

1.4 Emergency telephone number

+45 45 93 38 00 (08.00 - 17.00)

See section 4 First aid measures.

Emergency telephone number (with hours of operation)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

1.1 Product identifier

Product name: Hempatex HI-Build 46410

Product identity: 4641019990
Product type: acrylic primer

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

Field of application: metal industry, ships and shipyards. buildings

Identified uses: Consumer applications, Industrial applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : HEMPEL A/S

Lundtoftegårdsvej 91 DK-2800 Kgs. Lyngby

Denmark

Tel.: + 45 45 93 38 00 hempel@hempel.com 18 November 2022

13 November 2021.

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226
Acute Tox. 4, H332
Skin Irrit. 2, H315
Aquatic Chronic 3, H412
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Date of issue:

Date of previous issue:

Hazard pictograms :





Signal word: Warning

Hazard statements : H226 - Flammable liquid and vapor.

H315 - Causes skin irritation. H332 - Harmful if inhaled.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

General: Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention: Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Avoid breathing vapor. Wash thoroughly after handling.

Response: IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and

wash it before reuse.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international

regulations.

Hazardous ingredients:

Supplemental label elements: ontains 1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene, n-butyl methacrylate and methyl

methacrylate. May produce an allergic reaction.

Special packaging requirements

Containers to be fitted with child-

resistant fastenings:

Not applicable.

Version: 0.05 Page: 1/16



#### **SECTION 2: Hazards identification**

Tactile warning of danger: Yes, applicable.

#### 2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result None known.

in classification:

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

#### 3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) N	lo. 1272/2008 [CLP]	Туре
Mene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥5 - <10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
dipropylene glycol dibenzoate	REACH #: 01-2119529241-49 EC: 248-258-5 CAS: 27138-31-4	≥1 - ≤3	Aquatic Chronic 3, H412	-	[1]
solvent naphtha (petroleum), light arom.	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≥1 - ≤3	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1] [2]
trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≤1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
1,3-bis(12-hydroxyocta- decanamide-N-methyle) benzene	REACH #: 01-0000016979-49 EC: 423-300-7	<1	Skin Sens. 1B, H317 Aquatic Chronic 4, H413	-	[1]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	-	[1] [2]
styrene	REACH #: 01-2119457861-32 EC: 202-851-5 CAS: 100-42-5	≤0.3	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 11.8 mg/l	[1]
n-butyl methacrylate	REACH #: 01-2119486394-28 EC: 202-615-1 CAS: 97-88-1 Index: 607-033-00-5	≤0.3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335	-	[1]
methyl methacrylate	REACH #: 01-2119452498-28 EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6	≤0.3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	-	[1] [2]
			See Section 16 for the full text above.	of the H statements declared	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### Type

Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

Version: 0.05 Page: 2/16



#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth

to an unconscious person

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate

treatment (first aid).

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15

minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms

persist, seek medical attention.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if

respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by

mouth. If unconscious, place in recovery position and get medical attention immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm

and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so

that vomit will not re-enter the mouth and throat.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that

fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

#### Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation: Harmful if inhaled Skin contact: Causes skin irritation.

Ingestion: No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

> pain or irritation watering

redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:

> irritation redness

Ingestion: No specific data.

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

Notes to physician: If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat

symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested

or inhaled.

Specific treatments: No specific treatment.

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Extinguishing media: Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray.

Not to be used: waterjet.

#### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or

mixture:

Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products: Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/

oxides

#### 5.3 Advice for firefighters

Version: 0.05 Page: 3/16



#### **SECTION 5: Firefighting measures**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

#### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.

#### 6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

#### 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Product/ingredient name	Exposure limit values
w/lene	EU OEL (Europe, 1/2022). [xylene, mixed isomers] Absorbed through skin.  TWA: 50 ppm 8 hours.  TWA: 221 mg/m³ 8 hours.  STEL: 100 ppm 15 minutes.  STEL: 442 mg/m³ 15 minutes.
ethylbenzene	EU OEL (Europe, 1/2022). Absorbed through skin.  STEL: 884 mg/m³ 15 minutes.  STEL: 200 ppm 15 minutes.  TWA: 442 mg/m³ 8 hours.  TWA: 100 ppm 8 hours.

Version: 0.05 Page: 4/16



#### **SECTION 8: Exposure controls/personal protection**

solvent naphtha (petroleum), light arom.	EU OEL (Europe). TWA: 120 mg/m³ 8 hours. Form: Tentativ
toluene	TWA: 120 mg/m o hours. Form: Tentativ TWA: 25 ppm 8 hours. Form: Tentativ EU OEL (Europe, 1/2022). Absorbed through skin.
	TWA: 192 mg/m³ 8 hours. TWA: 50 ppm 8 hours. STEL: 384 mg/m³ 15 minutes.
methyl methacrylate	STEL: 100 ppm 15 minutes.  EU OEL (Europe, 1/2022).
	TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.

#### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **Derived effect levels**

Product/ingredient name	Type	Exposure	Value	Population	Effects
rylene	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
ethylbenzene	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
•	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
lipropylene glycol dibenzoate	DNEL	Long term Dermal	10 mg/kg bw/day	Workers	Systemic
, .,	DNEL	Long term Inhalation	8.8 mg/m³	Workers	Systemic
solvent naphtha (petroleum), light arom.	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	150 mg/m³	Workers	Systemic
rizinc bis(orthophosphate)	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
, , , ,	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
oluene	DNEL	Long term Dermal	384 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	192 mg/m³	Workers	Systemic
styrene	DNEL	Long term Inhalation	85 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	406 mg/kg	Workers	Systemic
n-butyl methacrylate	DNEL	Long term Dermal	5 mg/kg bw/day	Workers	Systemic
•	DNEL	Long term Inhalation	415.9 mg/m³	Workers	Systemic
nethyl methacrylate	DNEL	Long term Inhalation	208 mg/m³	Workers	Systemic
•	DNEL	Long term Dermal	13.67 mg/kg bw/day	Workers	Systemic

#### Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value	Method Detail
<b>M</b> ene	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Fresh water sediment	12.46 mg/kg	-
	Marine water sediment	12.46 mg/kg	-
	Soil	2.31 mg/kg	-
	Sewage Treatment Plant	6.68 mg/l	-
ethylbenzene	Fresh water	0.1 mg/l	-
•	Marine water	0.01 mg/l	-
	Sewage Treatment Plant	9.6 mg/l	-
	Fresh water sediment	13.7 mg/kg	-
	Soil	2.68 mg/kg	-
dipropylene glycol dibenzoate	Fresh water	0.0037 mg/l	-
	Marine water	0.00037 mg/l	-
	Fresh water sediment	1.49 mg/kg	-
	Fresh water sediment	0.149 mg/kg	-
	Soil	1 mg/kg	-
	Sewage Treatment Plant	10 mg/l	-
trizinc bis(orthophosphate)	Fresh water	20.6 µg/l	-
	Marine water	6.1 µg/l	-
	Fresh water sediment	117.8 mg/kg dwt	-
	Marine water sediment	56.5 mg/kg dwt	-
	Soil	35.6 mg/kg dwt	-
	Sewage Treatment Plant	52 μg/l	-
toluene	Fresh water	0.68 mg/l	-
	Marine water	0.68 mg/l	-
	Sewage Treatment Plant	13.61 mg/l	-

Version: 0.05 Page: 5/16

# **Safety Data Sheet**

### **Hempatex HI-Build 46410**



#### **SECTION 8: Exposure controls/personal protection**

	Fresh water sediment	16.39 mg/kg	-
	Marine water sediment	16.39 mg/kg	-
	Soil	2.89 mg/kg	-
styrene	Fresh water	0.028 mg/l	-
	Marine water	0.014 mg/l	-
	Fresh water sediment	0.614 mg/kg	-
	Marine water sediment	0.307 mg/kg	-
	Sewage Treatment Plant	5 mg/l	-
	Soil	0.2 mg/kg	-
n-butyl methacrylate	Fresh water	0.017 mg/l	-
	Marine water	0.002 mg/l	-
	Sewage Treatment Plant	31.7 mg/l	-
	Fresh water sediment	4.73 mg/kg	-
	Marine water sediment	0.473 mg/kg	-
	Soil	0.935 mg/kg	-
methyl methacrylate	Fresh water	0.94 mg/l	-
	Marine water	0.94 mg/l	-
	Soil	1.47 mg/kg	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	5.74 mg/kg	-
formaldehyde	Fresh water	0.47 mg/l	-
	Marine water	0.47 mg/l	-
	Fresh water sediment	2.44 mg/kg	-
	Marine water sediment	2.44 mg/kg	-
	Soil	0.29 mg/kg	-
	Sewage Treatment Plant	0.19 mg/l	-

#### 8.2 Exposure controls

#### Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### Individual protection measures

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be

worn when soiling is so great that regular work clothes do not adequately protect skin against contact

with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking,

using lavatory, and at the end of day.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment

indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of

protection: chemical splash goggles.

Hand protection: Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The

quality of the chemical-resistant protective gloves must be chosen as a function of the specific

workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the

appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®

May be used: nitrile rubber

Short term exposure: neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)

Body protection: Personal protective equipment for the body should be selected based on the task being performed and

the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk

assessment indicates this is necessary. 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. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

#### **Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Version: 0.05 Page: 6/16



#### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : Black.

Odor : Solvent-like

pH: Testing not relevant or not possible due to nature of the product.

Melting point/freezing point: -94.96°C This is based on data for the following ingredient: xylene
Boiling point/boiling range: Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: 26°C (78.8°F)

Evaporation rate: Testing not relevant or not possible due to nature of the product.

Flammability: Highly flammable in the presence of the following materials or conditions: open flames, sparks and

static discharge and heat.

Lower and upper explosive

(flammable) limits:

0.8 - 6.7 vol %

Vapor pressure : 0.893 kPa This is based on data for the following ingredient: xylene Vapor density : Testing not relevant or not possible due to nature of the product.

Specific gravity: 1.216 g/cm<sup>3</sup>

Partition coefficient (LogKow): Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature : Lowest known value: 432°C (809.6°F) (xylene).

Decomposition temperature: Testing not relevant or not possible due to nature of the product.

Viscosity: Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

Explosive properties: Testing not relevant or not possible due to nature of the product.

Oxidizing properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 42 % Water % by weight : Weighted average: 0 %

VOC content: 513.4 g/l

TOC Content: Weighted average: 461 g/l
Solvent Gas: Weighted average: 0.116 m³/l

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

#### 10.2 Chemical stability

The product is stable.

#### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

#### 10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials. Reactive or incompatible with the following materials: reducing materials and acids.

#### 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides

Version: 0.05 Page: 7/16



#### **SECTION 11: Toxicological information**

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Mene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
•	LC50 Inhalation Vapor	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
	LD50 Oral	Rat	3523 mg/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
•	LD50 Oral	Rat	3500 mg/kg	-
dipropylene glycol dibenzoate	LC50 Inhalation Dusts and mists	Rat	>200 mg/l	4 hours
, .,	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	3914 mg/kg	-
solvent naphtha (petroleum), light arom.	LC50 Inhalation Vapor	Rat	6193 mg/m³	4 hours
	LD50 Dermal	Rabbit	3160 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
rizinc bis(orthophosphate)	LD50 Oral	Rat	>5000 mg/kg	-
1,3-bis(12-hydroxyocta-	LC50 Inhalation Dusts and mists	Rat	>5 mg/m <sup>3</sup>	4 hours
decanamide-N-methyle)benzene				
• •	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
oluene	LC50 Inhalation Vapor	Rat	>20 mg/l	4 hours
	LD50 Oral	Rat	636 mg/kg	-
styrene	LC50 Inhalation Gas.	Rat	2770 ppm	4 hours
	LC50 Inhalation Vapor	Rat	11800 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	2650 mg/kg	-
n-butyl methacrylate	LC50 Inhalation Gas.	Rat	4910 ppm	4 hours
•	LD50 Dermal	Rabbit	11300 uL/kg	-
	LD50 Oral	Rat	16 g/kg	-
methyl methacrylate	LC50 Inhalation Vapor	Rat	78000 mg/m <sup>3</sup>	4 hours
- -	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	7872 mg/kg	-

#### Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
rempatex HI-Build 46410 xylene ethylbenzene dipropylene glycol dibenzoate	3523 3500 3914	3433.2 1100	15605.3 5000	154.3 11	
solvent naphtha (petroleum), light arom. styrene n-butyl methacrylate methyl methacrylate	8400 2650 16000 7872	3160		11.8 78	

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
<b>M</b> ene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
•	Skin - Irritant	Rabbit	-	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
ethylbenzene	Eyes - Mild irritant	Rabbit	-	-
•	Respiratory - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams
dipropylene glycol dibenzoate	Eyes - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	-
solvent naphtha (petroleum), light	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters
arom.				
toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams
styrene	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams
-	Skin - Irritant	Rabbit	-	-
n-butyl methacrylate	Skin - Mild irritant	Rabbit	-	500 microliters

Version: 0.05 Page: 8/16

# **Safety Data Sheet**

### **Hempatex HI-Build 46410**



#### **SECTION 11: Toxicological information**

#### **Mutagenic effects**

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Reproductive toxicity

No known significant effects or critical hazards.

#### **Teratogenic effects**

No known significant effects or critical hazards.

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
toluene	Category 3		Narcotic effects
styrene	Category 3		Respiratory tract irritation
n-butyl methacrylate	Category 3		Respiratory tract irritation
methyl methacrylate	Category 3		Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
toluene	Category 2	-	-
styrene	Category 1	-	hearing organs

#### **Aspiration hazard**

Product/ingredient name	Result	
ethylbenzene	ASPIRATION HAZARD - Category 1	
toluene	ASPIRATION HAZARD - Category 1	
styrene	ASPIRATION HAZARD - Category 1	

#### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential chronic health effects

Sensitization: Contains 1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene, n-butyl methacrylate, methyl

methacrylate. May produce an allergic reaction.

#### 11.2 Information on other hazards

Endocrine disrupting properties: See Section 15 for details.

Other information: No additional known significant effects or critical hazards.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
<b>e</b> thylbenzene	Chronic NOEC <1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
dipropylene glycol dibenzoate	Acute LC50 4.9 mg/l	Algae	72 hours
	Acute LC50 19.3 mg/l	Daphnia	48 hours
	Acute LC50 3.7 mg/l	Fish	96 hours
solvent naphtha (petroleum), light arom.	Acute EC50 19 mg/l	Algae - Pseudokirchneriella subcapitata (green algae)	96 hours
	Acute EC50 6.14 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.22 mg/l	Fish - Oncorhynchus mykiss (rainbow trout)	96 hours
trizinc bis(orthophosphate)	Acute EC50 0.8 mg/l	Algae	72 hours
, , ,	Acute EC50 2.44 mg/l	Daphnia	48 hours
1,3-bis(12-hydroxyocta-decanamide- N-methyle)benzene	Acute LC50 >100 mg/l	Algae	72 hours
- ,	Acute LC50 >100 mg/l	Fish	96 hours
toluene	Chronic NOEC <500000 μg/l Fresh water Chronic NOEC 1000 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata Daphnia - Daphnia magna	96 hours 21 days
styrene	Chronic NOEC 63 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
n-butyl methacrylate	Chronic NOEC 2.6 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days

Version: 0.05 Page: 9/16



#### **SECTION 12: Ecological information**

#### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Mene	OECD 301F Ready	90 - 98 % - Readily - 28 days	-	-
	Biodegradability - Manometric			
	Respirometry Test			
	-	>60 % - Readily - 28 days	-	-
ethylbenzene	-	>70 % - Readily - 28 days	-	-
dipropylene glycol dibenzoate	-	87 % - Readily - 28 days	-	-
solvent naphtha (petroleum), light	-	>70 % - Readily - 28 days	-	-
arom.				
1,3-bis(12-hydroxyocta-decanamide-	-	5 % - 28 days	-	-
N-methyle)benzene				
toluene	-	100 % - Readily - 14 days	-	-
styrene	-	70.9 % - Readily - 28 days	-	-
	-	>60 % - Readily - 10 days	-	-
n-butyl methacrylate	OECD 301C Ready	88 % - Readily - 28 days	-	-
	Biodegradability - Modified MITI			
	Test (I)			

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Mene	-	-	Readily
ethylbenzene	-	-	Readily
dipropylene glycol dibenzoate	-	-	Readily
solvent naphtha (petroleum), light	-	-	Readily
arom.			-
1,3-bis(12-hydroxyocta-decanamide-	-	-	Not readily
N-methyle)benzene			-
toluene	-	-	Readily
styrene	-	-	Readily
n-butyl methacrylate	-	-	Readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
wene see the see that the see t	3.12	8.1 - 25.9	low
ethylbenzene	3.6	-	low
dipropylene glycol dibenzoate	3.9	-	low
solvent naphtha (petroleum), light arom.	-	10 - 2500	high
trizinc bis(orthophosphate)	-	60960	high
toluene	2.73	90	low
styrene	2.96	13.49	low
n-butyl methacrylate	2.99	-	low
methyl methacrylate	1.38	-	low

#### 12.4 Mobility in soil

Soil/water partition coefficient

No known data avaliable in our database.

 $(K_{\text{OC}})$ :

Mobility: No known data avaliable in our database.

#### 12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB		
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.									

#### 12.6 Endocrine disrupting properties

See Section 15 for details.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

Version: 0.05 Page: 10/16



#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC): 08 01 11\*

#### **Packaging**

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

#### **SECTION 14: Transport information**

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Trans	port hazard class(es)	14.4 PG*		Additional information
ADR/RID Class	UN1263	PAINT	3		III	No.	Tunnel code (D/E)
IMDG Class	UN1263	PAINT	3		III	No.	Emergency schedules F-E, S-E
IATA Class	UN1263	PAINT	3		III	No.	-

PG\* : Packing group

Env.\* : Environmental hazards

#### 14.6 Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

#### **SECTION 15: Regulatory information**

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

#### **Annex XIV**

None of the components are listed.

#### Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

#### Other EU regulations

Seveso category This product is controlled under the Seveso III Directive.

#### Seveso category

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

#### 15.2 Chemical Safety Assessment

Version: 0.05 Page: 11/16

# Safety Data Sheet

### **Hempatex HI-Build 46410**



#### **SECTION 16: Other information**

Abbreviations and acronyms: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

EUH statement = CLP-specific Hazard statement

RRN = REACH Registration Number DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration

Highly flammable liquid and vapor. Full text of abbreviated H statements: H225

H226

Flammable liquid and vapor. H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure. H373

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life. FUH066 Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]: Acute Tox. 4 **ACUTE TOXICITY - Category 4** 

AQUATIC HAZARD (ACUTE) - Category 1 Aquatic Acute 1 AQUATIC HAZARD (LONG-TERM) - Category 1 Aquatic Chronic 1 AQUATIC HAZARD (LONG-TERM) - Category 2 Aquatic Chronic 2 Aquatic Chronic 3 AQUATIC HAZARD (LONG-TERM) - Category 3 Aquatic Chronic 4 AQUATIC HAZARD (LONG-TERM) - Category 4

Asp. Tox. 1 ASPIRATION HAZARD - Category 1

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 Eve Irrit. 2

Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2 Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3 TOXIC TO REPRODUCTION - Category 2 Repr. 2 Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 Skin Sens. 1 SKIN SENSITIZATION - Category 1B Skin Sens. 1B

STOT RE 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 STOT RE 2 STOT SF 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
	On basis of test data
ACUTE TOXICITY (inhalation)	Calculation method
SKIN CORROSION/IRRITATION	Calculation method
AQUATIC HAZARD (LONG-TERM)	Calculation method

#### Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

Version: 0.05 Page: 12/16

# **Safe Use of Mixture Information Hempatex HI-Build 46410**



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

#### General description of the process covered

Indoor spray painting by professionals with efficient ventilation such as spray booth or local exhaust ventilation

This safe use information is linked to

: Professional spray painting, near-industrial setting - Level I

HMP I/PW 01a

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

**Operational conditions** 

Place of use : Indoor use

Range of application/Process

conditions

: Assumes a good standard of occupational hygiene and safety management has been implemented.

#### Risk management measures (RMM)

Contributing activity	Process category	Maximum duration	Ventilation  Type and air changes per hour		Respiratory	Eye	Hands
activity	(ies)	duration					
Preparation of material for application	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Industrial application of coatings by spraying	PROC07	More than 4 hours	Local exhaust ventilation	Refer to relevant technical standards	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	None	None
Cleaning	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.







# Safe Use of Mixture Information Hempatex HI-Build 46410



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

#### General description of the process covered

Indoor painting by professionals by dipping or with brush, roller, putty knife etc. with enhanced ventilation or local exhaust ventilation (LEV)

This safe use information is linked to

: Professional low-energy painting, near-industrial setting - Level I

HMP I/PW 02a

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

**Operational conditions** 

Place of use : Indoor use

Range of application/Process

conditions

: Assumes a good standard of occupational hygiene and safety management has been implemented.

#### Risk management measures (RMM)

Contributing activity	Process category	Maximum duration	Ventilation  Type and air changes per hour		Respiratory	Eye	Hands
activity	(ies)	uuration					
Preparation of material for application	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Industrial application of coatings by other than spraying	PROC10	More than 4 hours	Local exhaust ventilation	Refer to relevant technical standards	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	None	None
Cleaning	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.







# **Safe Use of Mixture Information Hempatex HI-Build 46410**



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

#### General description of the process covered

Outdoor spray painting by professionals for specialist applications, with respiratory protection

Wear suitable coveralls to prevent exposure to the skin. Wear chemical-resistant gloves (tested to EN374) in combination with specific

activity training.

This safe use information is

linked to

: Professional spray painting, near-industrial setting - Level VI

HMP I/PW 05f

: Industrial uses - Professional uses Sector(s) of use

Product category(ies) : Coatings and paints, thinners, paint removers

**Operational conditions** 

Place of use

: Outdoor use

Range of application/Process

conditions

: Assumes a good standard of occupational hygiene and safety management has been implemented. Assumes that activities are undertaken with appropriate and well maintained equipment by trained

personnel operating under supervision.

#### Risk management measures (RMM)

Contributing	Process	Maximum	Ventilation  Type and air changes per hour		Respiratory	Eye	Hands
activity	(ies)	duration					
Preparation of material for application	PROC05	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Industrial application of coatings by spraying	PROC07	More than 4 hours	Outdoors	3 - 5	Use a properly fitted, air- purifying or air-fed respirator. EN 14594 with an assigned protection factor of at least 20.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Cleaning	PROC05	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Waste management	PROC08b	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.









# **Safe Use of Mixture Information Hempatex HI-Build 46410**



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

#### General description of the process covered

Outdoor painting by professionals by dipping or with brush, roller, putty knife etc.

This safe use information is linked to

: Professional low-energy painting, near-industrial setting - Level V

HMP I/PW 06e

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

**Operational conditions** 

Place of use : Outdoor use

Range of application/Process

conditions

: Assumes a good standard of occupational hygiene and safety management has been implemented.

#### Risk management measures (RMM)

Contributing activity	Process category	Maximum duration	Ventilation		Respiratory	Eye	Hands
activity	(ies)	duration	Type and air changes per hour				
Preparation of material for application	PROC05	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Industrial application of coatings by other than spraying	PROC10	More than 4 hours	Outdoors	3 - 5	Use a properly fitted, air- purifying or air-fed respirator. EN 14594 with an assigned protection factor of at least 20.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Cleaning	PROC05	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Waste management	PROC08b	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.







