skin de		Can be absorbed through the skin.
Xylene (CAS 1330-2 Iceland OELs: Skin des		Can be absorbed through the skin.
Xylene (CAS 1330-2		Can be absorbed through the skin.
Xylene (CAS 1330-2 Italy OELs: Skin desigr		Can be absorbed through the skin.
Xylene (CAS 1330-2	20-7)	Danger of cutaneous absorption
Latvia OELs: Skin desi Xylene (CAS 1330-2	-	Can be absorbed through the skin.
Lithuania OELs: Skin d	-	
Xylene (CAS 1330-2) Can be absorbed through the skin. Can be absorbed through the skin.
Luxembourg OELs: Sk Xylene (CAS 1330-2	20-7)	Can be absorbed through the skin.
Malta OELs: Skin desig Xylene (CAS 1330-2	•	Can be absorbed through the skin.
Netherlands OELs (bin Xylene (CAS 1330-2	ding): Skin designation	-
	t Values: Skin designation	Can be absorbed through the skin.
Xylene (CAS 1330-2 Portugal OELs: Skin de	20-7)	Can be absorbed through the skin.
Xylene (CAS 1330-2	20-7)	Can be absorbed through the skin.
Romania OELs: Skin de Xylene (CAS 1330-2	-	Can be absorbed through the skin.
Slovakia OELs for Card	cinogens and Mutagens: Skin	designation
Nickel (CAS 7440-0		Can be absorbed through the skin.
Slovakia OELs: Skin de	-	Cop be cheerbed through the state
Xylene (CAS 1330-2	20-7)	Can be absorbed through the skin.

Slovenia. OELs. Regulations (Official Gazette of the Repu		rs against risks due to exposure to chemicals while working
2-Butanone oxime (CAS	•	an be absorbed through the skin.
Xylene (CAS 1330-20-7)		an be absorbed through the skin.
Spain OELs: Skin designation	on	-
Xylene (CAS 1330-20-7)	Ca	an be absorbed through the skin.
Sweden Threshold Limit Val	ues: Skin designation	
Xylene (CAS 1330-20-7)		an be absorbed through the skin.
	ues at the Workplace: Skin desigr	nation
Xylene (CAS 1330-20-7)		an be absorbed through the skin.
UK EH40 WEL: Skin designa		
Nickel (CAS 7440-02-0) Xylene (CAS 1330-20-7)		an be absorbed through the skin. an be absorbed through the skin.
8.2. Exposure controls		
Appropriate engineering controls	Ventilation rates should be matche exhaust ventilation, or other engin	exhaust ventilation. Good general ventilation should be used. ed to conditions. If applicable, use process enclosures, local leering controls to maintain airborne levels below recommended ess to water supply or an emergency shower.
Individual protection measures,	such as personal protective equi	
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 safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed. Eye protection should meet standard EN 166.	
Skin protection		
- Hand protection	of 245 +/- 44 minutes. Minimum gl penetrate the gloves. Frequent ch	I374. Glove material: Nitrile. Use gloves with breakthrough time love thickness 0.381 (15 mil) mm. Be aware that the liquid may lange is advisable. The most suitable glove must be chosen in ier, who can inform about the breakthrough time of the glove
- Other	Wear appropriate chemical resista	ant clothing. Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with particulate filter (ABEK2/P3). Respiratory protection should meet standard EN 14387. Check with respiratory protective equipment suppliers.	
Thermal hazards	Wear appropriate thermal protection	ve clothing, when necessary.
Hygiene measures	personal hygiene measures, such drinking, and/or smoking. Routine contaminants. Contaminated work	requirements. When using do not smoke. Always observe good as washing after handling the material and before eating, ely wash work clothing and protective equipment to remove c clothing should not be allowed out of the workplace.
Environmental exposure controls	from ventilation or work process e requirements of environmental pro	supervisory personnel of all environmental releases. Emissions equipment should be checked to ensure they comply with the otection legislation. Fume scrubbers, filters or engineering oment may be necessary to reduce emissions to acceptable

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

3.1. Information on basic physical and chemical properties		
Physical state	Liquid.	
Form	Liquid.	
Colour	Black.	
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	139 - 213 °C (282,2 - 415,4 °F)	
Flammability	Flammable liquid and vapour.	
Upper/lower flammability or explosive limits		
Explosive limit - lower (%)	0,8 % (Petroleum distillates)	
Explosive limit – upper (%)	5,6 % (Petroleum distillates)	

Flash point	40 °C (104 °F) (Mineral spirits)
Auto-ignition temperature	260 °C (500 °F) (Petroleum distillates)
Decomposition temperature	253,8 °C (488,8 °F)
рН	Not applicable (material is insoluble in water).
Kinematic viscosity	3000 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	5,3 mmHg (20 °C (68 °F))
Density and/or relative density	
Density	1,294 g/cm³ (25 °C (77 °F))
Relative density	1,294 (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	604 g/l (EU VOC) 406,93 g/l (US VOC) 5,04 lb/gal (EU VOC) 3,4 lb/gal (US VOC)
Other safety characteristics	Total weight solids: 53.31 % w/w Total volume solids: 42.29 % v/v
SECTION 10: Stability and	I 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 oxidising agents. Strong acids. Halogens. Chlorine.
10.6. Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Fumes of metal oxides. Chlorine compounds. Fluorine compounds.
SECTION 11: Toxicologica	al information
General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of a	

Information on likely routes of exposure

Inhalation	May cause drowsiness or dizziness. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

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

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results	
2-Butanone oxime (CAS 96-29-7)			
Acute			
Dermal	5.11.1		
LD50	Rabbit	> 1000 mg/kg, 24 Hours	
Oral	- /	"	
LD50	Rat	> 900 mg/kg	
Ethylbenzene (CAS 100-41-4)			
Acute			
Dermal	Datat		
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	Det	0500	
LD50	Rat	3523 mg/kg	
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary 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	May cause cancer.		
Hungary. 26/2000 EüM Ordii (as amended)	nance on protection against a	and preventing risk relating to exposure to carcinogens at work	
2-Butanone oxime (CAS IARC Monographs. Overall I	96-29-7) Evaluation of Carcinogenicity	,	
Benzene, 1-chloro-4-(trifluoromethyl)- (CAS 98-56-6) C.I. Pigment black 028 (CAS 68186-91-4) Nickel (CAS 7440-02-0) Xylene (CAS 1330-20-7)		2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans. 2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans. orkers against risks due to exposure to chemicals while workin	
2-Butanone oxime (CAS Nickel (CAS 7440-02-0)	•	Carcinogenic, Category 2. Carcinogenic, Category 2.	
Reproductive toxicity	Suspected of damaging fertili		
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.		
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 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 in	oformation		
SECTION 12: Ecological in			
12.1. Toxicity	Toxic to aquatic life with long	lasting effects.	

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Components		Species	Test Results		
Distillates (petroleum), hydrotreate	ed light (CAS 6	64742-47-8)			
Aquatic					
Acute		B · · · · · · · · · ·			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2,9 mg/l, 96 hours		
Ethylbenzene (CAS 100-41-4)					
Aquatic					
<i>Acute</i> Crustacea	F.050	Water flee (Dephric magne)	1.91 9.29 mg// 49 hours		
	EC50	Water flea (Daphnia magna)	1,81 - 2,38 mg/l, 48 hours		
	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4,2 mg/l, 96 hours		
Chronic					
	EC50	Ceriodaphnia dubia	3,6 mg/l, 7 days		
Nickel (CAS 7440-02-0)					
Aquatic					
Acute	5050		4		
-	EC50	Water flea (Daphnia magna)	1 mg/l, 48 hours		
	LC50	Calanoid copepod (Eurytemora affinis)	>= 7,35 - <= 12,12 mg/l, 96 hours		
Xylene (CAS 1330-20-7)					
Aquatic					
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2,6 mg/l, 96 hours		
12.2. Persistence and degradability	No data is a	No data is available on the degradability of this product.			
12.3. Bioaccumulative potential					
Partition coefficient n-octanol/water (log Kow) STEEL-IT 1012 Polyurethane Benzene, 1-chloro-4-(trifluoro Ethylbenzene (CAS 100-41-4	Topcoat – Bla methyl)- (CAS				
Bioconcentration factor (BCF)	, Not availabl				
12.4. Mobility in soil	The produc	t is insoluble in water. Not expected to be m	obile in soil.		
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	The produc potential.	The product contains volatile organic compounds which have a photochemical ozone creation			
12.8. Additional information					
Estonia Dangerous substan	nces in soil D	ata			
Nickel (CAS 7440-02-0)	Nickel (Ni) 150 mg/kg Nickel (Ni) 50 mg/kg Nickel (Ni) 500 mg/kg				
SECTION 13: Disposal co	nsideratior				
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.			
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. Do not re-use empty containers.				
EU waste code	T I 147 1		veen the user, the producer and the waste		

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 class(es) Class 3 Subsidiary risk _ 3 Label(s) 30 Hazard No. (ADR) D/E Tunnel restriction code 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 RID 14.1. UN number UN1263 14.2. UN proper shipping Paint name 14.3. Transport hazard class(es) 3 Class Subsidiary risk -3 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards 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 class(es) Class 3 Subsidiary risk -Label(s) 3 14.4. Packing group Ш

14.5. Environmental hazards Yes

Read safety instructions, SDS and emergency procedures before handling. 14.6. Special precautions 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) Ш 14.4. Packing group 14.5. Environmental hazards Yes **ERG Code** 3L 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user IMDG UN1263 14.1. UN number 14.2. UN proper shipping PAINT name 14.3. Transport hazard class(es) Class 3 Subsidiary risk -

14.4. Packing group					
14.5. Environmental hazards	i				
Marine pollutant	Yes				
EmS	F-E, <u>S-E</u>				
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

Nickel (CAS 7440-02-0)

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

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

2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)		
Distillates (petroleum), hydrotreated light		
(CAS 64742-47-8)		
Xylene (CAS 1330-20-7)		
2-Butanone oxime (CAS 96-29-7)		

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

2-Butanone oxime (CAS 96-29-7)

2-Ethylhexanoic Acid Zirconium Salt (CAS 22464-99-9)

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

Contains a substance which 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		
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)		Affections engendrées par les solvants organiques liquides à usage professionnel : hydrocarbures liquides aliphatiques ou cycliques saturés ou insaturés et leurs mélanges; hydrocarbures halogénés liquides; dérivés nitrés des hydrocarbures aliphatiques; al 84
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. IMO: 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.	
References	vPvB: very Persistent, very Bioaccumulative. 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 ar methods and test data, if avail	nd environmental hazards is derived by a combination of calculation lable.
Full text of any statements, which are not written out in full under sections 2 to 15	H225 Highly flammable liquid H226 Flammable liquid and va H301 Toxic if swallowed. H304 May be fatal if swallowe H312 Harmful in contact with s H315 Causes skin irritation. H317 May cause an allergic sl H318 Causes serious eye dan H319 Causes serious eye dan H319 Causes serious eye irrit H332 Harmful if inhaled. H335 May cause respiratory in H336 May cause drowsiness of H350 May cause cancer. H351 Suspected of causing ca	apour. d and enters airways. skin. kin reaction. mage. ation. rritation. or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H361 Suspected of damaging the unborn child by ingestion.

H370 Causes damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure by inhalation.

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.

Follow training instructions when handling this material.

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.

Training information Disclaimer