

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II



Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
Date of printing: 05.11.2025

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

1.1 Product identifier

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
Unique Formula Identifier (UFI-Code): TG40-G0Q7-K00V-7WG8
Product type: polyurethane paint (base for multi-component product)

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

Field of application: metal industry
Identified uses: Industrial applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet:

Producer/Supplier: Bisdorf GmbH
Industriestraße 49-51
D-52224 Stolberg
Telephone: +49 (0) 2402 / 71048
Telefax: +49 (0) 2402 / 75465
E-Mail address: bisdorf-lacke@arcor.de

1.4 Emergency telephone number

Emergency information: Information Center against Poisons
University Bonn
Telephone number: +49 (0)228 / 19240
Date of issue: 05.11.2025
Date of previous issue: 02.11.2023

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

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

Classification acc. to GHS

Section	Hazard class	Hazard class and category	Hazard statement
2.6	flammable liquid	Flam. Liq. 3	H226
3.2	skin corrosion/irritation	Skin Irrit. 2	H315
3.8R	specific target organ toxicity - single exposure (respiratory tract irritation)	STOT SE 3	H335
3.8D	specific target organ toxicity - single exposure (narcotic effects, drowsiness)	STOT SE 3	H336

See Section 11 for more detailed information on health effects and symptoms.

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Hazard pictograms:



PBT and vPvB assessment:
This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Classification 1272/2008/EC (CLP)	Type
xylene (mixture of isomers)	REACH: 01-2119488216-32 CAS: 1330-20-7 EG: 215-535-7	5-10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373	[1] [2]
ethylbenzene	REACH: 01-2119489370-35 CAS: 100-41-4 EG: 202-849-4	1-5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 2, H373 (hearing organs)	[1] [2]
solvent naphtha (petroleum), light arom.	REACH: 01-2119455851-35 CAS: *64742-95-6 EG: 265-199-0 M-Faktor: 1	1-5	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411	[1] [2]
2-methoxy-1-methylethylacetate (PMA)	REACH: 01-2119475791-29 CAS: 108-65-6 EG: 203-603-9	1-5	Flam. Liq. 3, H226	[2]
n-butyl acetate	REACH: 01-2119485493-29 CAS: 123-86-4 EG: 204-658-1	10-15	Flam. Liq. 3, H226 STOT SE 3, H336	[1]
trizinc bis(orthophosphate)	REACH: 01-2119485044-40 (90%) 01-2119490076-36 (10%) CAS: 7779-90-0 EG: 231-944-3	<5	Mixture containing 90% of Zinc Phosphate and 10% of a non hazardous additive. This Mixture is not subjected to classification and labelling (see chapter 12).	[2]

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

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

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4.1. Description of first aid measures

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters

Additional information: The product is flammable. Use water spray to keep fire-exposed containers cool. Use extinguishing media suitable for surrounding materials. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions

6.3 Methods and material for containment and cleaning up

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

7.2 Conditions for safe storage, including any incompatibilities

German storage class: 10 - Combustible liquids neither in Storage Class 3

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

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Product/ingredient name	CAS-Nr.	Notation	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
xylene (mixture of isomers)	1330-20-7	skin	IOELV	50	221	100	442	2017/164/EU
ethylbenzene	100-41-4	skin	IOELV	100	442	200	884	2017/164/EU
solvent naphtha (petroleum), light arom.	64742-95-6		IOLEV	25	120			2017/164/EU
2-methoxy-1-methyl-ethylacetate (PMA)	108-65-6		IOLEV	50	275	270	550	2000/39/EG
n-butyl acetate	123-86-4	skin	MAK	2	11	4	22	DFG/GER
trizinc bis(orthophosphate)	7779-90-0		AGW		6			TRGS 900/GER

Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average

DNELs/DMELs

Product/ingredient name		
xylene (mixture of isomers)		
Oral	DNEL (population)	1,6 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (worker)	180 mg/kg bw/day (Long-term - systemic effects)
Inhalation	DNEL (population)	108 mg/kg bw/day (Long-term - systemic effects)
	DNEL (worker)	77 mg/m ³ (Long-term - systemic effects)
		289 mg/m ³ (Acute - systemic and local effects)
	DNEL (population)	14,8 mg/m ³ (Long-term - systemic effects)
		174 mg/m ³ (Acute - systemic and local effects)

Product/ingredient name		
ethylbenzene		
Dermal	DNEL (worker)	180 mg/kg bw/day (Long-term - systemic effects)
Inhalation	DNEL (worker)	77 mg/m ³ (Long-term - systemic effects)
		289 mg/m ³ (Acute - systemic and local effects)

Product/ingredient name		
solvent naphtha (petroleum), light arom.		
Oral	DNEL (population)	11 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (worker)	25 mg/kg bw/day (Long-term - systemic effects)
Inhalation	DNEL (population)	11 mg/kg bw/day (Long-term - systemic effects)
	DNEL (worker)	150 mg/m ³ (Long-term - systemic effects)
	DNEL (population)	32 mg/m ³ (Long-term - systemic effects)

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Product/ingredient name		
2-methoxy-1-methylethylacetate (PMA)		
Oral	DNEL (population)	36 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (worker)	796 mg/kg bw/day (Long-term - systemic effects)
	DNEL (population)	320 mg/kg bw/day (Long-term - systemic effects)
Inhalation	DNEL (worker)	275 mg/m ³ (Long-term - systemic effects)
	DNEL (population)	33 mg/m ³ (Long-term - systemic effects)

Product/ingredient name		
n-butyl acetate		
Oral	DNEL (population)	2 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (worker)	11 mg/kg bw/day (Long-term - systemic effects)
	DNEL (population)	6 mg/kg bw/day (Long-term - systemic effects)
Inhalation	DNEL (worker)	600 mg/m ³ (Acute - local effects)
		300 mg/m ³ (Long-term - systemic effects)
	DNEL (population)	300 mg/m ³ (Acute - local effects)
		35,7 mg/m ³ (Long-term - systemic effects)

Product/ingredient name		
trizinc bis(orthophosphate)		
Inhalation	DNEL (worker)	5 mg/m ³ (Long-term - systemic effects)

PNECs

Product/ingredient name	
xylene (mixture of isomers)	
PNEC aqua	0,327 mg/l (fresh water) 0,327 mg/l (marine water)
PNEC	6,58 mg/l (STP (sewage treatment plant)) 2,31 mg/kg dw (soil)
PNEC sediment	12,46 mg/kg dw (fresh water) 12,46 mg/kg dw (marine water)

Product/ingredient name	
ethylbenzole	
PNEC aqua	0,1 mg/l (fresh water) 0,01 mg/l (marine water)
PNEC	6,58 mg/l (STP (sewage treatment plant)) 2,68 mg/kg dw (soil)
PNEC sediment	13,7 mg/kg dw (fresh water) 1,37 mg/kg dw (marine water)

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Product/ingredient name	
2-methoxy-1-methylethylacetate (PMA)	
PNEC aqua	0,635 mg/l (fresh water) 0,064 mg/l (marine water)
PNEC	100 mg/l (STP (sewage treatment plant)) 0,29 mg/kg dw (soil)
PNEC sediment	3,29 mg/kg dw (fresh water) 0,329 mg/kg dw (marine water)

Product/ingredient name	
n-butyl acetate	
PNEC aqua	0,18 mg/l (fresh water) 0,018 mg/l (marine water)
PNEC	35,6 mg/l (STP (sewage treatment plant)) 0,09 mg/kg dw (soil)
PNEC sediment	0,981 mg/kg dw (fresh water) 0,098 mg/kg dw (marine water)

Product/ingredient name	
trizinc bis(orthophosphate)	
PNEC aqua	20,6 µg/l (fresh water) 6,1 µg/l (marine water)
PNEC	52 µg/l (STP (sewage treatment plant)) 106,8 mg/kg dw (soil)
PNEC sediment	235,6 mg/kg mg/kg dw (fresh water) 113 mg/kg dw (marine water)

(CAS 64742-95-6) - Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving. PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

8.2 Exposure controls / personal protection

Engineering measures

Refer to protective measures listed in sections 7.

Personal protective equipment:

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 approved/certified respirator or equivalent.

Hand protection

If there is a potential for product skin contact, use of gloves tested to e.g. EN 374 will provide sufficient protection. Protective gloves should in any case be tested for workplace-specific suitability (e.g. mechanical resistance, product compatibility, antistatic properties). Comply with instructions and information provided by the glove manufacturer concerning use, care and replacement of the gloves. Replace protective gloves immediately upon damage or at the first signs of wear. As far as possible, plan work procedures so that wearing gloves will not be necessary.

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	Long term exposure	Short term exposure
Recommended gloves should be made of	Viton®	Nitril.
Material thickness	>0,7 mm	>0,4 mm
Permeation time	>480 min	>480 min

Eye protection

Safety goggles with lateral shielding (DIN EN 166)

Body protection

Usual working clothes for the chemical industry, suitable for the job.

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: Fluid

Colour: RAL- Colours

Odor: Characteristic

Odor threshold: Not relevant for the hazard classification of the product.

Security-relevant basic data

Parameter	
pH-value	Not applicable.
Melting point/Melting range	<-25 °C
Boiling point/Boiling range	136 - 145 °C
Flash point	~23-27 °C (IP 170 (ABEL))
Flammability (solid / gas)	Not applicable.
Ignition temperature	~460 ° C (lowest value of the individual components)
Decomposition temperature	Not determined.
Auto-ignition temperature	The product is not self-igniting.
Explosive properties	Product is not explosive. However, formation of explosive air/steam mixtures as possible.
Explosion limits Lower Upper Oxidizing properties	1 %(Vol) 7 %(Vol) Not determined
Vapour pressure	10 hPa (20 °C)
Density	~1,41 g/cm ³ (20 °C)
Vapor density	Not determined
Evaporation rate	No data available.

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Parameter	
Solubility in Miscibility with water	Organic solvents (see point 3) 0.175 g/l
Partition coefficient: (n-octanol/water)	Testing not relevant or not possible due to nature of the product.
Viscosity (expiry time after DIN 53211) Dynamic: Kinematic:	structured viscous
Solvent separation test	< 3% (20°C)

9.2. Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

General information: The product is stable.

10.3 Possibility of hazardous reactions

General information: Rubber and other synthetic material can be affected.

10.4 Conditions to avoid

General information: The product is flammable. Keep away from excessive heat, sparks or open fire.

10.5 Incompatible materials

General information: oxidising agents, acids

10.6 Hazardous decomposition products

General information: Thermal disintegration depends to a great extent on the external conditions. A complex mixture of solids, liquids and gases forms in the air, including among other substances carbon dioxide, carbon monoxide and other organic compounds, when this material is burnt or is thermally or oxidatively degraded.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product/ingredient name	Result	Species	Dose	Exposure
xylene (mixture of isomers)	LC50 Inhalation Gas	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17,2 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
solvent naphtha (petroleum), light arom.	LC50 Inhalation Vapour	Rat	>6153 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>3160 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
2-methoxy-1-methylethylacetate (PMA)	LC50 Inhalation Vapour	Rat	> 10,8 mg/l	6 hours
	LD50 Dermal	Rabbit	> 5 000 mg/kg	-
	LD50 Oral	Rat	> 5 000 mg/kg	-
	LD50 Oral	Rat	> 5 000 mg/kg	-
n-butyl acetate	LC50 Inhalation Gas	Rat	2730 ppm	4 hours
	LC50 Inhalation Vapour	Rat	>21 mg/l	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
trizinc bis(orthophosphate)	LD50 Oral	Rat	10768 mg/kg	-
	LD50 Oral	Rat	>5.000 mg/kg	-

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Acute toxicity estimates

Route	ATE value
Dermal	23529 mg/kg
Inhalation (vapors)	129 mg/l/4h

Corrosion/Irritation

Product/ingredient name	Result	Species	Score	Exposure
xylene (mixture of isomers)	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
ethylbenzene	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams
	Respiratory - Mild irritant	Rabbit	-	-
solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	-
2-methoxy-1-methylethylacetate (PMA)	Eyes - Mild irritant	Rabbit	-	24 hours 100 milligrams
	Respiratory - Mild irritant	Rabbit	-	24 hours 500 milligrams
n-butyl acetate	Eyes - Mild irritant	Rabbit	-	-
	Eyes - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams
	Respiratory - Mild irritant	Rabbit	-	24 hours 10 milligrams

Sensitiser

Remarks

Skin: No evidence of sensitizing effects.

Respiratory: May cause respiratory irritation.

Mutagenicity

Remarks: No evidence of mutagenic effects.

Carcinogenicity

Remarks: No evidence of carcinogenic effects.

Reproductive toxicity

Remarks: No evidence that the substance is toxic for reproduction.

Teratogenicity

Remarks: No evidence that the substance may cause birth defects.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene (mixture of isomers)	Category 3	Not applicable.	Respiratory tract Irritation
solvent naphtha (petroleum), light arom.	Category 3	Not applicable.	Narcotic effects
n-butyl acetate	Category 3	Not applicable.	Respiratory tract Irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene (mixture of isomers)	Category 2	Not determined	Hearing organs
ethylbenzene	Category 2	Not determined	Hearing organs

Aspiration hazard

Product/ingredient name	Result
xylene (mixture of isomers)	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1

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Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

11.2 Endocrine disrupting properties

See Section 2 for details.

11.3 Other hazards

The product is flammable. Keep away from excessive heat, sparks or open fire. In use, may form flammable/explosive vapourair mixture. Electrostatic charges may be generated during pumping, release of which may cause a fire. The vapour/gas is heavier than air and will spread along the ground. Vapour may travel a considerable distance to source of ignition and flash back. Aspiration hazard if swallowed. Can enter lungs and cause damage.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
xylene (mixture of isomers)	Acute EC50 3,82 mg/l Acute EC50 4,7 mg/l	Daphnie - Daphnia magna Algae- Pseudokirchneriella subcapitata	48 hours 72 hours
ethylbenzene	Acute LC50 7,6 mg/l Acute EC50 2,4 mg/l Acute EC50 4,6 mg/l	Fish - Oncorhynchus mykiss Daphnie - Daphnia magna Algae - Pseudokirchneriella subcapitata	96 hours 48 hours 72 hours
solvent naphtha (petroleum), light arom.	Acute LC50 7 mg/l Acute EC50 3,2 mg/l Acute EC50 19 mg/l	Fish - Oncorhynchus mykiss Daphnie - Daphnia magna Algae - Pseudokirchneriella subcapitata	96 hours 48 hours 72 hours
2-methoxy-1-methylethylacetate (PMA)	Acute LC50 9.22 mg/l Acute EC50 408 mg/l Acute EC50 1000 mg/l	Fish - Oncorhynchus mykiss Daphnie - Daphnia magna Algae - Pseudokirchneriella subcapitata	96 hours 48 hours 72 hours
n-butyl acetate	Acute LC50 134 mg/l Acute LC50 44 mg/l Acute EC50 647,7 mg/l	Fish - Leuciscus idus Daphnie - Daphnia magna Algae - Selenastrum capricornutum	96 hours 48 hours 72 hours
trizinc bis(orthophosphate)	Acute LC50 18 mg/l Acute EC50 >100 mg/l* Acute EC50 >100 mg/l*	Fish - Oncorhynchus mykiss Daphnie - Daphnia magna Algae- Pseudokirchneriella subcapitata	96 hours 48 hours 72 hours
	Acute LC50 >100 mg/l* NOEC > 1 mg/l	Fish - Oncorhynchus mykiss Daphnie - Daphnia magna	96 hours 21 days

* According to GHS 2009 and CLP regulation 1272/2008/EC this mixture does not meet with aquatic classification and labelling criteria (regulation 1272/2008/EC Article 6 1, data generated in accordance with any of the methods referred to, in Article 8(3), on the mixture itself "NOVINOX ACE 20", and GHS 2009 chapter 1.3.2.3 a)).

12.2 Persistence and degradability

Product/ingredient name	Result
xylene (mixture of isomers)	87,8 % - 28 days
ethylbenzene	>70 % - 28 days
solvent naphtha (petroleum), light arom.	78 % - 28 days
2-methoxy-1-methylethylacetate (PMA)	96 % - 28 days
n-butyl acetate	90 % - 28 days

Remarks: The mixture is, according to the desired resistance, not readily biodegradable.

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12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene (mixture of isomers)	3.16	8.1 - 25.9	low
ethylbenzene	3.6	-	low
solvent naphtha (petroleum), light arom.	3.7 bis 4.5	10 - 2500	high
2-methoxy-1-methylethylacetate (PMA)	<1	-	low
n-butyl acetate	2.3	3.1	low
trizinc bis(orthophosphate)	-	60960	high

12.4 Mobility in soil

Soil/water partition coefficient (KOC): Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	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 2 for details.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



The generation of waste should be avoided or minimised 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 minimised 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 no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env* Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No. <u>Tunnel code</u> (D/E)
IMDG Class	UN1263	PAINT	3 	III	No. <u>Emergency schedules</u> F-E, S-E

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	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env* Additional information
IATA Class	UN1263	Paint	3 	III	No. -

Env.* : Environmental hazards

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.

Not applicable.

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

[14]

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DNEL	Derived No-Effect Level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
IOELV	indicative occupational exposure limit value
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	short-term exposure limit
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative

Full text of classifications [CLP/GHS]:

Acute Tox. 4, H312 ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332 ACUTE TOXICITY (inhalation) - Category 4
Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2
Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 3, H225 FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1
STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2
STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method

Notice to reader

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 performance 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.

Annex to the extended Safety Data Sheet (eSDS)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
Date of printing: 05.11.2025



n-butyl acetate

Annex: Exposure scenario 1

SECTION 1: Title section

Short title of the exposure scenario

Use in formulation. (Industrial)

Formulation & (re)packing of substances and mixtures (Industrial)

Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

Process category

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC5 Mixing or blending in batch processes

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15 Use as laboratory reagent

Environmental release category ERC2 Formulation into mixture

Description of the activities / processes covered in the Exposure Scenario

Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.

SECTION 2: Conditions of use affecting exposure

The usual precautionary measures should be adhered to in handling the chemicals.

Duration and frequency 8hrs (full working shift).

Worker

Frequency of use:

5 workdays/week.

Environment The product may not be released into the environment without control.

Physical parameters

Physical state

Fluid

Vapour pressure: 11.6 hPa (20 °C)

Concentration of the substance in the mixture Covers use of substance / product up to 100%

Other operational conditions

Emission days / year: 225

Assumes a good basic standard of occupational hygiene is implemented.

Assumes use at ambient temperature (unless stated differently).

Other operational conditions affecting environmental exposure

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Flow rate of receiving surface water: 18000 m³/day.

Release fraction to air from process (initial release prior to RMM) / wide dispersive use (regional only): 3.6 %.

Release fraction to wastewater from process (initial release prior to RMM) / wide dispersive use: 0 %.

Release fraction to soil from process (initial release prior to RMM) / wide dispersive use (regional only): 0 %.

Other operational conditions affecting worker exposure

Clean working place and equipment every day. Avoid splashing. Remove spilled product immediately.

Keep container tightly closed in a cool place.

Avoid contact with the skin and eyes.

Annex to the extended Safety Data Sheet (eSDS)

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Other operational conditions affecting consumer exposure during the use of the product

Not applicable.

Risk management measures

Ensure that personal protective measures are used at all activities.

Wear suitable gloves tested to EN374 during the activities where excessive skin contact is possible.

Eye Protection – suitable eye protection should be worn when handling product if there is a risk of splashing.

Worker protection

General exposures / Use (closed systems) PROC1 / PROC2 / PROC3:

Material transfers Drum/batch transfers (Non-dedicated facility) PROC8b:

Material transfers Drum/batch transfers (dedicated facility) PROC8b:

Laboratory activities (PROC15):

No other specific measures identified.

Mixing operations (open systems) PROC5:

Material transfers Drum/Batch transfer (Non-dedicated facility) PROC8a:

Filling of drums and small containers (PROC 9):

Small scale weighing PROC9:

Use local exhaustion at places where emission can occur.

Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

The employer must ensure that the necessary personal protective devices are available and applied accordingly to the instructions.

Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

Personal protective measures

Detailed measures on hand protection according to Safety Data Sheet, section 8.

Do not inhale gases / fumes / aerosols.

Measures for consumer protection Not relevant for this Exposure Scenario.

Environmental protection measures

Air

Treatment of air emissions is not required for the purposes of REACH compliance but may be needed to comply with other environmental legislation.

Water

Size of sewage treatment plant (m³/d): 2000

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/day): 119631

Prevent discharge of undissolved substance to or recover from onsite wastewater.

Soil No special measures required.

Disposal measures

Must not be disposed of with household waste. Do not allow to reach sewage system.

Disposal must be made according to official regulations.

SECTION 3: Exposure estimation

Worker (oral) No significant oral exposure.

Worker (dermal)

PROC 2, 5, 8a, 8b:

Exposure estimate: 1.3714 mg/kg/day

RCR: 0.124675

PROC 3, 9:

Exposure estimate: 0.6857 mg/kg/day

RCR: 0.06234

Annex to the extended Safety Data Sheet (eSDS)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
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PROC 15:

Exposure estimate: 0.3429 mg/kg/day

RCR: 0.03117

Worker (inhalation)

PROC 2, 5, 8a, 9:

Exposure estimate: 24.2 mg/m³

RCR: 0.080665

PROC 3, 15:

Exposure estimate: 48.3993 mg/m³

RCR: 0.16133

PROC 8b:

Exposure estimate: 120.9982 mg/m³

RCR: 0.40333

Environment

Highest estimated Values for ERC2:

Risc characterisation ratio (RCR): 0.2229

Consumer Not relevant for this Exposure Scenario.

SECTION 4: Guidance for downstream users

The exposure estimation was carried out in accordance with ECETOC TRA.

Version 3. <http://www.ecetoc.org/tra>

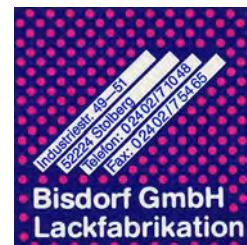
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/ Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/ Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Annex to the extended Safety Data Sheet (eSDS)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
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Annex: Exposure scenario 2

SECTION 1: Title section

Short title of the exposure scenario Uses in Coatings - Industrial

Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

Process category

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4 Chemical production where opportunity for exposure arises

PROC5 Mixing or blending in batch processes

PROC7 Industrial spraying

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC10 Roller application or brushing

PROC13 Treatment of articles by dipping and pouring

PROC15 Use as laboratory reagent

Environmental release category

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

Description of the activities / processes covered in the Exposure Scenario

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

SECTION 2: Conditions of use affecting exposure

The usual precautionary measures should be adhered to in handling the chemicals.

Duration and frequency 8hrs (full working shift).

Worker

Frequency of use:

5 workdays/week.

Environment The product may not be released into the environment without control.

Physical parameters

Physical state

Fluid

Vapour pressure: 11.6 hPa (20 °C)

Concentration of the substance in the mixture Covers use of substance / product up to 100%

Used amount per time or activity Annual site tonnage (tons per year): 43000

Other operational conditions

Emission days / year: 225

Assumes a good basic standard of occupational hygiene is implemented.

Assumes use at ambient temperature (unless stated differently).

Other operational conditions affecting environmental exposure

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Flow rate of receiving surface water: 18000 m³/day.

Release fraction to air from process (initial release prior to RMM) / wide dispersive use (regional only): 0.8 %.

Release fraction to wastewater from process (initial release prior to RMM) / wide dispersive use: 2 %.

Release fraction to soil from process (initial release prior to RMM) / wide dispersive use (regional only): 0 %.

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
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Other operational conditions affecting worker exposure

Clean working place and equipment every day. Avoid splashing. Remove spilled product immediately.
Keep container tightly closed in a cool place.
Avoid contact with the skin and eyes.

Other operational conditions affecting consumer exposure during the use of the product

Not applicable.

Risk management measures

Ensure that personal protective measures are used at all activities.
Wear suitable gloves tested to EN374 during the activities where excessive skin contact is possible.
Eye Protection – suitable eye protection should be worn when handling product if there is a risk of splashing.

Worker protection

General exposures / Use (closed systems) PROC1 / PROC2 / PROC3:

General exposures / Use (open systems) PROC4:

Mixing operations (open systems) PROC5:

No other specific measures identified.

Spraying PROC7:

Daily cleaning of equipment and work area. It must be ensured that the work is carried out outside the breathing zone of the worker (head-product distance greater than 1m). Regular inspection and maintenance of equipment and machinery.

Carry out in a vented booth or extracted enclosure.

Material transfers Drum/Batch transfer (Non-dedicated facility) PROC8a:

Use local exhaust at places where emission can occur.

Material transfers Drum/batch transfers (Non-dedicated facility) PROC8b:

Material transfers Drum/batch transfers (dedicated facility) PROC8b:

Transfer via enclosed lines.

Clear transfer lines prior to de-coupling.

Apply by Rolling or Brushing (PROC10):

Treatment by dipping and pouring (PROC13):

Provide a good standard of general or controlled ventilation (10 to 15 air changes per hour).

Use of a local source exhaust with adequate effectiveness.

Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaust or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

The employer must ensure that the necessary personal protective devices are available and applied accordingly to the instructions.

Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

Personal protective measures

Detailed measures on hand protection according to Safety Data Sheet, section 8.

Do not inhale gases / fumes / aerosols.

Measures for consumer protection Not relevant for this Exposure Scenario.

Environmental protection measures

Air

Treatment of air emissions is not required for the purposes of REACH compliance but may be needed to comply with other environmental legislation.

Water

Size of sewage treatment plant (m³/d): 2000

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/day): 1080.7

Prevent discharge of undissolved substance to or recover from onsite wastewater.

Soil No special measures required.

Disposal measures

Must not be disposed of with household waste. Do not allow to reach sewage system.

Disposal must be made according to official regulations.

Annex to the extended Safety Data Sheet (eSDS)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
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SECTION 3: Exposure estimation

Worker (oral) No significant oral exposure.

Worker (dermal)

PROC 1:

Exposure estimate: 0.0343 mg/kg/day

RCR: 0.003117

PROC 2, 5, 8a, 8b, 13:

Exposure estimate: 1.3714 mg/kg/day

RCR: 0.124675

PROC 3, 4:

Exposure estimate: 0.6857 mg/kg/day

RCR: 0.06234

PROC 7:

Exposure estimate: 4.2857 mg/kg/day

RCR: 0.3896

PROC 10:

Exposure estimate: 2.7429 mg/kg/day

RCR: 0.24935

PROC 15:

Exposure estimate: 0.3429 mg/kg/day

RCR: 0.03117

Worker (inhalation)

PROC 1:

Exposure estimate: 0.0484 mg/m³

RCR: 0.000161

PROC 2, 5, 8a, 10, 13:

Exposure estimate: 24.2 mg/m³

RCR: 0.080665

PROC 3, 15:

Exposure estimate: 48.3993 mg/m³

RCR: 0.16133

PROC 4:

Exposure estimate: 96.7986 mg/m³

RCR: 0.3227

PROC 7:

Exposure estimate: 0.0001 mg/m³

RCR: 0

PROC 8b:

Exposure estimate: 120.9982 mg/m³

RCR: 0.40333

Environment

Highest estimated Values for ERC4:

Risc characterisation ratio (RCR): 0.9254

Consumer Not relevant for this Exposure Scenario.

SECTION 4: Guidance for downstream users

The exposure estimation was carried out in accordance with ECETOC TRA.

Version 3. <http://www.ecetoc.org/tra>

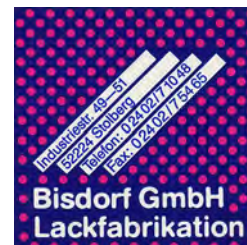
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/ Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/ Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Annex to the extended Safety Data Sheet (eSDS)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
Date of printing: 05.11.2025



Annex: Exposure scenario 3

SECTION 1: Title section

Short title of the exposure scenario Uses in Coatings - Professional

Sector of Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Process category

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4 Chemical production where opportunity for exposure arises

PROC5 Mixing or blending in batch processes

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC10 Roller application or brushing

PROC11 Non industrial spraying

PROC13 Treatment of articles by dipping and pouring

PROC15 Use as laboratory reagent

PROC19 Manual activities involving hand contact

Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

Description of the activities / processes covered in the Exposure Scenario

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

SECTION 2: Conditions of use affecting exposure

The usual precautionary measures should be adhered to in handling the chemicals.

Duration and frequency 8hrs (full working shift).

Worker

Frequency of use:

5 workdays/week.

Environment The product may not be released into the environment without control.

Physical parameters

Physical state

Fluid

Vapour pressure: 11.6 hPa (20 °C)

Concentration of the substance in the mixture Covers use of substance / product up to 100%

Used amount per time or activity Annual site tonnage (tons per year): 2000

Other operational conditions

Emission days / year: 225

Assumes a good basic standard of occupational hygiene is implemented.

Assumes use at ambient temperature (unless stated differently).

Other operational conditions affecting environmental exposure

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Flow rate of receiving surface water: 18000 m³/day.

Release fraction to air from process (initial release prior to RMM) / wide dispersive use (regional only): 99 %.

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

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Release fraction to wastewater from process (initial release prior to RMM) / wide dispersive use: 1 %.
Release fraction to soil from process (initial release prior to RMM) / wide dispersive use (regional only): 0 %.

Other operational conditions affecting worker exposure

Clean working place and equipment every day. Avoid splashing. Remove spilled product immediately.
Keep container tightly closed in a cool place.
Avoid contact with the skin and eyes.

Other operational conditions affecting consumer exposure during the use of the product

Not applicable.

Risk management measures

Ensure that personal protective measures are used at all activities.
Wear suitable gloves tested to EN374 during the activities where excessive skin contact is possible.
Eye Protection – suitable eye protection should be worn when handling product if there is a risk of splashing.

Worker protection

General exposures / Use (closed systems) PROC1 / PROC2 / PROC3:

General exposures / Use (open systems) PROC4:

Mixing operations (open systems) PROC5:

Laboratory activities (PROC15):

No other specific measures identified.

Material transfers Drum/Batch transfer (Non-dedicated facility) PROC8a:

Limit the substance content in the product to 25%.

Use local exhaust at places where emission can occur.

Material transfers Drum/batch transfers (Non-dedicated facility) PROC8b:

Material transfers Drum/batch transfers (dedicated facility) PROC8b:

Transfer via enclosed lines.

Clear transfer lines prior to de-coupling.

Apply by Rolling or Brushing (PROC10):

Treatment by dipping and pouring (PROC13):

Provide a good standard of general or controlled ventilation (10 to 15 air changes per hour).

Spraying (PROC 11):

Daily cleaning of equipment and work area. It must be ensured that the work is carried out outside the breathing zone of the worker (head-product distance greater than 1m). Regular inspection and maintenance of equipment and machinery.

Carry out in a vented booth or extracted enclosure.

Manual Spraying Indoor (PROC11) bis 45%:

Limit the substance content in the product to 45%.

It must be ensured that manual activity is minimized. Avoid frequent and direct contact with the substance.

Checks to verify the correct application of risk minimization measures and Compliance with the conditions of use are established. Daily cleaning of equipment and work area. Regular inspection and maintenance of equipment and machinery. Avoid splashes. Make sure doors and windows are open (general ventilation).

Use of a local source exhaust with adequate effectiveness.

Or:

Wearing a half mask with filter type P2L or better.

Hand application - fingerpaints, pastels, adhesives. PROC19:

Use local exhaust at places where emission can occur.

Avoid carrying out activities involving exposure for more than 4 hour(s).

Or: Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Avoid carrying out activities involving exposure for more than 1 hour(s).

Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaust or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

The employer must ensure that the necessary personal protective devices are available and applied accordingly to the instructions.

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Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

Personal protective measures

Detailed measures on hand protection according to Safety Data Sheet, section 8.

Do not inhale gases / fumes / aerosols.

Measures for consumer protection Not relevant for this Exposure Scenario.

Environmental protection measures

Air

Treatment of air emissions is not required for the purposes of REACH compliance but may be needed to comply with other environmental legislation.

Water

Size of sewage treatment plant (m³/d): 2000

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/day): 1934.6

Prevent discharge of undissolved substance to or recover from onsite wastewater.

Soil No special measures required.

Disposal measures

Must not be disposed of with household waste. Do not allow to reach sewage system.

Disposal must be made according to official regulations.

SECTION 3: Exposure estimation

Worker (oral) No significant oral exposure.

Worker (dermal)

PROC 1:

Exposure estimate: 0.0343 mg/kg/day

RCR: 0.003117

PROC 2, 5, 8a, 8b, 13:

Exposure estimate: 1.3714 mg/kg/day

RCR: 0.124675

PROC 3, 4:

Exposure estimate: 0.6857 mg/kg/day

RCR: 0.06234

PROC 10:

Exposure estimate: 2.7429 mg/kg/day

RCR: 0.24935

PROC 11 (Kabine):

Exposure estimate: 10.7143 mg/kg/day

RCR: 0.974

PROC 11 (Absaugung / Maske):

Exposure estimate: 4.8214 mg/kg/day

RCR: 0.4383

PROC 15:

Exposure estimate: 0.3429 mg/kg/day

RCR: 0.03117

PROC 19 (Absaug., 4h):

Exposure estimate: 8.4857 mg/kg/day

RCR: 0.77143

PROC 19 (Belüft., 1h):

Exposure estimate: 2.8286 mg/kg/day

RCR: 0.2571

Worker (inhalation)

PROC 1:

Exposure estimate: 0.0484 mg/m³

RCR: 0.000161

PROC 2, 5, 8a:

Exposure estimate: 24.2 mg/m³

RCR: 0.080665

Annex to the extended Safety Data Sheet (eSDS)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

Product name: 2K-PUR Einschichtlackfarbe, mixing rate 10:1
Date of printing: 05.11.2025



PROC 3, 15:

Exposure estimate: 48.3993 mg/m³

RCR: 0.16133

PROC 4:

Exposure estimate: 96.7986 mg/m³

RCR: 0.3227

PROC 8b:

Exposure estimate: 120.9982 mg/m³

RCR: 0.40333

PROC 11 (Kabine):

Exposure estimate: 0.0001 mg/m³

RCR: 0

PROC 11 (Absaugung):

Exposure estimate: 153 mg/m³

RCR: 0.51

PROC 11 (Maske):

Exposure estimate: 116 mg/m³

RCR: 0.3867

PROC 10, 13, 19 (Belüft., 1h):

Exposure estimate: 145.1979 mg/m³

RCR: 0.484

PROC 19 (Absaug., 4h):

Exposure estimate: 67.759 mg/m³

RCR: 0.22586

Environment

Highest estimated Values for ERC8a, 8d:

Risc characterisation ratio (RCR): 0.012923

Consumer Not relevant for this Exposure Scenario.

SECTION 4: Guidance for downstream users

The exposure estimation was carried out in accordance with ECETOC TRA.

Version 3. <http://www.ecetoc.org/tra>

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/ Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/ Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.