**2K Epoxy Primer Gray** Safety Data Sheet According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

	Regulations (HPR) WHMIS 2015 Issue date: 07/28/2017 Revision date: 09/21/2020 Supersedes: 07/31/2019 Version: 2.1
SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Product name	: 2K Epoxy Primer Gray
Product code	: 3680033 / REZ1232
1.2. Relevant identified uses	e of the substance or mixture and uses advised against
Recommended use	s of the substance or mixture and uses advised against : Automotive refinish
1.3. Details of the supplier o	of the safety data sheet
<b>Manufacturer</b> Peter Kwasny GmbH 96 Heibronner Str. Gundelsheim, 74831 - Germany T 49(0) 6269-95-20	<b>Distributor</b> Peter Kwasny Inc 62-64 Enter Lane Islandia, NY 11749 T 1-844-726-6330 (toll free North America) <b>Distributor</b> Peter Kwasny Spraypaint Canada Inc
	2275 Lake Shore Boulevard West, Suite 530 Toronot, ON M8V 3Y3
1.4. Emergency telephone n	iumber
Emergency number	: 352-323-3500 (24h / 7 days a week)
SECTION 2: Hazard identif	ication
2.1. Classification of the sub	
GHS classification	
Flam. Aerosol 1	
Press. Gas (Lig.)	
Skin Irrit. 2	
Eye Irrit. 2A	
Skin Sens. 1	
Carc. 2	
Repr. 2	
STOT SE 3	
Simple Asphy	
2.2. Label elements	
GHS labelling	
Hazard pictograms (GHS)	
	GHS02 GHS04 GHS07 GHS08
Signal word (GHS)	: Danger
Hazard statements (GHS)	: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May displace oxygen and cause rapid suffocation
Precautionary statements (GHS)	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hand forearms and face thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medica advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wa it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with wat for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed on contaminate of the several minutes.
	irritation persists: Get medical advice/attention. Store in a well-ventilated place. Keep containe tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding tightly closed.
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## 2K Epoxy Primer Gray

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50 °C/122 °F. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity

Not applicable

## **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%
Dimethyl ether	(CAS-No.) 115-10-6	30 - 60
Acetone	(CAS-No.) 67-64-1	10 - 30
Bisphenol A-epichlorohydrin polymer	(CAS-No.) 25068-38-6	5 – 10
Titanium dioxide	(CAS-No.) 13463-67-7	5 – 10
Xylenes (o-, m-, p- isomers)	(CAS-No.) 1330-20-7	1 – 5
Talc	(CAS-No.) 14807-96-6	1 – 5
Methyl isoamyl ketone	(CAS-No.) 110-12-3	1 – 5
Solvent naphtha, petroleum, heavy aromatic	(CAS-No.) 64742-94-5	1 – 5
1-Butanol	(CAS-No.) 71-36-3	1 – 5
n-Butyl acetate	(CAS-No.) 123-86-4	1 – 5
Ethylbenzene	(CAS-No.) 100-41-4	0.5 – 1.5

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures		
4.1. Description of first aid measures		
First-aid measures after inhalation	If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.	
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.	
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
First-aid measures after ingestion	: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.	
4.2. Most important symptoms and effects	s, both acute and delayed	
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death. May cause drowsiness or dizziness.	
Symptoms/effects after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.	
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.	
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
4.3. Indication of any immediate medical attention and special treatment needed		

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECT	ON 5: Fire-fighting measures	
5.1.	Extinguishing media	
Suitable	extinguishing media	: Water spray. Dry powder. Carbon dioxide (CO2).
Unsuitat	le extinguishing media	: Do not use water jet.

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

5.2. Special hazards arising from the sub	stance or mixture
Fire hazard	: Extremely flammable aerosol. Products of combustion may include, and are not limited to:
	oxides of carbon. Nitrogen oxides.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Vapours may form explosive mixture with air.
5.3. Advice for firefighters	
Firefighting instructions	: DO NOT fight fire when fire reaches explosives. Evacuate area.
Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours.
<b>SECTION 6: Accidental release meas</b>	ures
6.1. Personal precautions, protective equ	ipment and emergency procedures
General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate every possible source of ignition. Use only non-sparking tools. Use special care to avoid static electric charges.
6.1.1. For non-emergency personnel	
No additional information available	
6.1.2. For emergency responders	
No additional information available	
6.2. Environmental precautions	
Prevent entry to sewers and public waters.	
6.3. Methods and material for containmer	nt and cleaning up
For containment	: Stop leak if safe to do so. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal. Provide ventilation.
6.4. Reference to other sections	
For further information refer to section 8: "Exposu	re controls/personal protection"
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Do not pierce or burn, even after use. Hazardous waste due to potential risk of explosion.
Precautions for safe handling	: Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Keep away from sources of ignition - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.
7.2. Conditions for safe storage, includin	g any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	: Keep out of the reach of children. Store locked up. Store in a well-ventilated place. Store away from direct sunlight or other heat sources. Keep in fireproof place. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep away from incompatible materials.
SECTION 8: Exposure controls/perso	nal protection
8.1. Control parameters	
2K Epoxy Primer Gray Improved	
No additional information available	
Dimethyl ether (115-10-6)	
No additional information available	
Acetone (67-64-1)	
USA - ACGIH - Occupational Exposure Limits	3
ACGIH TWA (ppm)	250 ppm

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ACGIH chemical category Not Classifiable as a Human Carcinogen USA ACGIH - Biological Exposure Indices Biological	ACGIH STEL (ppm)	500 ppm
USA         ACCIH - Biological Exposure Indices           Diological Exposure Indices (EI)         25 mg1 Parameter: Acetone - Medium: urine - Sampling time: end of shift (nonspecific)           USA         OSHA PEL (TVA) (ng/m <sup>1</sup> )         2400 mg/m <sup>3</sup> OSHA PEL (TVA) (ng/m <sup>1</sup> )         2500 ppm (10% LEL)           USA - IDLH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> NIOSH FEL (TVA) (ng/m <sup>1</sup> )         2500 ppm (10% LEL)           USA - NOSH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> NIOSH FEL (TVA) (ng/m <sup>1</sup> )         2500 ppm (10% LEL)           USA - NOSH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> NIOSH FRE (TVA) (ng/m <sup>1</sup> )         2500 ppm (10% LEL)           USA - ACCH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> NIOSH ACCUPAC OCCupational Exposure Limits         S000 ng/m <sup>3</sup> Local name         Titanium dioxide (Total dust)           Oradinal Exposure Limits         S000 ng/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits         S000 ng/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits         S000 ng/m <sup>3</sup>		
Binological Exposure Indices (BET) 25 mg/H Parameter: Acetone - Medium: urine - Sampling time: end of shift (nonspecific) USA OPA - Occupational Exposure Limits USA - NDA - Occupational Exposure Limits Bisphenol - Applichtorohydrin polymer (25069-86-) No additional information available Trainalum dioxide (14836-87-7) USA - ACGIH - Occupational Exposure Limits Local name ACGIH TWA (mg/m <sup>3</sup> ) 10 mg/m <sup>3</sup> 10 mg/m <sup>3</sup> 1		
USA CoPHA - Occupational Exposure Limits           OSHA PEL (TWA) (topim)           1000 ppm           USA - NOSH - Occupational Exposure Limits           NIGSH REL (TWA) (topim)           250 ppm (10% LEL)           USA - NOSH - Occupational Exposure Limits           NIGSH REL (TWA) (topim)           250 ppm           Bisphenol A-epichtorohydrin polymer (2506:3-8-6)           No additional information available           Titanium dioxide (1346:3-67.7)           USA - ACCH - Occupational Exposure Limits           NoGH HEL (TWA) (topim)           10 mg/m <sup>1</sup> Pamark (ACGH)           11 million           OGH A Cocupational Exposure Limits           Local name           ACGH + Occupational Exposure Limits           Local name           ACGH + Occupational Exposure Limits           USA - ACH - Occupational Exposure Limits           USA - ACH - Occupational Exposure Limits           USA - ACH - Occupational Exposure Limits           USA - NOSH - Occupational Exposur		25 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift (nonspecific)
OSHA PEL (TWA) (ing/m?)         2400 mg/m²           OSHA PEL (TWA) (ing/m?)         1000 ppm           USI - IDLH - Occupational Exposure Limits         2500 ppm (10% LEL)           USB - NICHA - Occupational Exposure Limits         1000 ppm           NICSH FEL (TWA) (ing/m?)         590 mg/m²           NICSH FEL (TWA) (ing/m?)         590 mg/m²           NICSH FEL (TWA) (ing/m?)         590 mg/m²           No additional information available         Tainlum dioxide           Titanium dioxide (13485-677)         USA - ACCIH - Occupational Exposure Limits           USA - ACCIH - Occupational Exposure Limits         Local name           ACGIH TWA (ing/m?)         10 mg/m²           Regulatory reference         ACCIH 2020           USA - OSHA - Occupational Exposure Limits         Local name           OSHA PEL (TWA) (ing/m?)         15 mg/m² (total dust)           Regulatory reference (US-OSHA)         OSHA APEL (TWA) (ing/m?)           USA - MOSH - Occupational Exposure Limits         Not Classifiable as a Human Carcinogen           USA - NOSH - Occupational Exposure Limits         Not Classifiable as a Human Carcinogen           USA - MOSH - Occupational Exposure Limits         Not Classifiable as a Human Carcinogen           USA - MOSH - Occupational Exposure Limits         Not Classifiable as a Human Carcinogen           USA - ACCIH -		
OSHA PEL (TWA) (ppm)         100 ppm           USA - IDLH - Occupational Exposure Limits         2500 ppm (10% LEL)           USA - NOSH - Occupational Exposure Limits         590 mg/m <sup>2</sup> NIOSH REL (TWA) (mg/m <sup>2</sup> )         250 ppm           Bisphenol A-spichlorohydrin polymer (25068-38-0)         No           NIOSH REL (TWA) (mg/m <sup>2</sup> )         250 ppm           Bisphenol A-spichlorohydrin polymer (25068-38-0)         No           NIOSH REL (TWA) (mg/m <sup>2</sup> )         250 ppm           Bisphenol A-spichlorohydrin polymer (25068-38-0)         No           No Additional Information available         Titanium dioxide (13463-677)           USA - ACGIH - Occupational Exposure Limits         Local name           ACGIH TWA (mg/m <sup>2</sup> )         10 mg/m <sup>2</sup> Remark (ACGIH)         TU-V® Basis: LRT Irr. Notations: A4 (Not classifiable as a Human Carcinogen)           ACGIH Accollegional Exposure Limits         Local name           USA - OSHA - Occupational Exposure Limits         Local dust)           USA - NOSH - Occupational Exposure Limits         USA - OSHA - Occupational Exposure Limits           USA - NOSH - Occupational Exposure Limits         SUGM cym/m <sup>2</sup> (CIB 63-ninc)           USA - NOSH - Occupational Exposure Limits         SUGM cym/m <sup>2</sup> (CIB 63-ninc)           USA - NOSH - Occupational Exposure Limits         SUGM cym/m <sup>2</sup> (CIB 63-ninc) <td></td> <td>2400 ma/m<sup>3</sup></td>		2400 ma/m <sup>3</sup>
USA. IDLH - Occupational Exposure Limits         2500 ppm (10% LEL)           US IDLH (ppm)         2500 ppm (10% LEL)           USA - NOSH FEL (TWA) (mg/m)         590 mg/m <sup>3</sup> NOSH FEL (TWA) (ppm)         250 ppm           Bisphenol A-epichlorohydrin polymer (25068-38-6)         No additional information available           Titanium dioxide (13465-67-7)         USA - ACCIH - Occupational Exposure Limits           Local name         Titanium dioxide           ACGIH TVA (mg/m)         10 mg/m <sup>3</sup> Remark (ACGIH)         TU-VB Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)           ACGIH torking         Not Classifiable as a Human Carcinogen           Regulatory reference         ACOIH 2020           USA - OSCHA - Occupational Exposure Limits         Uscal name           USA - NOSHA - Occupational Exposure Limits         Uscal name           USA - NOSH - Occupational Exposure Limits         USA - NOSH - Occupational Exposure Limits           USA - NOSH - Occupational Exposure Limits         2.4 mg/m <sup>3</sup> (CIB 63-line)           USA - NOSH - Occupational Exposure Limits         2.4 mg/m <sup>3</sup> (CIB 63-line)           USA - ACGH - Occupational Exposure Limits         2.4 mg/m <sup>3</sup> (CIB 63-line)           USA - NOSH FEL (TWA) (mg/m <sup>3</sup> )         2.4 mg/m <sup>3</sup> (CIB 63-line)           USA - ACGH - Occupational Exposure Limits         2.4		
US 1024. rpm 10% LEL) USA - NIOSH + EL (TWA) (mg/m) 590 mg/m² USA - NIOSH + EL (TWA) (mg/m) 590 mg/m² NIOSH + EL (TWA) (mg/m) 250 pm Bisphend - Acgihethorohydrin polymer (25086-38-0 Na additional information available Titanium dioxide (1348-36-77) USA - ACGIH - Occupational Exposure Limits Local name 10 mg/m² Remark (ACGIH) 11 LV® Basis: LRT Irr. Notations: A4 (Not classifiable as a Human Carcinogen ACGIH + Occupational Exposure Limits Local name ACCIH 2020 USA - OSHA - Occupational Exposure Limits US LOLH (mg/m²) 15 mg/m² (Clasdifiable as a Human Carcinogen Regulatory reference ACCIH 2020 USA - OSHA - Occupational Exposure Limits US LOLH (mg/m²) 15 mg/m² (Cla dust) OSHA PEL (TWA) (mg/m²) 10 pg/m² (Cla dust) OSHA PEL (TWA) (mg/m²) 10 0 pm NOSH PEL (TWA) (mg/m²) 20 pm NOSH PEL (TWA) (mg/m²) 100 pm		
USA - NIOSH - Occupational Exposure Limits NIOSH REI, (TWA) (mg/m <sup>3</sup> ) S80 pm Bisphenol A-epichlorohydrin polymer (25069-38-6) No additional information available Titanium dioxide (13463-67-7) USA - ACCIH - Occupational Exposure Limits Local name Tanium dioxide ACGIH 7WA (mg/m <sup>3</sup> ) Remark (ACGIH) ACGIH 7WA (mg/m <sup>3</sup> ) Remark (ACGIH) ACGIH 7WA (mg/m <sup>3</sup> ) Not Classifiable as a Human Carcinogen ACGIH 17WA (mg/m <sup>3</sup> ) Not Classifiable as a Human Carcinogen ACGIH chemical category Not SI DLH (mg/m <sup>3</sup> ) S1 DLH (ML) (mg/m <sup>3</sup> ) S1 DLH (ML) (mg/m <sup>3</sup> ) S1 DLH (mg/m <sup>3</sup> ) S1 DLH (ML) (mg/m <sup>3</sup> ) S1 D	· ·	2500 ppm (10% LEL)
NIOSH REL (TWA) (mg/m²)     580 mg/m²       NIOSH REL (TWA) (mg/m²)     250 ppm       Stephend A-epichborohydrin polymer (25068-36-5)     No additional information available       Titanium dioxide (13643-67-7)     USB - ACGIH - Occupational Exposure Limits       Local name     Ttanium dioxide       ACGIH TWA (mg/m²)     10 mg/m²       Remark (ACGIH)     TLVB Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)       ACGIH chemical category     Not Classifiable as a Human Carcinogen       Regulatory reference     ACGIH 2020       USA - OSHA - Occupational Exposure Limits     Tanium dioxide (Total dust)       CosHA PEL (TWA) (mg/m²)     15 mg/m² (total dust)       Begulatory reference (US-OSHA)     OSHA Amotated Table Z-1       USA - NOSH - Occupational Exposure Limits     US ANOSH - Occupational Exposure Limits       USA - NOSH - Occupational Exposure Limits     USA NOSH - Occupational Exposure Limits       USA - ACGIH - Occupational Exposure Limits     2.4 mg/m² (CIB 63-line)       USA - ACGIH - Occupational Exposure Limits     2.4 mg/m² (CIB 63-line)       USA - OSHA - Occupational Exposure Limits     USA - OSHA - Occupational Exposure Limits       USA - OSHA - Occupational Exposure Limits     USA - OSHA - Occupational Exposure Limits       USA - OSHA - Occupational Exposure Limits     OSHA APL (TWA) (mg/m²)       USA - OSHA - Occupational Exposure Limits     OSHA APL (TWA) (pg/m²)		
NIOSH REL (TWA) [ppm]       250 ppm         Bisphenol A-epichlorohydrin polymer (25068-38-6)       No         No additional information available       Titanium dioxide (13463-67-7)         USA - ACCIH - Occupational Exposure Limits       Titanium dioxide         Cocia name       Titanium dioxide         ACGIH TWA (mg/m?)       10 mg/m²         Remark (ACCIH)       TLVB Basis: LTI Irr. Notations: A4 (Not classifiable as a Human Carcinogen)         ACGIH tomical category       Not Classifiable as a Human Carcinogen         ACGIH of Cocupational Exposure Limits       Titanium dioxide (Total dust)         USA - OSHA - Occupational Exposure Limits       USA Hancitatod Table Z-1         USA - NICH - Occupational Exposure Limits       USA Hancitatod Table Z-1         USA - NICH - Occupational Exposure Limits       USA HORH - Occupational Exposure Limits         USA - NICH - Occupational Exposure Limits       S000 mg/m²         USA - NICH - Occupational Exposure Limits       USA - NICH - Occupational Exposure Limits         Vigenes (or, m. p. isomers) (130-20-7)       USA - ACGIH - Occupational Exposure Limits         USA - ACGIH - Occupational Exposure Limits       USA - ACGIH - Occupational Exposure Limits         USA - ACGIH - Occupational Exposure Limits       1.5 g/g creatinine Parameter: Methylippuric acids - Medium: urine - Sampling time: ener of with theoretical eategory         USA - ACGIH - Occ	· ·	590 mg/m <sup>3</sup>
Bisphenol A-epichlorohydrin polymer (25069-38-6) No additional information available Titanium dioxide (13463-67-7) USA - ACGIH - Occupational Exposure Limits Local name Titanium dioxide ACGIH TVA (mg/m <sup>2</sup> ) 10 mg/m <sup>2</sup> Remark (ACGIH) TL-VI® Basis: LETT irr. Notations: A4 (Not classifiable as a Human Carcinogen) ACGIH toXA (mg/m <sup>2</sup> ) Not Classifiable as a Human Carcinogen ACGIH 2020 USA - OSCIA 2020 USA - OSCIA 2020 USA - OSCIA 2020 USA - OSCIA 2020 USA - Oscupational Exposure Limits US IDLH - Oscupational Exposure Limits US IDLH - Oscupational Exposure Limits US IDLH - Oscupational Exposure Limits Not Classifiable as a Human Carcinogen Regulatory reference (US-OSHA) 05H A Annotated Table Z-1 USA - NIOSH REL (TWA) (mg/m <sup>2</sup> ) USA - NIOSH - Oscupational Exposure Limits NIOSH REL (TWA) (mg/m <sup>2</sup> ) 2.4 mg/m <sup>2</sup> (CIB 63-fine) USA - NIOSH - Oscupational Exposure Limits Not Classifiable as a Human Carcinogen USA - ACGIH - Oscupational Exposure Limits Not Classifiable as a Human Carcinogen USA - ACGIH - Oscupational Exposure Limits Not Classifiable as a Human Carcinogen USA - ACGIH - Decupational Exposure Limits Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices Biological Exposure Indices Biological Exposure Indices Biological Exposure Indices Biological Exposure Indices Biological Exposure Limits ACGIH - Oscupational Exposure Limits ACGIH TVA (mg/m <sup>2</sup> ) 435 mg/m <sup>2</sup> OSHA PEL (TWA) (mg/m <sup>2</sup> ) 435 mg/m <sup>2</sup> OSHA PEL (TWA) (mg/m <sup>2</sup> ) 50 ppm ACGIH TVA (Mg/m <sup>2</sup> ) 50 ppm ACGIH TVA (Mg/m <sup>2</sup> ) 475 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> ) 420 mg/m <sup>3</sup> NIOSH REL (TWA) (mg/m <sup>3</sup> ) 475 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> ) 475 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> ) 420 mg/m <sup>3</sup> NIOSH REL (TWA) (mg/m <sup>3</sup> ) 420 mg/m <sup>3</sup> NIOSH REL (TWA) (mg/m <sup>3</sup> ) 50 ppm LSA - ACGIH - Oscupational Exposure Limits NIOSH REL (TWA) (mg/m <sup>3</sup> ) 50 ppm LSA - NIOSH REL (TWA) (mg/m <sup>3</sup> ) 50 ppm LSA - NIOSH REL (TWA) (mg/m <sup>3</sup> ) 50 ppm LSA - ACGIH - Oscupational Exposure Limits NIOSH REL (TWA) (mg/m <sup>3</sup> ) 50 ppm LSA - ACGIH		
No additional information available Titanium dioxide (1348-67-7) USA - ACGH - Occupational Exposure Limits Local name Titanium dioxide ACGH TWA (mg/m <sup>3</sup> ) 10 mg/m <sup>3</sup> ACGH A Cocupational Exposure Limits Cocal name ACGH (1997) Not Classifiable as a Human Carcinogen ACGH oremical category Not Classifiable as a Human Carcinogen ACGH A Cocupational Exposure Limits USA - OSHA - Occupational Exposure Limits USA - NICH - Occupational Exposure Limits USA - NICH - Occupational Exposure Limits USA - OSHA - Occupational Exposure Limits USA - ACGH - Dicupational Exposure Limits USA - ACGH - Biological Exposure Indices USA - OSHA - Occupational Exposure Limits USA - OSHA PEL (TWA) (mg/m <sup>3</sup> )		
Titanium dioxide (13463-67-7)         USA - ACCIH - Occupational Exposure Limits         Local name       Titanium dioxide         AGGIH TWA (mgim <sup>3</sup> )       10 mgim <sup>3</sup> Remark (ACGIH)       TLV89 Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)         ACGIH dominal category       Not Classifiable as a Human Carcinogen         Regulatory reference       ACGIH 2020         USA - OSHA - Occupational Exposure Limits       Cost aname         Cocal name       Titanium dioxide (Total dust)         OSHA - FEL (TWA) (mg/m <sup>3</sup> )       G500 mg/m <sup>3</sup> USA - IDLH - Occupational Exposure Limits       S000 mg/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits       0.3 mg/m <sup>3</sup> (UBI 63-fine)         USA - NOSH - Occupational Exposure Limits       0.3 mg/m <sup>3</sup> (UBI 63-fine)         USA - ACGIH - Occupational Exposure Limits       0.3 mg/m <sup>3</sup> (UBI 63-fine)         VSA - ACGIH - Occupational Exposure Limits       0.3 mg/m <sup>3</sup> (UBI 63-fine)         USA - ACGIH - Occupational Exposure Limits       0.4 mg/m <sup>3</sup> (DBI 63-fine)         USA - ACGIH - Occupational Exposure Limits       0.5 mg/m <sup>3</sup> (DBI 63-fine)         USA - ACGIH - Occupational Exposure Limits       0.5 mg/m <sup>3</sup> (DBI 63-fine)         USA - ACGIH - Doccupational Exposure Limits       0.5 mg/m <sup>3</sup> (DBI 63-fine)         USA - ACGIH - Occupational Exposure Limits <t< td=""><td></td><td>ru)</td></t<>		ru)
USA - ACGIH - Occupational Exposure Limits         Titanium dioxide           Local name         Titanium dioxide           ACGIH TWA (mg/m <sup>2</sup> )         10 mg/m <sup>2</sup> Remark (ACGIH)         TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)           ACGIH chemical category         Not Classifiable as a Human Carcinogen           Regulatory reference         ACGIH 2020           USA - Oscupational Exposure Limits         Itanium dioxide (Total dust)           Local name         Titanium dioxide (Total dust)           OSHA PEL (TWA) (mg/m <sup>3</sup> )         15 mg/m <sup>3</sup> (total dust)           Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           USA - IOLH - Occupational Exposure Limits         USA - NOSH - Occupational Exposure Limits           VIGH REL (TWA) (mg/m <sup>3</sup> )         5000 mg/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits         Vigenes (or, m. p. isomers) (130-20-7)           USA - ACGIH - Doccupational Exposure Limits         Vigenes (or, m. p. isomers) (130-20-7)           USA - ACGIH - Biological Exposure Indices         Biological Exposure Indices           Biological Exposure Indices (BEI)         1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: enc of shift           USA - ACGIH - Biological Exposure Limits         Scha PEL (TWA) (mg/m <sup>3</sup> )         435 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> )<		
Local name       Titanium dioxide         ACGIH TWA (mg/m <sup>3</sup> )       10 mg/m <sup>3</sup> Remark (ACGH)       TLV® Basis: LFT /r. Notations: A4 (Not classifiable as a Human Carcinogen)         AGGIH chemical category       Not Classifiable as a Human Carcinogen         Regulatory reference       ACGIH 2020         USA - OSHA - Occupational Exposure Limits       SGHA PEL (TWA) (mg/m <sup>3</sup> )         Local name       Titanium dioxide (Total dust)         OSHA - PEL (TWA) (mg/m <sup>3</sup> )       S000 mg/m <sup>3</sup> USA - OSHA - Occupational Exposure Limits       S000 mg/m <sup>3</sup> (CIB 63-fine)         USA - NotAr Occupational Exposure Limits       0.3 mg/m <sup>3</sup> (CIB 63-fine)         NOSH REL (TWA) (mg/m <sup>3</sup> )       2.4 mg/m <sup>3</sup> (CIB 63-fine)         USA - ACGH - Occupational Exposure Limits       O.3 mg/m <sup>3</sup> (CIB 63-fine)         NOSH A Cacing Lixposure Limits       O.3 mg/m <sup>3</sup> (CIB 63-fine)         USA - ACGH - Occupational Exposure Limits       Sta A CGH - Biological Exposure Limits         USA - ACGH - Biological Exposure Limits       Sta Gradian - Biological Exposure Limits         USA - Occupational Exposure Limits       Sta Gradian - Carcinogen         USA - OCHA PEL (TWA) (mg/m <sup>3</sup> )       436 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> )       436 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         USA - ACGH - Occupational Exposure Limits		
AGGIH TWA (mg/m³)       10 mg/m³         Remark (ACGIH)       TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)         ACGIH chemical category       Not Classifiable as a Human Carcinogen         Regulatory reference       ACGIH 2020         USA - Occupational Exposure Limits       Standard         Local name       Titanium dioxide (Total dust)         OSHA PEL (TWA) (mg/m³)       15 mg/m³ (total dust)         OSHA Coccupational Exposure Limits       OSHA Annotated Table Z-1         USA - IDL - Occupational Exposure Limits       Stotal Annotated Table Z-1         USA - INCSH - Occupational Exposure Limits       Stotal Annotated Table Z-1         USA - NICSH - Occupational Exposure Limits       Stotal Annotated Table Z-1         USA - ACGIH - Occupational Exposure Limits       Stotal Carcinogen         VIGSH - Accupational Exposure Limits       Stotal Carcinogen         VIGSH - Occupational Exposure Limits       ACGIH - Occupational Exposure Indices         Biological Exposure Indices (BE)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - ACGIH - Occupational Exposure Limits       Stoga RE C(TWA) (mg/m³)         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm	· · ·	Theories distribute
Remark (ACGIH)       TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)         ACGIH chemical category       Not Classifiable as a Human Carcinogen         Regulatory reference       ACGIH 2020         USA - Oscupational Exposure Limits       Ttanium dioxide (Total dust)         OSHA PEL (TWA) (mg/m <sup>9</sup> )       15 mg/m <sup>9</sup> (total dust)         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         USA - IDLH - Occupational Exposure Limits       5000 mg/m <sup>9</sup> USA - NOSH - Occupational Exposure Limits       5000 mg/m <sup>9</sup> USA - NOSH - Occupational Exposure Limits       5000 mg/m <sup>9</sup> USA - NOSH - Occupational Exposure Limits       6000 mg/m <sup>9</sup> VSA - ACGIH - Occupational Exposure Limits       6000 mg/m <sup>9</sup> Xylenes (or, mr, p- Isomers) (1330-20-7)       USA - ACGIH - Occupational Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: ent of shift         USA - ACGIH - Occupational Exposure Limits       Sci (S- mr, p-isomers)         OSHA PEL (TWA) (mg/m <sup>9</sup> )       435 mg/m <sup>9</sup> OSHA PEL (TWA) (mg/m <sup>9</sup> )       435 mg/m <sup>9</sup> OSHA PEL (TWA) (mg/m <sup>9</sup> )       60 ppm         USA - ACGIH - Occupational Exposure Limits       USA + ACGIH - Occupational Exposure Limits         USA - ACGIH - Occupational E		
AGGIH chemical category       Not Classifiable as a Human Carcinogen         Regulatory reference       ACGIH 2020         USA - OSHA - Occupational Exposure Limits       OSHA Annotated Table Z-1         USSA - NIOSH - Occupational Exposure Limits       OSHA Annotated Table Z-1         USA - NIOSH - Occupational Exposure Limits       US - NUCH (mg/m <sup>3</sup> )         US - NLH (mg/m <sup>3</sup> )       5000 mg/m <sup>3</sup> USA - NOSH - Occupational Exposure Limits       2.4 mg/m <sup>3</sup> (CIB 63-fine)         NIOSH REL (TWA) (mg/m <sup>3</sup> )       2.4 mg/m <sup>3</sup> (CIB 63-fine)         USA - ACGIH - Occupational Exposure Limits       0.5 mg/m <sup>3</sup> (CIB 63-ultratine, including engineered nanoscale)         Xylenes (or, mr, prisomers) (1330-20-7)       USA - ACGIH - Occupational Exposure Limits         ACGIH chemical category       Not Classifiable as a Human Carcinogen         USA - ACGIH - Diccupational Exposure Limits       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - OSCH - Occupational Exposure Limits       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - ACGIH - Biological Exposure Limits       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - ACGIH - Biological Exposure Limits       0.5 HA PEL (TWA) (mg/m <sup>2</sup> )         OSHA PEL (TWA) (mg/m <sup>2</sup> )       435 mg/m <sup>2</sup> OSHA PEL (		
Regulatory reference       ACGIH 2020         USA - OSHA - Occupational Exposure Limits       Titanium dioxide (Total dust)         OSHA PEL (TWA) (mg/m <sup>3</sup> )       15 mg/m <sup>3</sup> (total dust)         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         USA - Nocupational Exposure Limits       US IDLH (mg/m <sup>3</sup> )         US IDLH (mg/m <sup>3</sup> )       5000 mg/m <sup>3</sup> USA - NIOSH - Occupational Exposure Limits       US IDLH (mg/m <sup>3</sup> )         USA - NIOSH - Occupational Exposure Limits       S000 mg/m <sup>3</sup> Vylenes (or, mr., p- isomers) (1300-20-7)       USA - ACGIH - Occupational Exposure Limits         ACGIH - Biological Exposure Indices       Biological Exposure Indices         Biological Exposure Indices       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - Occupational Exposure Limits       Xylenes (or, mr., p-isomers)         OSHA PEL (TWA) (mg/m <sup>3</sup> )       435 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> )       435 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> )       20 ppm         ACGIH - Occupational Exposure Limits       Soft APEL (TWA) (ppm)         USA - ACGIH - Occupational Exposure Limits       Soft APEL (TWA) (mg/m <sup>3</sup> )         OSHA PEL (TWA) (mg/m <sup>3</sup> )       20 ppm         ACGIH TWA (ppm)       50 ppm         USA - ACGIH - Occupational Exposure Limits		
USA - OSHA - Occupational Exposure Limits         Local name         OSHA PEL (TWA) (mg/m <sup>3</sup> )         15 mg/m <sup>3</sup> (total dust)         Regulatory reference (US-OSHA)         OSH A PEL (TWA) (mg/m <sup>3</sup> )         US a. IDLH - Occupational Exposure Limits         US A. NIDCH - Occupational Exposure Limits         US A. NIOSH - Occupational Exposure Limits         NIOSH REL (TWA) (mg/m <sup>3</sup> )         2.4 mg/m <sup>3</sup> (CIB 63-fine)         0.3 mg/m <sup>3</sup> (CIB 63-dire, including engineered nanoscale)         Xylenes (or, mr. p- isomers) (1300-20-7)         USA - ACGIH - Occupational Exposure Limits         ACGIH - Cocupational Exposure Limits         ACGIH - Cocupational Exposure Limits         Diological Exposure Indices         Biological Exposure Indices (BEI)		
Local name       Titanium dioxide (Total dust)         OSHA PEL (TWA) (mg/m³)       15 mg/m³ (total dust)         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         USA - IDLH - Occupational Exposure Limits       5000 mg/m³         USA - NIOSH - Occupational Exposure Limits       NIOSH REL (TWA) (mg/m³)         NIOSH REL (TWA) (mg/m³)       2.4 mg/m³ (CIB 63-fine) 0.3 mg/m³ (CIB 63-ultrafine, including engineered nanoscale)         Xylenes (or, mr., p- isomers) (130-20-7)       USA - ACGIH - Occupational Exposure Limits         ACGIH - Cocupational Exposure Limits       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices       Not Classifiable as a Human Carcinogen         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - Oscupational Exposure Limits       ACGIH - Nocupational Exposure Limits         Local name       Xylenes (or, mr. p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (mg/m³)       0SH Annotated Table Z-1         Methyl isoamyl ktone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         VGGH TWA (ppm)       100 ppm         ACGIH STEL (ppm)       50 ppm         USA - Oscupational Exposure Limits       S0 ppm         USA - ACGIH - Occupational Exposure		ACGIH 2020
OSHA PEL (TWA) (mg/m <sup>3</sup> )       15 mg/m <sup>3</sup> (total dust)         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         USA - IDLH - Occupational Exposure Limits       5000 mg/m <sup>3</sup> US IDLH (mg/m <sup>3</sup> )       5000 mg/m <sup>3</sup> USA - NIOSH - Occupational Exposure Limits       5000 mg/m <sup>3</sup> NIOSH REL (TWA) (mg/m <sup>3</sup> )       2.4 mg/m <sup>3</sup> (CIB 63-fine)         .0.3 mg/m <sup>3</sup> (CIB 63-ultrafine, including engineered nanoscale)       2.4 mg/m <sup>3</sup> (CIB 63-ultrafine, including engineered nanoscale)         Xylenes (o-, m-, p- isomers) (1330-20-7)       USA - ACGIH - Occupational Exposure Limits         ACGIH - Hondical category       Not Classifiable as a Human Carcinogen         USA - ACGIH - Occupational Exposure Indices       Biological Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m <sup>3</sup> )       435 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> )       400 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGH - Occupational Exposure Limits         OSGHA PEL (TWA) (mg/m <sup>3</sup> )       20 ppm         ACGIH T Occupational Exposure Limits       So ppm         OSHA PEL (TWA) (mg/m <sup>3</sup> )		Thereives disside (Tabel dust)
Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         USA - IDLH - Occupational Exposure Limits       5000 mg/m³         US IDLH (mg/m³)       5000 mg/m³         USA - NIOSH - Occupational Exposure Limits       0.3 mg/m³ (CIB 63-fine)         NIOSH REL (TWA) (mg/m³)       2.4 mg/m³ (CIB 63-fine)         0.3 mg/m³ (CIB 63-fine)       0.3 mg/m³ (CIB 63-fine)         0.3 mg/m³ (CIB 63-fine)       0.3 mg/m³ (CIB 63-fine)         0.4 ACGH - Occupational Exposure Limits       0.4 mg/m³ (CIB 63-fine)         ACGIH - Dicological Exposure Indices       0.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - ACGH - Biological Exposure Limits       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (mg/m³)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       100 ppm         USA - ACGIH - Occupational Exposure Limits       OSHA PEL (TWA) (mg/m³)         OSHA PEL (TWA) (mg/m³)       20 ppm         ACGIH TWA (ppm)       100 ppm         USA - ACGIH - Occupatio		
USA - IDLH - Occupational Exposure Limits       5000 mg/m³         USA - NIOSH - Occupational Exposure Limits       5000 mg/m³         NIOSH REL (TWA) (mg/m³)       2.4 mg/m³ (CIB 63-fine) 0.3 mg/m³ (CIB 63-ultrafine, including engineered nanoscale)         Xylenes (or, mr, p- isomers) (1330-20-7)       USA - ACGIH - Occupational Exposure Limits         ACGIH - homical category       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: enc of shift         USA - OCCUPAtional Exposure Limits       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: enc of shift         USA - OSHA - Occupational Exposure Limits       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: enc of shift         Local name       Xylenes (or, mr, p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH TWA (ppm)       20 ppm         OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm		
US IDLH (mg/m <sup>3</sup> )       5000 mg/m <sup>3</sup> USA - NIOSH - Occupational Exposure Limits         NIOSH REL (TWA) (mg/m <sup>3</sup> )       2.4 mg/m <sup>3</sup> (CIB 63-fine) 0.3 mg/m <sup>a</sup> (CIB 63-ultrafine, including engineered nanoscale)         Xylenes (o-, m-, p- isomers) (1330-20-7)       USA - ACGIH - Occupational Exposure Limits         ACGIH - Decupational Exposure Limits       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: enc of shift         USA - Occupational Exposure Limits       Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m <sup>3</sup> )       435 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)         CSHA PEL (TWA) (ppm)       100 ppm       Regulatory reference (US-OSHA)         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         USA - ACGIH TO - Occupational Exposure Limits       20 ppm         ACGIH STEL (ppm)       50 ppm         USA - Occupational Exposure Limits       Cost ppm         OSHA PEL (TWA) (mg/m <sup>3</sup> )       475 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> )       60 ppm         USA - Occupational Exposure Limits       USA PACGIH - Occupational Exposure Limits         NIOSH REL (TWA) (mg/m <sup>3</sup> )       240 mg		OSHA Annotated Table 2-1
USA - NIOSH - Occupational Exposure Limits         NIOSH REL (TWA) (mg/m <sup>3</sup> )       2.4 mg/m <sup>3</sup> (CIB 63-fine)         0.3 mg/m <sup>3</sup> (CIB 63-ultrafine, including engineered nanoscale)         Xylenes (o-, m-, p- isomers) (1330-20-7)         USA - ACGIH - Occupational Exposure Limits         ACGIH chemical category       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - OSHA - Occupational Exposure Limits       Local name         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m <sup>3</sup> )       435 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       20 ppm         USA - ACGIH - Occupational Exposure Limits       ACGIH TWA (ppm)         ACGIH TWA (ppm)       20 ppm         QSHA PEL (TWA) (mg/m <sup>3</sup> )       50 ppm         USA - OCcupational Exposure Limits       Variant of the second of		F000
NIOSH REL (TWA) (mg/m³)       2.4 mg/m³ (CIB 63-tine)         0.3 mg/m³ (CIB 63-tiltrafine, including engineered nanoscale)         Xylenes (o-, m-, p- isomers) (1330-20-7)         USA - ACGIH - Occupational Exposure Limits         ACGIH - Cocupational Exposure Limits         ACGIH - Biological Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - ACGH - Occupational Exposure Limits          Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH TWA (ppm)       50 ppm         USA - OSHA - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         Scha PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (mg/m³)       240 mg/m³         NOSH APEL (TWA) (mg/m³)       240 mg/m³         NOSH APEL (TWA) (ppm)       50 ppm         USA - OSHA - Occupational Exposure Limits       Into ppm         NIOSH REL (TWA) (mg/m³)       240 mg/m³ <td></td> <td>5000 mg/m<sup>3</sup></td>		5000 mg/m <sup>3</sup>
0.3 mg/m³ (CIB 63-ultrafine, including engineered nanoscale)         Xylenes (o-, m-, p- isomers) (1330-20-7)         USA - ACGIH - Occupational Exposure Limits         ACGIH chemical category       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: enc of shift         USA - Occupational Exposure Limits       Local name         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH TWA (ppm)       50 ppm         USA - OSHA - Occupational Exposure Limits         OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         USA - OSHA - Occupational Exposure Limits       INOSH REL (TWA) (mg/m³)         USA - NIOSH - Occupational Exposure Limits       INOSH REL (TWA) (ppm]         NIOSH REL (TWA) (ppm]       50 ppm         USA - NIOSH - Occupational Exposure Limits		
USA - ACGIH - Occupational Exposure Limits         ACGIH chemical category       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: enc of shift         USA - OSHA - Occupational Exposure Limits         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH TWA (mg/m³)       475 mg/m³         OSHA PEL (TWA) (mg/m³)       100 ppm         ACGIH TWA (ppm)       100 ppm         QSHA PEL (TWA) (mg/m³)       20 ppm         ACGIH TWA (ppm)       100 ppm         USA - ACGIH - Occupational Exposure Limits       50 ppm         OSHA PEL (TWA) (mg/m³)       475 mg/m³         NOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) (mg/m³)       50 ppm         NIOSH REL (TWA) (mg/m³)       50 ppm         NIOSH REL (TWA) (mg/m³)       50 ppm         NIOSH REL (TWA) (mg/m³)       50 ppm <td>NIOSH REL (TWA) (mg/m³)</td> <td></td>	NIOSH REL (TWA) (mg/m³)	
ACGIH chemical category       Not Classifiable as a Human Carcinogen         USA - ACGIH - Biological Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - OSHA - Occupational Exposure Limits       Local name         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m <sup>9</sup> )       435 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH STEL (ppm)       50 ppm         USA - OSHA - Occupational Exposure Limits         OSHA PEL (TWA) (mg/m <sup>3</sup> )       475 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         USA - OSHA - Occupational Exposure Limits       OSHA PEL (TWA) (ppm)         OSHA PEL (TWA) (mg/m <sup>3</sup> )       475 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         USA - NOSH - Occupational Exposure Limits       USA - NOSH - Occupational Exposure Limits         NIOSH REL (TWA) (ppm)       100 ppm         USA - NOSH - Occupational Exposure Limits       S0 ppm         NIOSH REL (TWA) (ppm]       50 ppm         NIOSH REL (TWA	Xylenes (o-, m-, p- isomers) (1330-20-7)	
USA - ACGIH - Biological Exposure Indices         Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - OSHA - Occupational Exposure Limits       Xylenes (o-, m-, p-isomers)         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m³)       435 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH STEL (ppm)       50 ppm         USA - OshA - Occupational Exposure Limits       OSHA PEL (TWA) (mg/m³)         OSHA PEL (TWA) (mg/m³)       475 mg/m³         USA - NOSH - Occupational Exposure Limits       OSHA PEL (TWA) (ppm)         OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) (mg/m³)       50 ppm         USA - NOSH - Occupational Exposure Limits       S0 ppm         NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) (ppm]       50 ppm         USA - NOSH - Occupational Exposure Limits       S0 ppm         NIOSH REL (TWA) (ppm] <td>USA - ACGIH - Occupational Exposure Limits</td> <td></td>	USA - ACGIH - Occupational Exposure Limits	
Biological Exposure Indices (BEI)       1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift         USA - OSHA - Occupational Exposure Limits         Local name       Xylenes (o-, m-, p-isomers)         OSHA PEL (TWA) (mg/m <sup>3</sup> )       435 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         Methyl isoamyl ketone (110-12-3)       USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH TWA (ppm)       50 ppm         USA - OSHA - Occupational Exposure Limits       OSHA PEL (TWA) (mg/m <sup>3</sup> )         OSHA PEL (TWA) (mg/m <sup>3</sup> )       20 ppm         So oppm       So oppm         USA - OSHA - Occupational Exposure Limits       OSHA PEL (TWA) (mg/m <sup>3</sup> )         OSHA PEL (TWA) (mg/m <sup>3</sup> )       475 mg/m <sup>3</sup> OSHA PEL (TWA) (mg/m <sup>3</sup> )       240 mg/m <sup>3</sup> NIOSH REL (TWA) (mg/m <sup>3</sup> )       240 mg/m <sup>3</sup> NIOSH REL (TWA) (ppm]       50 ppm         USA - ACGIH - Occupational Exposure Limits       50 ppm	ACGIH chemical category	Not Classifiable as a Human Carcinogen
of shiftUSA - OSHA - Occupational Exposure LimitsLocal nameXylenes (o-, m-, p-isomers)OSHA PEL (TWA) (mg/m³)435 mg/m³OSHA PEL (TWA) (ppm)100 ppmRegulatory reference (US-OSHA)OSHA Annotated Table Z-1Methyl isoamyl ketone (110-12-3)USA - ACGIH - Occupational Exposure LimitsACGIH TWA (ppm)20 ppmACGIH TWA (ppm)50 ppmUSA - OSHA - Occupational Exposure LimitsOSHA PEL (TWA) (mg/m³)475 mg/m³OSHA PEL (TWA) (mg/m³)100 ppmUSA - NOSH - Occupational Exposure LimitsNOSH A PEL (TWA) (ppm)100 ppmUSA - NIOSH - Occupational Exposure LimitsNIOSH REL (TWA) (mg/m³)240 mg/m³NIOSH REL (TWA) (ppm]50 ppm1-Butanol (71-36-3)50 ppmUSA - ACGIH - Occupational Exposure Limits	USA - ACGIH - Biological Exposure Indices	
Local nameXylenes (o-, m-, p-isomers)OSHA PEL (TWA) (mg/m³)435 mg/m³OSHA PEL (TWA) (ppm)100 ppmRegulatory reference (US-OSHA)OSHA Annotated Table Z-1Methyl isoamyl ketone (110-12-3)USA - ACGIH - Occupational Exposure LimitsACGIH TWA (ppm)20 ppmACGIH STEL (ppm)50 ppmUSA - OSHA - Occupational Exposure LimitsOSHA PEL (TWA) (mg/m³)475 mg/m³OSHA PEL (TWA) (mg/m³)100 ppmUSA - NIOSH - Occupational Exposure LimitsNIOSH REL (TWA) (mg/m³)240 mg/m³NIOSH REL (TWA) (mg/m³)50 ppm1-Butanol (71-36-3)50 ppmUSA - ACGIH - Occupational Exposure Limits	Biological Exposure Indices (BEI)	1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift
OSHA PEL (TWA) (mg/m³)435 mg/m³OSHA PEL (TWA) (ppm)100 ppmRegulatory reference (US-OSHA)OSHA Annotated Table Z-1Methyl isoamyl ketone (110-12-3)USA - ACGIH - Occupational Exposure LimitsACGIH TWA (ppm)20 ppmACGIH STEL (ppm)50 ppmUSA - OSHA - Occupational Exposure Limits50 ppmOSHA PEL (TWA) (mg/m³)475 mg/m³OSHA PEL (TWA) (ppm)100 ppmUSA - NIOSH - Occupational Exposure Limits100 ppmNIOSH REL (TWA) (mg/m³)240 mg/m³NIOSH REL (TWA) (mg/m³)50 ppmUSA - ACGIH - Occupational Exposure Limits50 ppm	USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m³)435 mg/m³OSHA PEL (TWA) (ppm)100 ppmRegulatory reference (US-OSHA)OSHA Annotated Table Z-1Methyl isoamyl ketone (110-12-3)USA - ACGIH - Occupational Exposure LimitsACGIH TWA (ppm)20 ppmACGIH STEL (ppm)50 ppmUSA - OSHA - Occupational Exposure Limits50 ppmOSHA PEL (TWA) (mg/m³)475 mg/m³OSHA PEL (TWA) (ppm)100 ppmUSA - NIOSH - Occupational Exposure Limits100 ppmNIOSH REL (TWA) (mg/m³)240 mg/m³NIOSH REL (TWA) (mg/m³)50 ppmUSA - ACGIH - Occupational Exposure Limits50 ppm	Local name	Xylenes (o-, m-, p-isomers)
OSHA PEL (TWA) (ppm)100 ppmRegulatory reference (US-OSHA)OSHA Annotated Table Z-1Methyl isoamyl ketone (110-12-3)USA - ACGIH - Occupational Exposure LimitsACGIH TWA (ppm)20 ppmACGIH STEL (ppm)50 ppmUSA - OSHA - Occupational Exposure Limits50 ppmOSHA PEL (TWA) (mg/m³)475 mg/m³OSHA PEL (TWA) (ppm)100 ppmUSA - NIOSH - Occupational Exposure Limits100 ppmNIOSH REL (TWA) (mg/m³)240 mg/m³NIOSH REL (TWA) (mg/m³)50 ppmUSA - NIOSH - Occupational Exposure Limits50 ppmNIOSH REL (TWA) (mg/m³)50 ppmNIOSH REL (TWA) (mg/m³)50 ppm1-Butanol (71-36-3)50 ppmUSA - ACGIH - Occupational Exposure Limits50 ppm	OSHA PEL (TWA) (mg/m <sup>3</sup> )	
Methyl isoamyl ketone (110-12-3)         USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH STEL (ppm)       50 ppm         USA - OsHA - Occupational Exposure Limits       50 ppm         OSHA PEL (TWA) (mg/m <sup>3</sup> )       475 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         USA - NIOSH - Occupational Exposure Limits       100 ppm         NIOSH REL (TWA) (mg/m <sup>3</sup> )       240 mg/m <sup>3</sup> NIOSH REL (TWA) (ppm]       50 ppm         USA - ACGIH - Occupational Exposure Limits       50 ppm	OSHA PEL (TWA) (ppm)	100 ppm
Methyl isoamyl ketone (110-12-3)         USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH STEL (ppm)       50 ppm         USA - OsHA - Occupational Exposure Limits       50 ppm         OSHA PEL (TWA) (mg/m <sup>3</sup> )       475 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         USA - NIOSH - Occupational Exposure Limits       100 ppm         NIOSH REL (TWA) (mg/m <sup>3</sup> )       240 mg/m <sup>3</sup> NIOSH REL (TWA) (ppm]       50 ppm         USA - ACGIH - Occupational Exposure Limits       50 ppm	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - ACGIH - Occupational Exposure Limits         ACGIH TWA (ppm)       20 ppm         ACGIH STEL (ppm)       50 ppm         USA - OSHA - Occupational Exposure Limits       50 ppm         OSHA PEL (TWA) (mg/m <sup>3</sup> )       475 mg/m <sup>3</sup> OSHA PEL (TWA) (ppm)       100 ppm         USA - NIOSH - Occupational Exposure Limits       100 ppm         NIOSH REL (TWA) (mg/m <sup>3</sup> )       240 mg/m <sup>3</sup> NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits	Methyl isoamyl ketone (110-12-3)	
ACGIH TWA (ppm)20 ppmACGIH STEL (ppm)50 ppmUSA - OSHA - Occupational Exposure LimitsOSHA PEL (TWA) (mg/m³)475 mg/m³OSHA PEL (TWA) (ppm)100 ppmUSA - NIOSH - Occupational Exposure LimitsNIOSH REL (TWA) (mg/m³)240 mg/m³NIOSH REL (TWA) (mg/m³)50 ppm1-Butanol (71-36-3)USA - ACGIH - Occupational Exposure Limits	USA - ACGIH - Occupational Exposure Limits	
ACGIH STEL (ppm)       50 ppm         USA - OSHA - Occupational Exposure Limits       0         OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         USA - NIOSH - Occupational Exposure Limits       100 ppm         NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits	ACGIH TWA (ppm)	20 ppm
USA - OSHA - Occupational Exposure Limits         OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         USA - NIOSH - Occupational Exposure Limits         NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits		
OSHA PEL (TWA) (mg/m³)       475 mg/m³         OSHA PEL (TWA) (ppm)       100 ppm         USA - NIOSH - Occupational Exposure Limits       100 ppm         NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits		
OSHA PEL (TWA) (ppm)       100 ppm         USA - NIOSH - Occupational Exposure Limits         NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits		475 mg/m <sup>3</sup>
USA - NIOSH - Occupational Exposure Limits         NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits		
NIOSH REL (TWA) (mg/m³)       240 mg/m³         NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits		
NIOSH REL (TWA) [ppm]       50 ppm         1-Butanol (71-36-3)       USA - ACGIH - Occupational Exposure Limits		240 ma/m <sup>3</sup>
1-Butanol (71-36-3) USA - ACGIH - Occupational Exposure Limits		
USA - ACGIH - Occupational Exposure Limits		
	. ,	
		20 ppm

USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	300 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	100 ppm
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	1400 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (ceiling) (mg/m <sup>3</sup> )	150 mg/m <sup>3</sup>
NIOSH REL (Ceiling) [ppm]	50 ppm
US-NIOSH chemical category	Potential for dermal absorption
Ethylbenzene (100-41-4)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - ACGIH - Biological Exposure Indices	
Biological Exposure Indices (BEI)	0.15 g/g creatinine Parameter: Sum of mandelic acid and phenylglyoxylic acid - Medium: urine - Sampling time: end of shift (nonspecific)
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl benzene
OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1 OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	800 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m³)	435 mg/m <sup>3</sup>
NIOSH REL (TWA) [ppm]	100 ppm
NIOSH REL (STEL) (mg/m <sup>3</sup> )	545 mg/m <sup>3</sup>
NIOSH REL (STEL) [ppm]	125 ppm
Talc (14807-96-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	Not Classifiable as a Human Carcinogen containing no asbestos fibers
USA - OSHA - Occupational Exposure Limits	
Local name	Talc (not containing asbestos) (Silicates (less than 1% crystalline silica))
OSHA PEL (TWA) (ppm)	20 mppcf
Remark (OSHA)	Table Z-3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
USA - IDLH - Occupational Exposure Limits	
US IDLH (mg/m <sup>3</sup> )	1000 mg/m <sup>3</sup> (containing no asbestos and <1% quartz)
USA - NIOSH - Occupational Exposure Limits	1
NIOSH REL (TWA) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (containing no Asbestos and <1% Quartz-respirable dust)
Solvent naphtha, petroleum, heavy aromatic (647-	42-94-5)
No additional information available	
n-Butyl acetate (123-86-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	n-Butyl acetate
ACGIH TWA (ppm)	50 ppm (Butyl acetates, all isomers)
ACGIH STEL (ppm)	150 ppm (Butyl acetates, all isomers)
Remark (ACGIH)	TLV® Basis: Eye & URT irr
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	n-Butyl-acetate
OSHA PEL (TWA) (mg/m <sup>3</sup> )	710 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	150 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

USA - IDLH - Occupational Exposure L	imits	
US IDLH (ppm)	1700 ppm (10% LEL)	
USA - NIOSH - Occupational Exposure	Limits	
NIOSH REL (TWA) (mg/m <sup>3</sup> )	710 mg/m <sup>3</sup>	
NIOSH REL (TWA) [ppm]	150 ppm	
NIOSH REL (STEL) (mg/m <sup>3</sup> )	950 mg/m <sup>3</sup>	
NIOSH REL (STEL) [ppm]	200 ppm	
8.2. Exposure controls		
Appropriate engineering controls	: Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.	
land protection	: Wear suitable gloves resistant to chemical penetration.	
Eye protection	: Wear eye/face protection.	
Skin and body protection	: Wear suitable protective clothing.	
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.	
Environmental exposure controls	: Avoid release to the environment.	
Other information	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.	

9.1.Information on basic physical and chemical propertyPhysical state: LiquidAppearance: Aerosol.Colour: GrayOdour: CharacterisOdour threshold: No data avapH: No data avaMelting point: No data avaFreezing point: No data ava	
Appearance: Aerosol.Colour: GrayOdour: CharacterisOdour threshold: No data avapH: No data avaMelting point: No data ava	c
Colour: GrayOdour: CharacterisOdour threshold: No data avapH: No data avaMelting point: No data ava	с
Odour       : Characteris         Odour threshold       : No data ava         pH       : No data ava         Melting point       : No data ava	с
Odour threshold: No data avapH: No data avaMelting point: No data ava	0
pH : No data ava Melting point : No data ava	lable
Melting point : No data ava	
Freezing point : No data ava	
Boiling point : No data ava	
Flash point : < -18 °C (<	
Relative evaporation rate (butylacetate=1) : No data ava	,
	ammable aerosol.
Vapour pressure : No data ava	
Relative vapour density at 20 °C (68 °F) : No data ava	
Relative density : No data ava	lable
Density : 0.94 g/m <sup>3</sup>	
Solubility : No data ava	lable
Partition coefficient n-octanol/water : No data ava	
Auto-ignition temperature : No data ava	
Decomposition temperature : No data ava	
Viscosity, kinematic : No data ava	
Viscosity, dynamic : No data ava	
Explosive limits : No data ava	
Explosive properties : No data ava	lable
Oxidising properties : No data ava	
9.2. Other information	
Gas group : Press. Gas (	ia)
Flame projection length : >75 cm < 10	• *
Flackback : Possible	0.11

cording to the Hazard Communication Standard	(CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015
SECTION 10: Stability and react	ivity
0.1. Reactivity	
lo dangerous reactions known under nor	al conditions of use.
0.2. Chemical stability	
xtremely flammable aerosol. Contents ur hock, friction, fire or other sources of igni	der pressure. Container may explode if heated. Do not puncture. Do not burn. Extreme risk of explosion bon.
0.3. Possibility of hazardous react	ons
o dangerous reactions known under nor	al conditions of use.
0.4. Conditions to avoid	
eat. Sparks. Open flame. Direct sunlight.	Overheating. Incompatible materials.
0.5. Incompatible materials	
xidizing materials. Acids. Alkalis.	
5	dueto
0.6. Hazardous decomposition pro lay include, and are not limited to: oxides	
SECTION 11: Toxicological info	
1.1. Information on toxicological e	
cute toxicity (oral)	: Not classified.
cute toxicity (dermal)	: Not classified.
cute toxicity (inhalation)	: Not classified.
Dimethyl ether (115-10-6)	
LC50 inhalation rat	164000 ppm/4h
Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	> 15700 mg/kg
LC50 inhalation rat	50100 mg/m³ (Exposure time: 8 h)
<b>Bisphenol A-epichlorohydrin polymer</b>	(25068-38-6)
LD50 oral rat	11400 mg/kg
Xylenes (o-, m-, p- isomers) (1330-20-	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	> 4350 mg/kg
LC50 inhalation rat	29.08 mg/l/4h
LC50 Inhalation - Rat (Vapours)	27.57 mg/l/4h
Methyl isoamyl ketone (110-12-3)	
LD50 oral rat	> 3200 mg/kg
LD50 dermal rabbit LC50 inhalation rat	10 ml/kg 17.8 mg/l (Exposure time: 6 h)
1-Butanol (71-36-3) LD50 oral rat	700 malka
LD50 oral rat	700 mg/kg 3402 mg/kg
LC50 inhalation rat	> 8000 ppm/4h
Ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	15400 mg/kg
LC50 inhalation rat	17.4 mg/l/4h
Solvent naphtha, petroleum, heavy ar	· ·
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2 ml/kg
LC50 inhalation rat	> 590 mg/m³ (Exposure time: 4 h)
n-Butyl acetate (123-86-4)	
LD50 oral rat	10768 mg/kg
LD50 dermal rabbit	> 17600 mg/kg
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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Suspected of causing cancer.

Xylenes (o-, m-, p- isomers) (1330-20-7)	
IARC group	3 - Not classifiable
Ethylbenzene (100-41-4)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity
In OSHA Hazard Communication Carcinogen list	Yes
Talc (14807-96-6)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause drowsiness or dizziness.
Acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.
Xylenes (o-, m-, p- isomers) (1330-20-7)	1
STOT-single exposure	May cause drowsiness or dizziness.
Methyl isoamyl ketone (110-12-3)	1
STOT-single exposure	May cause drowsiness or dizziness.
1-Butanol (71-36-3)	I
STOT-single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
n-Butyl acetate (123-86-4)	1
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	Not classified.
Aspiration hazard	: Not classified.
2K Epoxy Primer Gray Improved	
Vaporizer	Aerosol
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death. May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological informat	ion		
12.1. Toxicity			
Ecology - general	: May cause long-term adverse effects in the aquatic environment.		
Dimethyl ether (115-10-6)			
LC50 fish 1	> 4.1 g/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])		
Acetone (67-64-1)			
LC50 fish 1	4.74 – 6.33 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)		
EC50 Daphnia 1	10294 – 17704 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Acetone (67-64-1)					
LC50 fish 2	6210 – 8120 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])				
EC50 Daphnia 2	12600 – 12700 mg/l (Exposure time: 48 h - Species: Daphnia magna)				
Xylenes (o-, m-, p- isomers) (1330-20-7)					
LC50 fish 1	13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])				
EC50 Daphnia 1	3.82 mg/l (Exposure time: 48 h - Species: water flea)				
LC50 fish 2	2.661 – 4.093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])				
EC50 Daphnia 2	0.6 mg/l (Exposure time: 48 h - Species: Gammarus lacustris)				
Methyl isoamyl ketone (110-12-3)					
LC50 fish 1	159 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])				
1-Butanol (71-36-3)					
LC50 fish 1	1730 – 1910 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])				
EC50 Daphnia 1	1983 mg/l (Exposure time: 48 h - Species: Daphnia magna)				
LC50 fish 2	1740 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])				
EC50 Daphnia 2	1897 – 2072 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])				
NOEC chronic crustacea	4.1 mg/l				
Ethylbenzene (100-41-4)					
LC50 fish 1	11 – 18 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])				
EC50 Daphnia 1	1.8 – 2.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)				
LC50 fish 2	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])				
NOEC chronic crustacea	0.956 mg/l				
Talc (14807-96-6)					
LC50 fish 1	> 100 g/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])				
Solvent naphtha, petroleum, heavy arom	natic (64742-94-5)				
LC50 fish 1	19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])				
EC50 Daphnia 1	0.95 mg/l (Exposure time: 48 h - Species: Daphnia magna)				
LC50 fish 2	2.34 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)				
n-Butyl acetate (123-86-4)					
LC50 fish 1	100 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])				
LC50 fish 2	17 – 19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])				
2.2. Persistence and degradability					
· · ·					
2K Epoxy Primer Gray Improved	Netesteblished				
Persistence and degradability	Not established.				
2.3. Bioaccumulative potential					
2K Epoxy Primer Gray Improved					
Bioaccumulative potential	Not established.				
Dimethyl ether (115-10-6)					
Partition coefficient n-octanol/water	-0.18				
Acetone (67-64-1)					
BCF fish 1	0.69				
Partition coefficient n-octanol/water	-0.24				
Xylenes (o-, m-, p- isomers) (1330-20-7)					
BCF fish 1	0.6 – 15				
Partition coefficient n-octanol/water	2.77 – 3.15				
Methyl isoamyl ketone (110-12-3) Partition coefficient n-octanol/water	1 00				
	1.88				
1-Butanol (71-36-3)					
1-Butanol (71-36-3) BCF fish 1	0.64				
1-Butanol (71-36-3) BCF fish 1 Partition coefficient n-octanol/water	0.64 0.785 (at 25 °C)				
1-Butanol (71-36-3) BCF fish 1					

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Ethulhanzana (400, 44, 4)					
Ethylbenzene (100-41-4)					
Partition coefficient n-octanol/water	3.2				
Talc (14807-96-6)					
BCF fish 1	(no known bioaccumulation)				
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)					
BCF fish 1	61 – 159				
Partition coefficient n-octanol/water	2.9 – 6.1				
n-Butyl acetate (123-86-4)					
Partition coefficient n-octanol/water	1.81 (at 23 °C)				
12.4. Mobility in soil					
No additional information available					
12.5. Other adverse effects					
	. No other offects luceur				
Other information	: No other effects known.				
SECTION 13: Disposal consideratior	ns				
13.1. Waste treatment methods					
Product/Packaging disposal recommendations	<ul> <li>Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Container under pressure. Do not drill or burn even after use.</li> </ul>				
Additional information	: Flammable vapours may accumulate in the container.				
SECTION 14: Transport information					
Department of Transportation (DOT) and Tran	isportation of Dangerous Goods (TDG)				
In accordance with DOT/TDG					
	: UN1950				
UN-No.(DOT/TDG)					
UN-NO.(DOT/TDG) Proper Shipping Name (DOT/TDG)	: Aerosols				



## **SECTION 15: Regulatory information**

### 15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

### 15.2. International regulations

No additional information available

## 15.3. US State regulations

**WARNING**:

This product can expose you to Ethylbenzene, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

## **SECTION 16: Other information**

Revision date	: 09/21/2020			
Other information	: None.			
Prepared by	: Nexreg Compliance Inc. www.Nexreg.com	N E X R E G		
09/21/2020			EN (English)	10/11

## **2K Epoxy Primer Gray**

## Safety Data Sheet

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