Safety Data Sheet

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

1.1. Product identifier

Product identifier.	5103/590
Product name.	10% SHEEN COMPLIANT LACQUER
UFI	No Information

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

Recommended Use.	Industrial Wood Coating
Uses advised against.	Professional Use Only

1.3. Details of the supplier of the safety data sheet

Supplier.	Morrells Woodfinishes Ltd Wellington Works Mill Lane, Woodley Stockport SK6 1RN Tel: +44 (0)161 406 5300 Fax: +44 (0)161 406 6276 EMail: enquires@morrells.co.uk
1.4. Emergency telephone number	Chemtrec: +1-800-424-9300 USA Chemtrec: +1 703-527-3887 ex-USA 24 hrs./day, 7 days/week
Europe	112
Austria	+43 1 406 43 43
Belgium	Poison center (BE): +32 70 245 245
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
Finland	Poison Information Centre (FI):+358 9 471 977
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790 |par Poison Center Nord: +49 551 19240 (24h available English / German)
Ireland	National Poisons Information Centre (IE): +353 1 8379964 / + 353 1 8092566
Iceland	+354 543 2222
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Luxembourg	112
Netherlands	National Poisons Information Center (NL): +31 88 755 8000 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO):+ 47 22 591300
Portugal	Poison Information Center (PT): +351 21 330 3284
Spain	Poison Information Service (ES): +34 91 562 04 20
Sweden	Poisons Information Center (SV):+46 8 33 12 31
Switzerland	Poison Center: Tel 145; +41 44 251 51 51
United Kingdom	111 / 0300 020 0155

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flammable Liquid, category 2
STOT, single exposure, category 3, NE
Skin Irritation, category 2
Serious Eye Damage, category 1
Hazardous to the aquatic environment, Chronic, category 3
Allergic effects

2.2. Label elements

Signal Word
Danger

Hazardous ingredients which must be listed on the label
Not Applicable

Possible Hazards
9.2% of the mixture consists of ingredient(s) of unknown toxicity
4.1% of the mixture consists of ingredient(s) of unknown acute oral toxicity
4.1% of the mixture consists of ingredient(s) of unknown acute dermal toxicity
9.2% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity

GHS HAZARD STATEMENTS

EUH208	Contains Formaldehyde. May produce an allergic reaction.
H225	Highly flammable liquid and vapour.
H412	Harmful to aquatic life with long lasting effects.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

GHS SDS PRECAUTIONARY STATEMENTS

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P264	Wash contaminated skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use carbon dioxide to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

EMERGENCY OVERVIEW: No Information

SECTION 3: Composition/information on ingredients

3.1. Substances

This product is a mixture. Health hazard information is based on its components.

3.2. Mixtures

Chemical Name	CAS-No.	EC No.	Wt. %
N-BUTANOL	71-36-3	200-751-6	>=10 - <20
Xylene	1330-20-7	215-535-7	>=10 - <20
Ethanol	64-17-5	200-578-6	>=3 - <7
N-Butyl Acetate	123-86-4	204-658-1	>=3 - <7
Amorphous silixon dioxide	112926-00-8	No Information	>=3 - <7
2-ethoxy-1-methylethylacetate	54839-24-6	259-370-9	>=1 - <5
1-METHOXY-2-PROPANOL	107-98-2	203-539-1	<1
METHANOL	67-56-1	200-659-6	<1
Formaldehyde	50-00-0	200-001-8	<0.1
2-Methoxy-1-methylethyl acetate	108-65-6	203-603-9	<1
2-(2-BUTOXYETHOXY)ETHANOL	112-34-5	203-961-6	<1

Chemical Name	Classification (1272/2008/EC)	Specific Conc. Limits, M-factors and ATEs
N-BUTANOL	Flam. Liq. 3 (H226) Acute Tox. 4 Oral (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 RTI (H335) STOT SE 3 NE (H336) Aquatic Chronic 3 (H412)	ATE oral (mg/kg): 700 mg/kg Rat ATE dermal (mg/kg): 3402 mg/kg Rabbit ATE inhalation - vapor (mg/l/4h): N.R. ATE inhalation - dust/mist (mg/l/4h): N.R.
Xylene	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Acute Tox. 4 Inhalation (H332)	ATE oral (mg/kg): 3500 mg/kg Rat ATE dermal (mg/kg): >4350 mg/kg Rabbit ATE inhalation - vapor (mg/l/4h): N.R. ATE inhalation - dust/mist (mg/l/4h): N.R.
Ethanol	Flam. Liq. 2 (H225) Aquatic Chronic 2 (H411)	ATE oral (mg/kg): 7060 mg/kg Rat ATE dermal (mg/kg): N.R. ATE inhalation - vapor (mg/l/4h): 116.9 mg/L, 133.8 mg/L Rat ATE inhalation - dust/mist (mg/l/4h): N.R.
N-Butyl Acetate	EUH066 Flam. Liq. 3 (H226) STOT SE 3 RTI (H335) STOT SE 3 NE (H336) Aquatic Chronic 3 (H412)	ATE oral (mg/kg): 10768 mg/kg Rat ATE dermal (mg/kg): >17600 mg/kg Rabbit ATE inhalation - vapor (mg/l/4h): 21 mg/l ATE inhalation - dust/mist (mg/l/4h): N.R.
Amorphous silixon dioxide	Not classified	ATE oral (mg/kg): >20000 mg/kg Rat
2-ethoxy-1-methylethylacetate	Flam. Liq. 3 (H226) Acute Tox. 3 Inhalation (H331) STOT SE 3 NE (H336)	ATE inhalation - vapor (mg/l/4h): >6.99 mg/L Rat
1-METHOXY-2-PROPANOL	Flam. Liq. 3 (H226) STOT SE 3 NE (H336)	ATE oral (mg/kg): N.R. ATE dermal (mg/kg): N.R. ATE inhalation - vapor (mg/l/4h): N.R. ATE inhalation - dust/mist (mg/l/4h): N.R.
METHANOL	Flam. Liq. 2 (H225) STOT SE 1 (H370) Aquatic Chronic 3 (H412)	ATE oral (mg/kg): 6200 mg/kg Rat ATE dermal (mg/kg): 15840 mg/kg Rabbit ATE inhalation - vapor (mg/l/4h): N.R. ATE inhalation - dust/mist (mg/l/4h): N.R.
Formaldehyde	Acute Tox. 3 Oral (H301) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Acute Tox. 2 Inhalation (H330) STOT SE 3 RTI (H335) Muta. 2 (H341) Carc. 1B (H350)	ATE oral (mg/kg): 100 mg/kg Rat ATE dermal (mg/kg): >2000 mg/kg Rat ATE inhalation - vapor (mg/l/4h): .6 mg/L Rat
2-Methoxy-1-methylethyl acetate	Flam. Liq. 3 (H226)	ATE oral (mg/kg): N.R. ATE dermal (mg/kg): N.R. ATE inhalation - vapor (mg/l/4h): N.R. ATE inhalation - dust/mist (mg/l/4h): N.R.
2-(2-BUTOXYETHOXY)ETHANOL	Eye Irrit. 2 (H319)	ATE oral (mg/kg): 5660 mg/kg Rat ATE dermal (mg/kg): 2700 mg/kg Rabbit ATE inhalation - vapor (mg/l/4h): N.R. ATE inhalation - dust/mist (mg/l/4h): N.R.

For the full text of the H-Statements mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice.

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. Do not get in eyes, on skin, or on clothing. Do not delay care and transport of a seriously injured person. Effects should disappear after individual has been exposed to fresh air for approximately 10 minutes. Remove and isolate contaminated clothing and shoes. Use first aid treatment according to the nature of the injury. Do not breathe dust. Move out of dangerous area. Use personal protective equipment. Remove all sources of ignition. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin. See section 8 for more information. Ensure adequate ventilation.

Inhalation.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Keep victim warm and quiet. If unconscious place in recovery position and seek medical advice. Artificial respiration and/or oxygen may be necessary. Administer oxygen if breathing is difficult. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a doctor immediately if allergic signs, particularly in the respiratory tract, are observed. Get medical attention if symptoms occur.

Skin contact.

Take off contaminated clothing and shoes immediately. Allergic symptoms may develop within 12 hours after exposure. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes. Do not remove clothing if adhering to skin. Wash contaminated clothing before reuse. Thoroughly clean shoes before reuse.

Eye contact.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May produce an allergic reaction. Do not rub affected area. Get medical attention immediately.

Ingestion.

Rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Remove from exposure, lie down. If swallowed, call a poison control center or doctor immediately. Keep at rest. Allergic symptoms may develop within 12 hours after exposure.

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

Symptoms.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Hives. Itching. Burning. Rashes. May cause allergic skin reaction. Drowsiness. Dizziness. Skin irritation. Eye irritation. Redness.

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

Notes to physician.

Treat symptomatically. May cause sensitization of susceptible persons. Effects of contact or inhalation may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media.

Use:. Dry chemical. Carbon dioxide (CO_2). Water spray or fog. Alcohol-resistant foam. Move containers from fire area if you can do it without risk.

Extinguishing media which shall not be used for safety reasons.

Do not use a solid water stream as it may scatter and spread fire. Water may be ineffective.

5.2. Special hazards arising from the substance or mixture

The product causes burns of eyes, skin and mucous membranes. Flammable. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Runoff may pollute waterways. Vapor explosion hazard indoors, outdoors or in sewers. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Will be easily ignited by heat, sparks or flames. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not allow run-off from fire fighting to enter drains or water courses. Cool drums with water spray. Fire will produce dense black smoke containing hazardous combustion products (see section 10). Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Container may explode in heat of fire.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.Keep away from sources of ignition. Prevent fire fighting water from entering surface water or groundwater. Cool containers with spray water from a safe distance. Never use welding or cutting torch on or near container (even empty) because product may ignite explosively.Cool closed containers exposed to fire with water spray.
Pay attention to flashback. Refer to protective measures listed in sections 7 and 8.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions.

Evacuate personnel to safe areas. Use personal protective equipment. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Take precautionary measures against static discharges. Pay attention to flashback. All equipment used when handling the product must be grounded. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Avoid contact with skin, eyes and inhalation of vapors. Do not get in eyes, on skin, or on clothing. A vapor suppressing foam may be used to reduce vapors. Wash thoroughly after handling. Contaminated surfaces will be extremely slippery. Refer to protective measures listed in sections 7 and 8. Do not breathe dust. Wear appropriate respiratory protection and protective clothing as described in Section VIII. Corrosive.

Advice for emergency responders.

Pay attention to flashback. Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

Do not allow material to contaminate ground water system. Should not be released into the environment. Prevent entry into waterways, sewers, basements or confined areas. Prevent spreading of vapors through sewers, ventilation systems and confined areas. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological information. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Try to prevent the material from entering drains or water courses. Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for Containment.

Soak up with inert absorbent material. Place into closed container and store in a safe location to await disposal. Wash the spill area with soap and water. Change contaminated clothing and launder before re-use. Wear proper personal protective clothing and equipment.

Methods for cleaning up.

No Information

Other information.

All equipment used when handling the product must be grounded. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate the area. Use personal protective equipment as required.

6.4. Reference to other sections

See Section 8, 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling.

Use spark-proof tools and explosion-proof equipment. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Take precautionary measures against static discharges. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Ensure adequate ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wash thoroughly after handling. Never pierce, drill, grind, cut, saw or weld any empty container. Provide sufficient air exchange and/or exhaust in work rooms. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Keep product and empty container away from heat and sources of ignition. Electrical equipment should be protected to the appropriate standard. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Keep container closed when not in use. Ground and bond containers when transferring material.

Hygiene measures.

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Handle in accordance with good industrial hygiene and safety practice. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions.

Keep in a bunded area. Keep in properly labeled containers. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep out of the reach of children. Store in accordance with the particular national regulations. Store in accordance with local regulations. Ensure all equipment is electrically grounded before beginning transfer operations. Use spark-proof tools and explosion-proof equipment. Keep locked up or in an area accessible only to qualified or authorized persons. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Store between 41 and 77 °F (5 - 25° C) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)

Specific use(s).

No Information

Exposure scenario.

No Information Available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limit Values

Chemical Name	Austria	Belgium	Denmark	European Union.	Finland	France
N-BUTANOL 71-36-3	STEL: 200 ppm STEL: 600 mg/m3 TWA: 50 ppm TWA: 150 mg/m3	TWA: 20 ppm TWA: 62 mg/m3	N.D.	N.D.	STEL: 75 ppm STEL: 230 mg/m3 TWA: 50 ppm TWA: 150 mg/m3	STEL: 50 ppm STEL: 150 mg/m3
Xylene 1330-20-7	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	TWA: 25 ppm TWA: 109 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 440 mg/m3 TWA: 50 ppm TWA: 220 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3
Ethanol 64-17-5	STEL: 2000 ppm STEL: 3800 mg/m3 TWA: 1000 ppm TWA: 1900 mg/m3	TWA: 1000 ppm TWA: 1907 mg/m3	TWA: 1000 ppm TWA: 1900 mg/m3	N.D.	STEL: 1300 ppm STEL: 2500 mg/m3 TWA: 1000 ppm TWA: 1900 mg/m3	STEL: 5000 ppm STEL: 9500 mg/m3 TWA: 1000 ppm TWA: 1900 mg/m3
N-Butyl Acetate 123-86-4	STEL: 100 ppm STEL: 480 mg/m3 TWA: 50 ppm TWA: 241 mg/m3	STEL: 150 ppm STEL: 712 mg/m3 TWA: 50 ppm TWA: 238 mg/m3	TWA: 50 ppm TWA: 241 mg/m3	N.D.	STEL: 150 ppm STEL: 725 mg/m3 TWA: 50 ppm TWA: 240 mg/m3	STEL: 150 ppm STEL: 723 mg/m3 TWA: 50 ppm TWA: 241 mg/m3
Amorphous silixon dioxide 112926-00-8	TWA: 4 mg/m3	TWA: 10 mg/m3	N.D.	N.D.	TWA: 5 mg/m3	N.D.
2-ethoxy-1-methylethylacetate 54839-24-6	STEL: 200 ppm STEL: 1200 mg/m3 TWA: 50 ppm TWA: 300 mg/m3	N.D.	N.D.	N.D.	N.D.	N.D.
1-METHOXY-2-PROPANOL 107-98-2	STEL: 50 ppm STEL: 187 mg/m3 TWA: 50 ppm TWA: 187 mg/m3	STEL: 100 ppm STEL: 369 mg/m3 TWA: 50 ppm TWA: 184 mg/m3	TWA: 50 ppm TWA: 185 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 100 ppm TWA: 375 mg/m3	STEL: 150 ppm STEL: 560 mg/m3 TWA: 100 ppm TWA: 370 mg/m3	STEL: 100 ppm STEL: 375 mg/m3 TWA: 50 ppm TWA: 188 mg/m3
METHANOL 67-56-1	STEL: 800 ppm STEL: 1040 mg/m3 TWA: 200 ppm TWA: 260 mg/m3	STEL: 250 ppm STEL: 333 mg/m3 TWA: 200 ppm TWA: 266 mg/m3	TWA: 200 ppm TWA: 260 mg/m3	TWA: 200 ppm TWA: 260 mg/m3	STEL: 250 ppm STEL: 330 mg/m3 TWA: 200 ppm TWA: 270 mg/m3	STEL: 1000 ppm STEL: 1300 mg/m3 TWA: 200 ppm TWA: 260 mg/m3

Chemical Name	Austria	Belgium	Denmark	European Union.	Finland	France
Formaldehyde 50-00-0	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.3 ppm TWA: 0.37 mg/m3	STEL: 0.3 ppm STEL: 0.38 mg/m3	TWA: 0.3 ppm TWA: 0.37 mg/m3	N.D.	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.3 ppm TWA: 0.37 mg/m3 TWA: 0.05 ppm	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.5 ppm TWA: 0.3 ppm TWA: 0.37 mg/m3 TWA: 0.62 mg/m3
2-Methoxy-1-methylethyl acetate 108-65-6	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 270 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3
2-(2-BUTOXYETHOXY)ETHANOL 112-34-5	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	TWA: 10 ppm TWA: 68 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	TWA: 10 ppm TWA: 68 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3

Chemical Name	Germany	Iceland	Ireland	Italy	Luxembourg	Netherlands
N-BUTANOL 71-36-3	STEL: 100 ppm STEL: 310 mg/m3 TWA: 100 ppm TWA: 310 mg/m3	STEL: 50 ppm STEL: 150 mg/m3	STEL: 60 ppm TWA: 20 ppm	N.D.	N.D.	N.D.
Xylene 1330-20-7	STEL: 100 ppm STEL: 440 mg/m3 TWA: 50 ppm TWA: 220 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 25 ppm TWA: 109 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 47.5 ppm TWA: 210 mg/m3
Ethanol 64-17-5	STEL: 800 ppm STEL: 1520 mg/m3 TWA: 200 ppm TWA: 380 mg/m3	TWA: 1000 ppm TWA: 1900 mg/m3	STEL: 1000 ppm	N.D.	N.D.	STEL: 1000 ppm STEL: 1900 mg/m3 TWA: 137 ppm TWA: 260 mg/m3
N-Butyl Acetate 123-86-4	STEL: 200 ppm STEL: 960 mg/m3 TWA: 100 ppm TWA: 480 mg/m3	STEL: 150 ppm STEL: 723 mg/m3 TWA: 50 ppm TWA: 241 mg/m3	STEL: 150 ppm STEL: 723 mg/m3	STEL: 723 mg/m3 STEL: 150 ppm TWA: 241 mg/m3 TWA: 50 ppm	STEL: 723 mg/m3 STEL: 150 ppm TWA: 241 mg/m3 TWA: 50 ppm	STEL: 150 ppm STEL: 723 mg/m3 TWA: 50 ppm TWA: 241 mg/m3
Amorphous silixon dioxide 112926-00-8	STEL: 0.16 mg/m3 TWA: 0.02 mg/m3	N.D.	N.D.	N.D.	N.D.	N.D.
2-ethoxy-1-methylethylacetate 54839-24-6	STEL: 40 ppm STEL: 240 mg/m3 TWA: 20 ppm TWA: 120 mg/m3	N.D.	N.D.	N.D.	N.D.	N.D.
1-METHOXY-2-PROPANOL 107-98-2	STEL: 200 ppm STEL: 740 mg/m3 TWA: 100 ppm TWA: 370 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 50 ppm TWA: 185 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 100 ppm TWA: 375 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 100 ppm TWA: 375 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 100 ppm TWA: 375 mg/m3	STEL: 150 ppm STEL: 563 mg/m3 TWA: 100 ppm TWA: 375 mg/m3
METHANOL 67-56-1	STEL: 200 ppm STEL: 260 mg/m3 TWA: 100 ppm TWA: 130 mg/m3	TWA: 200 ppm TWA: 260 mg/m3	STEL: 600 ppm STEL: 780 mg/m3 TWA: 200 ppm TWA: 260 mg/m3	TWA: 200 ppm TWA: 260 mg/m3	TWA: 200 ppm TWA: 260 mg/m3	TWA: 100 ppm TWA: 133 mg/m3
Formaldehyde 50-00-0	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.3 ppm TWA: 0.37 mg/m3	STEL: 0.60 ppm STEL: 0.74 mg/m3 TWA: 0.30 ppm TWA: 0.37 mg/m3	STEL: 0.6 ppm STEL: 0.738 mg/m3 STEL: 0.62 mg/m3 TWA: 0.3 ppm TWA: 0.5 ppm TWA: 0.37 mg/m3 TWA: 0.62 mg/m3	STEL: 0.74 mg/m3 STEL: 0.6 mg/m3 TWA: 0.37 mg/m3 TWA: 0.3 ppm TWA: 0.62 mg/m3 TWA: 0.5 ppm	N.D.	STEL: 0.41 ppm STEL: 0.5 mg/m3 TWA: 0.12 ppm TWA: 0.15 mg/m3

Chemical Name	Germany	Iceland	Ireland	Italy	Luxembourg	Netherlands
2-Methoxy-1-methylethyl acetate 108-65-6	STEL: 50 ppm STEL: 270 mg/m3 TWA: 50 ppm TWA: 270 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	TWA: 100 ppm TWA: 550 mg/m3
2-(2-BUTOXYETHOXY)ETHANOL 112-34-5	STEL: 15 ppm STEL: 100.5 mg/m3 TWA: 67 mg/m3 TWA: 10 ppm	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	STEL: 14.8 ppm STEL: 100 mg/m3 TWA: 7.4 ppm TWA: 50 mg/m3

Chemical Name	Norway	Portugal	Spain	Sweden	Switzerland	United Kingdom
N-BUTANOL 71-36-3	N.D.	TWA: 20 ppm	STEL: 50 ppm STEL: 154 mg/m3 TWA: 20 ppm TWA: 61 mg/m3	STEL: 30 ppm STEL: 90 mg/m3 TWA: 15 ppm TWA: 45 mg/m3	STEL: 100 ppm STEL: 310 mg/m3 TWA: 100 ppm TWA: 310 mg/m3	STEL: 50 ppm STEL: 154 mg/m3
Xylene 1330-20-7	STEL: 37.5 ppm STEL: 135 mg/m3 TWA: 25 ppm TWA: 108 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 442 mg/m3 TWA: 50 ppm TWA: 221 mg/m3	STEL: 100 ppm STEL: 440 mg/m3 TWA: 50 ppm TWA: 220 mg/m3	STEL: 100 ppm STEL: 441 mg/m3 TWA: 50 ppm TWA: 220 mg/m3
Ethanol 64-17-5	STEL: 625 ppm STEL: 1187.5 mg/m3 TWA: 500 ppm TWA: 950 mg/m3	STEL: 1000 ppm	STEL: 1000 ppm STEL: 1910 mg/m3	STEL: 1000 ppm STEL: 1900 mg/m3 TWA: 500 ppm TWA: 1000 mg/m3	STEL: 1000 ppm STEL: 1920 mg/m3 TWA: 500 ppm TWA: 960 mg/m3	STEL: 3000 ppm STEL: 5760 mg/m3 TWA: 1000 ppm TWA: 1920 mg/m3
N-Butyl Acetate 123-86-4	STEL: 723 mg/m3 STEL: 150 ppm TWA: 241 mg/m3 TWA: 50 ppm	STEL: 150 ppm STEL: 723 mg/m3 TWA: 50 ppm TWA: 241 mg/m3	STEL: 150 ppm STEL: 723 mg/m3 TWA: 50 ppm TWA: 241 mg/m3	STEL: 150 ppm STEL: 723 mg/m3 TWA: 50 ppm TWA: 241 mg/m3	STEL: 150 ppm STEL: 720 mg/m3 TWA: 50 ppm TWA: 240 mg/m3	STEL: 200 ppm STEL: 966 mg/m3 TWA: 150 ppm TWA: 724 mg/m3
Amorphous silixon dioxide 112926-00-8	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
2-ethoxy-1-methylethylacetate 54839-24-6	N.D.	N.D.	N.D.	N.D.	STEL: 100 ppm STEL: 600 mg/m3 TWA: 50 ppm TWA: 300 mg/m3	N.D.
1-METHOXY-2-PROPANOL 107-98-2	STEL: 75 ppm STEL: 225 mg/m3 TWA: 50 ppm TWA: 180 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 100 ppm TWA: 375 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 100 ppm TWA: 375 mg/m3	STEL: 150 ppm STEL: 568 mg/m3 TWA: 50 ppm TWA: 190 mg/m3	STEL: 200 ppm STEL: 720 mg/m3 TWA: 100 ppm TWA: 360 mg/m3	STEL: 150 ppm STEL: 560 mg/m3 TWA: 100 ppm TWA: 375 mg/m3
METHANOL 67-56-1	STEL: 150 ppm STEL: 162.5 mg/m3 TWA: 100 ppm TWA: 130 mg/m3	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m3	TWA: 200 ppm TWA: 266 mg/m3	STEL: 250 ppm STEL: 350 mg/m3 TWA: 200 ppm TWA: 250 mg/m3	STEL: 400 ppm STEL: 520 mg/m3 TWA: 200 ppm TWA: 260 mg/m3	STEL: 250 ppm STEL: 333 mg/m3 TWA: 200 ppm TWA: 266 mg/m3
Formaldehyde 50-00-0	STEL: 0.74 mg/m3 STEL: 0.6 ppm TWA: 0.37 mg/m3 TWA: 0.3 ppm	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.3 ppm TWA: 0.37 mg/m3 TWA: 0.62 mg/m3 TWA: 0.5 ppm	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.3 ppm TWA: 0.37 mg/m3	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.3 ppm TWA: 0.37 mg/m3	STEL: 0.6 ppm STEL: 0.74 mg/m3 TWA: 0.3 ppm TWA: 0.37 mg/m3	STEL: 2 ppm STEL: 2.5 mg/m3 TWA: 2 ppm TWA: 2.5 mg/m3
2-Methoxy-1-methylethyl acetate 108-65-6	STEL: 75 ppm STEL: 337.5 mg/m3 TWA: 50 ppm TWA: 270 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 550 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 50 ppm STEL: 275 mg/m3 TWA: 50 ppm TWA: 275 mg/m3	STEL: 100 ppm STEL: 548 mg/m3 TWA: 50 ppm TWA: 274 mg/m3
2-(2-BUTOXYETHOXY)ETHANOL 112-34-5	STEL: 20 ppm STEL: 102 mg/m3 TWA: 10 ppm TWA: 68 mg/m3	STEL: 101.2 mg/m3 STEL: 15 ppm TWA: 10 ppm TWA: 67.5 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3	STEL: 15 ppm STEL: 101 mg/m3 TWA: 10 ppm TWA: 68 mg/m3	STEL: 15 ppm STEL: 101 mg/m3 TWA: 10 ppm TWA: 67 mg/m3	STEL: 15 ppm STEL: 101.2 mg/m3 TWA: 10 ppm TWA: 67.5 mg/m3

TWA: Time weighted average
STEL: Short term exposure limit.

EU - REACH (1906/2006) Registration Data - Derived No Effect Levels (DNELs)

Chemical Name	CAS Number	DNEL
N-BUTANOL	71-36-3	general population oral systemic effects long term exposure 1.5625 mg/kg bw/day DNEL (200-751-6); general population dermal systemic effects long term exposure 3.125 mg/kg bw/day DNEL (200-751-6); general population inhalation systemic effects long term exposure 55.357 mg/m3 DNEL (200-751-6); general population inhalation local effects long term exposure 155 mg/m3 DNEL (200-751-6); workers inhalation local effects long term exposure 310 mg/m3 DNEL (200-751-6)
Xylene	1330-20-7	general population oral systemic effects long term exposure 12.5 mg/kg bw/day DNEL (215-535-7); general population inhalation systemic effects long term exposure 65.3 mg/m3 DNEL (215-535-7); general population inhalation local effects long term exposure 65.3 mg/m3 DNEL (215-535-7); general population dermal systemic effects long term exposure 125 mg/kg bw/day DNEL (215-535-7); workers dermal systemic effects long term exposure 212 mg/kg bw/day DNEL (215-535-7); workers inhalation systemic effects long term exposure 221 mg/m3 DNEL (215-535-7); workers inhalation local effects long term exposure 221 mg/m3 DNEL (215-535-7); general population inhalation systemic effects acute/short term exposure 260 mg/m3 DNEL (215-535-7); general population inhalation local effects acute/short term exposure 260 mg/m3 DNEL (215-535-7); workers inhalation systemic effects acute/short term exposure 442 mg/m3 DNEL (215-535-7); workers inhalation local effects acute/short term exposure 442 mg/m3 DNEL (215-535-7)
Ethanol	64-17-5	general population oral systemic effects long term exposure 87 mg/kg bw/day DNEL (200-578-6); general population inhalation systemic effects long term exposure 114 mg/m3 DNEL (200-578-6); general population dermal systemic effects long term exposure 206 mg/kg bw/day DNEL (200-578-6); workers dermal systemic effects long term exposure 343 mg/kg bw/day DNEL (200-578-6); workers inhalation systemic effects long term exposure 950 mg/m3 DNEL (200-578-6); general population inhalation local effects acute/short term exposure 950 mg/m3 DNEL (200-578-6); workers inhalation local effects acute/short term exposure 1900 mg/m3 DNEL (200-578-6)
2-ethoxy-1-methylethylacetate	54839-24-6	general population oral systemic effects long term exposure 13.1 mg/kg bw/day DNEL (259-370-9); general population dermal systemic effects long term exposure 62 mg/kg bw/day DNEL (259-370-9); workers dermal systemic effects long term exposure 103 mg/kg bw/day DNEL (259-370-9); workers inhalation systemic effects long term exposure 152 mg/m3 DNEL (259-370-9); general population inhalation systemic effects long term exposure 181 mg/m3 DNEL (259-370-9); general population inhalation systemic effects acute/short term exposure 1420 mg/m3 DNEL (259-370-9); workers inhalation systemic effects acute/short term exposure 2366 mg/m3 DNEL (259-370-9)
1-METHOXY-2-PROPANOL	107-98-2	general population oral systemic effects long term exposure 33 mg/kg bw/day DNEL (203-539-1); general population inhalation systemic effects long term exposure 43.9 mg/m3 DNEL (203-539-1); general population dermal systemic effects long term exposure 78 mg/kg bw/day DNEL (203-539-1); workers dermal systemic effects long term exposure 183 mg/kg bw/day DNEL (203-539-1); workers inhalation systemic effects long term exposure 369 mg/m3 DNEL (203-539-1); workers inhalation systemic effects acute/short term exposure 553.5 mg/m3 DNEL (203-539-1); workers inhalation local effects acute/short term exposure 553.5 mg/m3 DNEL (203-539-1)

Chemical Name	CAS Number	DNEL
METHANOL	67-56-1	general population dermal systemic effects long term exposure 4 mg/kg bw/day DNEL (200-659-6); general population dermal systemic effects acute/short term exposure 4 mg/kg bw/day DNEL (200-659-6); general population oral systemic effects long term exposure 4 mg/kg bw/day DNEL (200-659-6); general population oral systemic effects acute/short term exposure 4 mg/kg bw/day DNEL (200-659-6); workers dermal systemic effects long term exposure 20 mg/kg bw/day DNEL (200-659-6); workers dermal systemic effects acute/short term exposure 20 mg/kg bw/day DNEL (200-659-6); general population inhalation systemic effects long term exposure 26 mg/m3 DNEL (200-659-6); general population inhalation systemic effects acute/short term exposure 26 mg/m3 DNEL (200-659-6); general population inhalation local effects long term exposure 26 mg/m3 DNEL (200-659-6); general population inhalation local effects acute/short term exposure 26 mg/m3 DNEL (200-659-6); workers inhalation systemic effects long term exposure 130 mg/m3 DNEL (200-659-6); workers inhalation systemic effects acute/short term exposure 130 mg/m3 DNEL (200-659-6); workers inhalation local effects long term exposure 130 mg/m3 DNEL (200-659-6); workers inhalation local effects acute/short term exposure 130 mg/m3 DNEL (200-659-6)
Formaldehyde	50-00-0	general population inhalation local effects long term exposure 0.1 mg/m3 DNEL (200-001-8); workers inhalation local effects long term exposure 0.375 mg/m3 DNEL (200-001-8); workers inhalation local effects acute/short term exposure 0.75 mg/m3 DNEL (200-001-8); general population inhalation systemic effects long term exposure 3.2 mg/m3 DNEL (200-001-8); general population oral systemic effects long term exposure 4.1 mg/kg bw/day DNEL (200-001-8); workers inhalation systemic effects long term exposure 9 mg/m3 DNEL (200-001-8); general population dermal local effects long term exposure 12 µg/cm2 DNEL (200-001-8); workers dermal local effects long term exposure 37 µg/cm2 DNEL (200-001-8); general population dermal systemic effects long term exposure 102 mg/kg bw/day DNEL (200-001-8); workers dermal systemic effects long term exposure 240 mg/kg bw/day DNEL (200-001-8)
2-Methoxy-1-methylethyl acetate	108-65-6	general population inhalation systemic effects long term exposure 33 mg/m3 DNEL (203-603-9); general population inhalation local effects long term exposure 33 mg/m3 DNEL (203-603-9); general population oral systemic effects long term exposure 36 mg/kg bw/day DNEL (203-603-9); workers inhalation systemic effects long term exposure 275 mg/m3 DNEL (203-603-9); general population dermal systemic effects long term exposure 320 mg/kg bw/day DNEL (203-603-9); workers inhalation local effects acute/short term exposure 550 mg/m3 DNEL (203-603-9); workers dermal systemic effects long term exposure 796 mg/kg bw/day DNEL (203-603-9)
2-(2-BUTOXYETHOXY)ETHANOL	112-34-5	general population oral systemic effects long term exposure 5 mg/kg bw/day DNEL (203-961-6); general population inhalation systemic effects long term exposure 40.5 mg/m3 DNEL (203-961-6); general population inhalation local effects long term exposure 40.5 mg/m3 DNEL (203-961-6); general population dermal systemic effects long term exposure 50 mg/kg bw/day DNEL (203-961-6); general population inhalation local effects acute/short term exposure 60.7 mg/m3 DNEL (203-961-6); workers inhalation systemic effects long term exposure 67.5 mg/m3 DNEL (203-961-6); workers inhalation local effects long term exposure 67.5 mg/m3 DNEL (203-961-6); workers dermal systemic effects long term exposure 83 mg/kg bw/day DNEL (203-961-6); workers inhalation local effects acute/short term exposure 101.2 mg/m3 DNEL (203-961-6)

EU - REACH (1906/2006) Registration Data - Predicted No Effect Concentrations (PNECs)

Chemical Name	CAS Number	PNEC

Chemical Name	CAS Number	PNEC
N-BUTANOL	71-36-3	0.082 mg/L PNEC (freshwater, 200-751-6); 0.0082 mg/L PNEC (marine water, 200-751-6); 2.25 mg/L PNEC (freshwater (intermittent releases), 200-751-6); 0.324 mg/kg sediment dw PNEC (sediment (freshwater), 200-751-6); 0.0324 mg/kg sediment dw PNEC (sediment (marine water), 200-751-6); 2476 mg/L PNEC (sewage treatment, 200-751-6); 0.0166 mg/kg soil dw PNEC (soil, 200-751-6)
Xylene	1330-20-7	0.327 mg/L PNEC (freshwater, 215-535-7); 0.327 mg/L PNEC (marine water, 215-535-7); 0.327 mg/L PNEC (freshwater (intermittent releases), 215-535-7); 12.46 mg/kg sediment dw PNEC (sediment (freshwater), 215-535-7); 12.46 mg/kg sediment dw PNEC (sediment (marine water), 215-535-7); 6.58 mg/L PNEC (sewage treatment, 215-535-7); 2.31 mg/kg soil dw PNEC (soil, 215-535-7)
N-Butyl Acetate	123-86-4	0.18 mg/L PNEC (freshwater, 204-658-1); 0.018 mg/L PNEC (marine water, 204-658-1); 0.36 mg/L PNEC (freshwater (intermittent releases), 204-658-1); 0.981 mg/kg sediment dw PNEC (sediment (freshwater), 204-658-1); 0.0981 mg/kg sediment dw PNEC (sediment (marine water), 204-658-1); 35.6 mg/L PNEC (sewage treatment, 204-658-1); 0.0903 mg/kg soil dw PNEC (soil, 204-658-1)
2-ethoxy-1-methylethylacetate	54839-24-6	2 mg/L PNEC (freshwater, 259-370-9); 0.2 mg/L PNEC (marine water, 259-370-9); 2 mg/L PNEC (freshwater (intermittent releases), 259-370-9); 117 mg/kg food PNEC (food chain, 259-370-9); 8.2 mg/kg sediment dw PNEC (sediment (freshwater), 259-370-9); 0.82 mg/kg sediment dw PNEC (sediment (marine water), 259-370-9); 62.5 mg/L PNEC (sewage treatment, 259-370-9); 0.67 mg/kg soil dw PNEC (soil, 259-370-9)
1-METHOXY-2-PROPANOL	107-98-2	10 mg/L PNEC (freshwater, 203-539-1); 1 mg/L PNEC (marine water, 203-539-1); 100 mg/L PNEC (freshwater (intermittent releases), 203-539-1); 52.3 mg/kg sediment dw PNEC (sediment (freshwater), 203-539-1); 5.2 mg/kg sediment dw PNEC (sediment (marine water), 203-539-1); 100 mg/L PNEC (sewage treatment, 203-539-1); 4.59 mg/kg soil dw PNEC (soil, 203-539-1)
METHANOL	67-56-1	20.8 mg/L PNEC (freshwater, 200-659-6); 2.08 mg/L PNEC (marine water, 200-659-6); 1540 mg/L PNEC (freshwater (intermittent releases), 200-659-6); 77 mg/kg sediment dw PNEC (sediment (freshwater), 200-659-6); 7.7 mg/kg sediment dw PNEC (sediment (marine water), 200-659-6); 100 mg/L PNEC (sewage treatment, 200-659-6); 100 mg/kg soil dw PNEC (soil, 200-659-6)
Formaldehyde	50-00-0	0.44 mg/L PNEC (freshwater, 200-001-8); 0.44 mg/L PNEC (marine water, 200-001-8); 4.44 mg/L PNEC (freshwater (intermittent releases), 200-001-8); 2.3 mg/kg sediment dw PNEC (sediment (freshwater), 200-001-8); 2.3 mg/kg sediment dw PNEC (sediment (marine water), 200-001-8); 0.19 mg/L PNEC (sewage treatment, 200-001-8); 0.2 mg/kg soil dw PNEC (soil, 200-001-8)
2-Methoxy-1-methylethyl acetate	108-65-6	0.635 mg/L PNEC (freshwater, 203-603-9); 0.0635 mg/L PNEC (marine water, 203-603-9); 6.35 mg/L PNEC (freshwater (intermittent releases), 203-603-9); 3.29 mg/kg sediment dw PNEC (sediment (freshwater), 203-603-9); 0.329 mg/kg sediment dw PNEC (sediment (marine water), 203-603-9); 100 mg/L PNEC (sewage treatment, 203-603-9); 0.29 mg/kg soil dw PNEC (soil, 203-603-9)
2-(2-BUTOXYETHOXY)ETHANOL	112-34-5	1.1 mg/L PNEC (freshwater, 203-961-6); 0.11 mg/L PNEC (marine water, 203-961-6); 11 mg/L PNEC (freshwater (intermittent releases), 203-961-6); 56 mg/kg food PNEC (food chain, 203-961-6); 4.4 mg/kg sediment dw PNEC (sediment (freshwater), 203-961-6); 0.44 mg/kg sediment dw PNEC (sediment (marine water), 203-961-6); 200 mg/L PNEC (sewage treatment, 203-961-6); 0.32 mg/kg soil dw PNEC (soil, 203-961-6)

EU - REACH (1906/2006) Article 59(1) - Candidate Substances of Very High Concern (SVHC)

None

8.2. Exposure controls

Engineering Measures.

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal protective equipment.

Eye/Face Protection.

Tightly fitting safety goggles. If splashes are likely to occur, wear:. Face-shield. Chemical resistant goggles must be worn.

Skin and body protection.

No special protective equipment required. Solvent-resistant gloves. Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Follow the skin protection plan. Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Flame retardant antistatic protective clothing. Antistatic boots.

The selected protective gloves have to satisfy the specifications of EU Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Respiratory protection.

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In the case of dust or aerosol formation use respirator with an approved filter. Breathing apparatus with filter. Respirator with filter for organic vapor. Respirator with a vapor filter (EN 141).

Environmental Exposure Controls.

Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No Information
Colour	Clear - yellowish
Odour	No Information
Odour Threshold	No Information
pH	No Information
Melting Point, °C	No Information
Flash Point, °C	11
Boiling Range, °C	78 - 351
Combustibility	Does not Support Combustion
Vapor Pressure, mmHg	No Information
Vapor density	No Information
Specific Gravity (g/cm3)	Not Applicable
Solubility in water	No Information
Partition Coefficient, n-octanol/water	No Information
Auto-Ignition Temperature, °C	No Information
Decomposition temperature, °C	No Information
Viscosity	No Information

9.2. Other information

Volatile organic compounds (VOC) content. 324.602028625

9.2.1. Information with regard to physical hazard classes

No Information

9.2.2. Other safety characteristics

Evaporation rate No Information Available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable.

10.2. Chemical stability
Stable under recommended storage conditions. Risk of ignition. To avoid thermal decomposition, do not overheat. Keep away from open flames, hot surfaces and sources of ignition.

10.3. Possibility of hazardous reactions
None known based on information supplied.

10.4. Conditions to avoid
Excessive heat. Storage near to reactive materials. Take precautionary measures against static discharges. Direct sources of heat.

10.5. Incompatible materials
Reducing agents. Risk of explosion if heated under confinement. Vapors are flammable. May form explosive mixtures in air. Oxidizing agents.

10.6. Hazardous decomposition products
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

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

Acute toxicity.

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

Product Information

The product itself has not been tested
Data on individual components are tabulated below

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	>5000 mg/kg
ATEmix (dermal)	>5000 mg/kg
ATEmix (inhalation-vapor)	170.44 mg/l

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
71-36-3	N-BUTANOL	700 mg/kg Rat	3402 mg/kg Rabbit	N.R.
1330-20-7	Xylene	3500 mg/kg Rat	>4350 mg/kg Rabbit	N.R.
64-17-5	Ethanol	7060 mg/kg Rat	N.R.	116.9 mg/L, 133.8 mg/L Rat
123-86-4	N-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	21 mg/l
112926-00-8	Amorphous silixon dioxide	>20000 mg/kg Rat	N.R.	N.R.
54839-24-6	2-ethoxy-1-methylethylacetate	N.R.	N.R.	>6.99 mg/L Rat
107-98-2	1-METHOXY-2-PROPANOL	N.R.	N.R.	N.R.
67-56-1	METHANOL	6200 mg/kg Rat	15840 mg/kg Rabbit	22500 ppm Rat
50-00-0	Formaldehyde	100 mg/kg Rat	>2000 mg/kg Rat	.6 mg/L Rat
108-65-6	2-Methoxy-1-methylethyl acetate	N.R.	N.R.	N.R.
112-34-5	2-(2-BUTOXYETHOXY)ETHANOL	5660 mg/kg Rat	2700 mg/kg Rabbit	N.R.

Skin corrosion/irritation.

May cause allergic skin reaction. Irritating to skin. May cause irritation. May cause skin irritation. SKIN IRRITANT.

Eye damage/irritation.

Causes serious eye damage.

Respiratory or skin sensitization.

May cause irritation. May cause drowsiness. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Specific target organ systemic toxicity (single exposure).

Vapors may cause drowsiness and dizziness.

11.2. Information on other hazards

Endocrine disrupting properties

N.A.

Other information.

N.A.

SECTION 12: Ecological information

12.1. Toxicity

5.11% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia.
N-BUTANOL 71-36-3	EC50 96 h Desmodesmus subspicatus >500 mg/L, EC50 72 h Desmodesmus subspicatus >500 mg/L	LC50 96 h Pimephales promelas 1730 - 1910 mg/L, LC50 96 h Pimephales promelas 1740 mg/L, LC50 96 h Lepomis macrochirus 100000 - 500000 µg/L, LC50 96 h Pimephales promelas 1910000 µg/L	EC50 48 h Daphnia magna 1983 mg/L, EC50 48 h Daphnia magna 1897 - 2072 mg/L
Xylene 1330-20-7	N.D.	LC50 96 h Pimephales promelas 13.4 mg/L, LC50 96 h Oncorhynchus mykiss 2.661 - 4.093 mg/L, LC50 96 h Oncorhynchus mykiss 13.5 - 17.3 mg/L, LC50 96 h Lepomis macrochirus 13.1 - 16.5 mg/L, LC50 96 h Lepomis macrochirus 19 mg/L, LC50 96 h Lepomis macrochirus 7.711 - 9.591 mg/L, LC50 96 h Pimephales promelas 23.53 - 29.97 mg/L, LC50 96 h Cyprinus carpio 780 mg/L, LC50 96 h Cyprinus carpio >780 mg/L, LC50 96 h Poecilia reticulata 30.26 - 40.	EC50 48 h water flea 3.82 mg/L, LC50 48 h Gammarus lacustris 0.6 mg/L
Ethanol 64-17-5	N.D.	LC50 96 h Oncorhynchus mykiss 12.0 - 16.0 mL/L, LC50 96 h Pimephales promelas >100 mg/L, LC50 96 h Pimephales promelas 13400 - 15100 mg/L	LC50 48 h Daphnia magna 9268 - 14221 mg/L, EC50 48 h Daphnia magna 2 mg/L
N-Butyl Acetate 123-86-4	EC50 72 h Desmodesmus subspicatus 674.7 mg/L	LC50 96 h Lepomis macrochirus 100 mg/L, LC50 96 h Pimephales promelas 17 - 19 mg/L	N.D.
Amorphous silixon dioxide 112926-00-8	N.D.	N.D.	N.D.
2-ethoxy-1-methylethylacetate 54839-24-6	N.D.	LC50 96 h Oncorhynchus mykiss 140 mg/L	EC50 48 h Daphnia magna 96 - 130 mg/L
1-METHOXY-2-PROPANOL 107-98-2	N.D.	LC50 96 h Pimephales promelas 20.8 g/L	EC50 48 h Daphnia magna 23300 mg/L
METHANOL 67-56-1	N.D.	LC50 96 h Pimephales promelas 28200 mg/L, LC50 96 h Pimephales promelas >100 mg/L, LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L, LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L, LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L	N.D.
Formaldehyde 50-00-0	N.D.	LC50 96 h Pimephales promelas 22.6 - 25.7 mg/L, LC50 96 h Lepomis macrochirus 1510 µg/L, LC50 96 h Brachydanio rerio 41 mg/L, LC50 96 h Oncorhynchus mykiss 0.032 - 0.226 mL/L, LC50 96 h Oncorhynchus mykiss 100 - 136 mg/L, LC50 96 h Pimephales promelas 23.2 - 29.7 mg/L	LC50 48 h Daphnia magna 2 mg/L, EC50 48 h Daphnia magna 11.3 - 18 mg/L

2-Methoxy-1-methylethyl acetate 108-65-6	N.D.	LC50 96 h Pimephales promelas 161 mg/L	EC50 48 h Daphnia magna >500 mg/L
2-(2-BUTOXYETHOXY) ETHANOL 112-34-5	EC50 96 h Desmodesmus subspicatus >100 mg/L	LC50 96 h Lepomis macrochirus 1300 mg/L	EC50 48 h Daphnia magna >100 mg/L

12.2. Persistence and degradability
No data are available on the product itself

12.3. Bioaccumulative potential
Discharge into the environment must be avoided.

CAS-No.	Chemical Name	Bio. Conc. Factor (BCF)	Octanol-water par. Coeff (KOW)
71-36-3	N-BUTANOL	N.I.	1
1330-20-7	Xylene	N.I.	2.77 - 3.15
64-17-5	Ethanol	N.I.	-0.35
123-86-4	N-Butyl Acetate	N.I.	1.81, 2.3
112926-00-8	Amorphous silixon dioxide	N.I.	N.I.
54839-24-6	2-ethoxy-1-methylethylacetate	N.I.	0.76
107-98-2	1-METHOXY-2-PROPANOL	N.I.	<1
67-56-1	METHANOL	N.I.	-0.77
50-00-0	Formaldehyde	N.I.	0.35
108-65-6	2-Methoxy-1-methylethyl acetate	N.I.	1.2
112-34-5	2-(2-BUTOXYETHOXY)ETHANOL	N.I.	1

12.4. Mobility in soil
Mobility in soil.
No information available

12.5. Results of PBT and vPvB assessment
No data are available on the product itself

12.6. Endocrine disrupting properties
No information available

12.7. Other adverse effects
No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste from residues / unused products.
Disposal should be in accordance with applicable regional, national and local laws and regulations. Dispose of contents/container to an approved waste disposal plant.

Contaminated packaging.
Do not re-use empty containers.

Other information.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

SECTION 14: Transport information

ADR

14.1. UN number or ID number	1263
14.2. UN proper shipping name	Paint Related Material
14.3. Transport hazard class(es)	3
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	No Information

IMDG

14.1. UN number or ID number	1263
14.2. UN proper shipping name	Paint Related Material

14.3. Transport hazard class(es)	3
14.4. Packing group	II
14.5 Marine Pollutant	No.
Environmental hazards	No.
14.6. Special precautions for user	No Information
14.7. Maritime transport in bulk according to IMO instruments	No Information

IATA

14.1. UN number or ID number	1263
14.2. UN proper shipping name	Paint Related Material
14.3. Transport hazard class(es)	3
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	No Information

SECTION 15: Regulatory information

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

National regulatory information.

French table of occupational diseases

CAS-No.	Chemical Name	French table of occupational diseases
71-36-3	N-BUTANOL	RG 84
64-17-5	Ethanol	RG 84
123-86-4	N-Butyl Acetate	RG 84
54839-24-6	2-ethoxy-1-methylethylacetate	RG 84
107-98-2	1-METHOXY-2-PROPANOL	RG 84
67-56-1	METHANOL	RG 84
50-00-0	Formaldehyde	RG 43
108-65-6	2-Methoxy-1-methylethyl acetate	RG 84
112-34-5	2-(2-BUTOXYETHOXY)ETHANOL	RG 84

European Union.

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Persistent Organic Pollutants

Not applicable

Authorizations and/or restrictions on use:

CAS-No.	Chemical Name	Substance subject to authorization per REACH Annex XIV	Restricted substance per REACH Annex XVII
71-36-3	N-BUTANOL	No.	Yes.
1330-20-7	Xylene	No.	Yes.
67-56-1	METHANOL	No.	Yes.
50-00-0	Formaldehyde	No.	Yes.
112-34-5	2-(2-BUTOXYETHOXY)ETHANOL	No.	Yes.

EU Substances of Very High Concern

None

International Inventories.

TSCA Contains Non Listed Components

DSL

	Contains Non Listed Components
EINECS/ELINCS	Contains Non Listed Components
ENCS	Contains Non Listed Components
IECSC	Contains Non Listed Components
KECI	Contains Non Listed Components
PICCS	Contains Non Listed Components
AIIC	Contains Non Listed Components
NZIoC	Contains Non Listed Components

TSCA	United States Toxic Substances Control Act Section 8(b) Inventory.
DSL	Canadian Domestic Substances List.
EINECS/ELINCS	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.
ENCS	Japan Existing and New Chemical Substances.
IECSC	China Inventory of Existing Chemical Substances.
KECL	Korean Existing and Evaluated Chemical Substances.
PICCS	Philippines Inventory of Chemicals and Chemical Substances.
AIIC	Australian Inventory of Industrial Chemicals.
NZIoC	New Zealand Inventory of Chemicals.

15.2. Chemical safety assessment

No.

SECTION 16: Other information

Revision Date 7/16/2024

Indication of changes: Commission Regulation (EU) 2020/878: amending Annex II by introducing specific requirements regarding nanoforms of substances, adapting to the 6th and 7th revision of the GHS, and adding requirements regarding the Unique Formula Identifier (as set by Annex VIII to Regulation (EC) 1272/2008), endocrine disrupting properties, specific concentration limits, M-factors and acute toxicity estimates.

Legend.

N.D.	No data available.
N.I.	No information available.
N.A.	Not Applicable.
N.R.	Not relevant.

This safety datasheet complies with the requirements of Regulation (EC) No. 2020/878

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.