

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025

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

1.1 Product identifier

Product name: DD-Lackfarbe, mixing rate 2:1
Unique Formula Identifier (UFI-Code): AH50-K000-800U-50G1
Product type: polyester 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: 07.11.2025
Date of previous issue: 07.10.2023

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

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

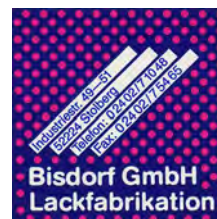
Classification acc. to GHS

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.

SAFETY DATA SHEET

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



SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

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	5-10	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411	[1] [2]
1-methoxy-2-propanol (PM)	REACH: 01-2119457435-35 CAS: 107-98-2 EG: 203-539-1	1-5	Flam. Liq. 3, H226 STOT SE 3, H336	[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	1-5	Flam. Liq. 3, H226 STOT SE 3, H336	[1]

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.

SAFETY DATA SHEET

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



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

Bisdorf GmbH
Lackfabrikation

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.

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

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/m³]	STEL [ppm]	STEL [mg/m³]	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
1-methoxy-2-propanol (PM)	107-98-2		IOLEV	100	375	150	568	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

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/m³ (Long-term - systemic effects)
		289 mg/m³ (Acute - systemic and local effects)
	DNEL (population)	14,8 mg/m³ (Long-term - systemic effects)
		174 mg/m³ (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/m³ (Long-term - systemic effects)
		289 mg/m³ (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/m³ (Long-term - systemic effects)
	DNEL (population)	32 mg/m³ (Long-term - systemic effects)

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025

Product/ingredient name		
1-methoxy-2-propanol (PM)		
Oral	DNEL (population)	3,3 mg/kg bw/day (Long-term - systemic effects)
	DNEL (worker)	183 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (population)	78 mg/kg bw/day (Long-term - systemic effects)
	DNEL (worker)	553,5 mg/m ³ (Acute - local effects)
Inhalation	DNEL (population)	369 mg/m ³ (Long-term - systemic effects)
	DNEL (worker)	43,9 mg/m ³ (Long-term - systemic effects)

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

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

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

Product/ingredient name	
1-methoxy-2-propanol (PM)	
PNEC aqua	10 mg/l (fresh water) 1 mg/l (marine water)
PNEC	100 mg/l (STP (sewage treatment plant)) 4,59 mg/kg dw (soil)
PNEC sediment	52,3 mg/kg dw (fresh water) 5,2 mg/kg dw (marine water)

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)

(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.

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025

	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	~1,34 g/cm ³ (20 °C)
Vapor density	Not determined
Evaporation rate	No data available.

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025

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:	~130 s DIN 4mm (20°C)
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	-
	LC50 Inhalation Vapour	Rat	>6153 mg/m ³	4 hours
solvent naphtha (petroleum), light arom.	LD50 Dermal	Rabbit	>3160 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
	LC50 Inhalation Vapour	Rat	10000 ppm	4 hours
	LD50 Dermal	Rabbit	13 g/kg	-
1-methoxy-2-propanol (PM)	LD50 Oral	Rat	6600 mg/kg	-
	LC50 Inhalation Vapour	Rat	> 10,8 mg/l	6 hours
	LD50 Dermal	Rabbit	> 5 000 mg/kg	-
	LD50 Oral	Rat	> 5 000 mg/kg	-

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

Product/ingredient name	Result	Species	Dose	Exposure
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	-

Acute toxicity estimates

Route	ATE value
Oral	not rated
Dermal	not rated
Inhalation (vapors)	189,673 mg/l/4h

Corrosion/Irritation

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

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
1-methoxy-2-propanol (PM)	Category 3	Not applicable.	Narcotic effects
n-butyl acetate	Category 3	Not applicable.	Respiratory tract Irritation

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

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

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 vapour/air 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
1-methoxy-2-propanol (PM)	Acute LC50 9.22 mg/l Acute EC50 23300 mg/l Acute EC50 1000 mg/l	Fish - Oncorhynchus mykiss Daphnie - Daphnia magna Algae - Pseudokirchneriella subcapitata	96 hours 48 hours 168 hours
2-methoxy-1-methylethylacetate (PMA)	Acute LC50 350 mg/l Acute EC50 408 mg/l Acute EC50 1000 mg/l	Fish - Leuciscus idus 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 Acute LC50 18 mg/l	Fish - Leuciscus idus Daphnie - Daphnia magna Algae - Selenastrum capricornutum Fish - Oncorhynchus mykiss	96 hours 48 hours 72 hours 96 hours

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025

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
1-methoxy-2-propanol (PM)	96 % - 28 days
2-methoxy-1-methylethylacetate (PMA)	83% - 28 days

Product/ingredient name	Result
n-butyl acetate	90% - 28 days

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

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 – 250	high
1-methoxy-2-propanol (PM)	<1	-	low
2-methoxy-1-methylethylacetate (PMA)	1.2	<100	low
n-butyl acetate	2.3	-	low

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.

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

Date of printing: 07.11.2025



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
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.

This product contains substances for which Chemical Safety Assessments are still required.

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025

SECTION 16: Other information

Abbreviations and acronyms:

Abbr.	Descriptions of used abbreviations
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
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

SAFETY DATA SHEET

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

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

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

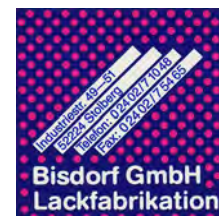
Notice to reader

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: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025



xylene, mixture of isomers

Annex: Exposure scenario 1

SECTION 1: Title section

Short title of the exposure scenario 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

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

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

PROC14 Tableting, compression, extrusion, pelletisation, granulation

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.

Physical parameters

Physical state

Fluid

Vapour pressure: 0.5-10 kPa (20 °C)

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

Used amount per time or activity

Regional use tonnage (tonnes/year): 15000, SU3

Annual site tonnage (tonnes/year): 3750, SU3

Maximum daily site tonnage (kg/day): 12500, SU3

Other operational conditions

Emission days / year: 300

Assumes use at not more than 20°C above ambient temperature (unless stated differently).

Assumes a good basic standard of occupational hygiene is implemented.

Other operational conditions affecting environmental exposure

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

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

Release fraction to wastewater from process (initial release prior to RMM) / wide dispersive use: 0.2 %.

Release fraction to soil from process (initial release prior to RMM) / wide dispersive use (regional only): 0.01 %.

Annex to the extended Safety Data Sheet (eSDS)

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

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.

Worker protection

Storage (PROC1 / PROC2):

Store substance within a closed system.

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

Laboratory activities (PROC15):

No other specific measures identified.

Batch processes at elevated temperatures. Operation is carried out at elevated temperature (> 20°C above ambient temperature) PROC3:

Store / Handle product in closed systems.

Provide extract ventilation to points where emissions (can) occur.

Preparation of material for application. Use in contained batch (PROC3):

General exposures / Use (open systems) PROC4:

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Process sampling (PROC3):

Provide a good standard of general ventilation.

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

Mixing operations (open systems) PROC5:

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

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

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

Filling of drums and small containers (PROC 9):

Production or preparation of articles by tableting, compression, extrusion or pelletisation (PROC14):

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

Bulk transfers (closed systems) PROC8b:

Ensure that material transfer is avoided or provide extract ventilation. Use local exhaust at places where emission can occur.

Equipment cleaning and maintenance (PROC 8a, 8b):

Drain or remove substance from equipment prior to break-in or maintenance.

Retain drain downs in sealed storage pending disposal or for subsequent recycle.

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

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Provide basic employee training to prevent / minimise exposures and to report any skin problems that may develop.

Do not inhale gases / fumes / aerosols.

Safety glasses

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.

Treat air emission to provide a typical removal efficiency of (%): 0

Annex to the extended Safety Data Sheet (eSDS)

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

Water

Sludge treatment: Incineration or in a landfill

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

Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%): 93.6

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/day): 6.31

Assumed domestic sewage treatment plant flow (m3/d): 2000

Soil *Use bunds or dykes around storage facilities to prevent soil and water pollution in the event of a spill.*

Disposal measures

External treatment and disposal of waste should comply with applicable local and/or national regulations.

External recovery and recycling of waste should comply with applicable local and/or national regulations.

Waste type *Partially emptied and uncleaned packaging*

Notes *Disposal must be made according to official regulations.*

SECTION 3: Exposure estimation

Worker (oral) *No significant oral exposure.*

Worker (dermal)

PROC 1 / 3 / 15:

Exposure estimate: 0.34 mg/kg/day

RCR: 0

PROC 2:

Exposure estimate: 1.37 mg/kg/day

RCR: 0.01

PROC 4 / 8b / 9:

Exposure estimate: 6.86 mg/kg/day

RCR: 0.04

PROC 5 / 8a:

Exposure estimate: 13.71 mg/kg/day

RCR: 0.04

PROC 14:

Exposure estimate: 3.43 mg/kg/day

RCR: 0.02

Worker (inhalation)

PROC 1:

Exposure estimate: 0.01 ppm

RCR: 0

PROC 2 / 15:

Exposure estimate: 10 ppm

RCR: 0.56

PROC 3:

Exposure estimate: 17.5 ppm

RCR: 0.99

PROC 4:

Exposure estimate: 14 ppm

RCR: 0.79

PROC 5 / 8a / 8b / 9 / 14:

Exposure estimate: 15 ppm

RCR: 0.85

Environment *The calculated value is smaller than the PNEC.*

Consumer *Not relevant for this Exposure Scenario.*

Annex to the extended Safety Data Sheet (eSDS)

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

Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025



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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

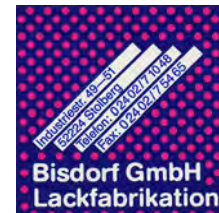
Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Annex to the extended Safety Data Sheet (eSDS)

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

Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025



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

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

PROC10 Roller application or brushing

PROC13 Treatment of articles by dipping and pouring

PROC14 Tableting, compression, extrusion, pelletisation, granulation

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.

Physical parameters

Physical state

Fluid

Vapour pressure: 0.5-10 kPa (20 °C)

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

Used amount per time or activity

Regional use tonnage (tonnes/year): 5000, SU3

Annual site tonnage (tonnes/year): 5000, SU3

Maximum daily site tonnage (kg/day): 17000, SU3

Other operational conditions

Continuous release.

Emissiondays /year: 300

Assumes use at not more than 20°C above ambient temperature (unless stated differently).

Assumes a good basic standard of occupational hygiene is implemented.

Other operational conditions affecting environmental exposure

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Release fraction to air from process (initial release prior to RMM) / wide dispersive use (regional only): 98 %.

Annex to the extended Safety Data Sheet (eSDS)

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

Release fraction to wastewater from process (initial release prior to RMM) / wide dispersive use: 0.7 %.

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.

Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.

Worker protection

Storage (PROC1 / PROC2):

Store substance within a closed system.

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

Laboratory activities (PROC15):

No other specific measures identified.

Film formation - force drying, stoving and other technologies (closed systems).

Operation is carried out at elevated temperature (> 20°C above ambient temperature) PROC2:

Store / Handle product in closed systems.

Provide extract ventilation to points where emissions (can) occur.

Mixing operations (closed systems) PROC:

Film formation - air drying (PROC4):

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Preparation of material for application (PROC5):

Provide a good standard of general or controlled ventilation (5 to 15 air changes per hour).

Avoid manual contact with wet work pieces.

Transfer from/pouring from containers (PROC8a,8b,9):

Apply by Rolling or Brushing (PROC10):

Treatment by dipping and pouring (PROC13):

Production or preparation of articles by tableting, compression, extrusion or pelletisation (PROC14):

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

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

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

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

Ensure that material transfer is avoided or provide extract ventilation.

Spraying (automatic/robotic) PROC7:

Carry out in a vented booth or extracted enclosure.

Spraying (PROC 7 (manuell)):

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

Wear a respirator conforming to EN140 with Type A filter or better.

Equipment cleaning and maintenance (Non-dedicated facility) PROC 8a:

Drain or remove substance from equipment prior to break-in or maintenance.

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.

Annex to the extended Safety Data Sheet (eSDS)

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

Personal protective measures

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Provide basic employee training to prevent / minimise exposures and to report any skin problems that may develop.

Do not inhale gases / fumes / aerosols.

Safety glasses

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.

Treat air emission to provide a typical removal efficiency of (%): 90

Water

Sludge treatment: Incineration or in a landfill

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

Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%): 93.6

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/day): 69000

Assumed domestic sewage treatment plant flow (m³/d): 2000

Soil Use bunds or dykes around storage facilities to prevent soil and water pollution in the event of a spill.

Notes In case of unintended release of the product: See section 6 of the Safety Data Sheet.

Disposal measures

External treatment and disposal of waste should comply with applicable local and/or national regulations.

External recovery and recycling of waste should comply with applicable local and/or national regulations.

Waste type Partially emptied and uncleaned packaging

Notes Disposal must be made according to official regulations.

SECTION 3: Exposure estimation

Worker (oral) No significant oral exposure.

Worker (dermal)

PROC 1 / 3 / 15:

Exposure estimate: 0.34 mg/kg/day

RCR: 0

PROC 2 / 8a:

Exposure estimate: 1.37 mg/kg/day

RCR: 0.01

PROC 4 / 13:

Exposure estimate: 13.71 mg/kg/day

RCR: 0.08

PROC 5:

Exposure estimate: 0.07 mg/kg/day

RCR: 0

PROC 7 (automatisch):

Exposure estimate: 2.14 mg/kg/day

RCR: 0.01

PROC 7 (manuell):

Exposure estimate: 42.86 mg/kg/day

RCR: 0.24

PROC 8a (Anlagenr.):

Exposure estimate: 0.69 mg/kg/day

RCR: 0

PROC 8b / 9:

Exposure estimate: 6.86 mg/kg/day

RCR: 0.04

Annex to the extended Safety Data Sheet (eSDS)

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

Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025



PROC 10:

Exposure estimate: 27.43 mg/kg/day

RCR: 0.15

PROC 14:

Exposure estimate: 3.43 mg/kg/day

RCR: 0.02

Worker (inhalation)

PROC 1:

Exposure estimate: 0.01 ppm

RCR: 0

PROC 2 / 8a (Anlagenr.) / 15:

Exposure estimate: 10 ppm

RCR: 0.56

PROC 3:

Exposure estimate: 17.5 ppm

RCR: 0.99

PROC 4 / 5 / 9 / 13 / 14:

Exposure estimate: 15 ppm

RCR: 0.85

PROC 7 (automatisch):

Exposure estimate: 12.5 ppm

RCR: 0.71

PROC 7 (manuell):

Exposure estimate: 7.5 ppm

RCR: 0.42

PROC 8a / 10:

Exposure estimate: 5 ppm

RCR: 0.28

PROC 8b:

Exposure estimate: 1.5 ppm

RCR: 0.08

Environment The calculated value is smaller than the PNEC.

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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Annex to the extended Safety Data Sheet (eSDS)

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

Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025



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.

Physical parameters

Physical state

Fluid

Vapour pressure: 0.5-10 kPa (20 °C)

Concentration of the substance in the mixture

Covers use of substance / product up to 100% (unless stated otherwise).

Used amount per time or activity

Regional use tonnage (tonnes/year): 5000, SU22

Annual site tonnage (tonnes/year): 10, SU22

Maximum daily site tonnage (kg/day): 27.4, SU22

Other operational conditions

Continuous release.

Emissiondays /year: 365

Assumes use at not more than 20°C above ambient temperature (unless stated differently).

Assumes a good basic standard of occupational hygiene is implemented.

Other operational conditions affecting environmental exposure

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Annex to the extended Safety Data Sheet (eSDS)

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

Release fraction to air from process (initial release prior to RMM) / wide dispersive use (regional only): 98 %.

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): 1 %.

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.

Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.

Worker protection

Storage (PROC1 / PROC2):

Store substance within a closed system.

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

Filling / preparation of equipment from drums or containers (Use in closed systems) PROC2:

Ensure material transfers are under containment or extract ventilation.

Preparation of material for application. Use in contained batch (PROC3):

Provide a good standard of general or controlled ventilation (5 to 15 air changes per hour).

Use drum pumps or carefully pour from container.

Film formation - air drying Indoor (PROC4):

Provide a good standard of general ventilation.

Provide extract ventilation to points where emissions (can) occur.

Avoid manual contact with wet work pieces.

Film formation - air drying Outdoors (PROC 4):

Ensure operation is undertaken outdoors. Avoid manual contact with wet work pieces. Clear spills immediately.

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

Preparation of material for application Indoor PROC 5:

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

Controlled ventilation means air is supplied or removed by a powered fan.

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

Preparation of material for application Outdoor (PROC 5):

Ensure operation is undertaken outdoors.

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

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

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.

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Equipment cleaning and maintenance (Non-dedicated facility) PROC 8a:

Drain down system prior to equipment break-in or maintenance.

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

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

Roller, spreader, flow application Indoor (PROC 10):

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

Wear a respirator conforming to EN140 with Type A filter or better.

Roller, spreader, flow application Outdoor (PROC 10):

Dipping, immersion and pouring Outdoor (PROC 13):

Ensure Operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A filter or better. Automate activity where possible.

Annex to the extended Safety Data Sheet (eSDS)

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



Product name: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025

Spraying Manual (PROC 11):

Carry out in a vented booth or extracted enclosure.

Spraying (PROC 11, außen):

Ensure operation is undertaken outdoors.

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

Wear a respirator conforming to EN140 with Type A filter or better.

Dipping, immersion and pouring Indoor (PROC 13):

Use local exhaust at places where emission can occur.

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

Laboratory activities (PROC15):

Handle substance within a predominantly closed system provided with extract ventilation.

Hand application - fingerpaints, pastels, adhesives PROC19 Indoor:

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

Limit the substance content in the product to 5%.

Hand application - fingerpaints, pastels, adhesives PROC19 Outdoor:

Ensure operation is undertaken outdoors.

Limit the substance content in the product to 5%.

Avoid carrying out activities involving exposure for more than 4 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.

Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

Personal protective measures

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Provide basic employee training to prevent / minimise exposures and to report any skin problems that may develop.

Do not inhale gases / fumes / aerosols.

Safety glasses

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.

Treat air emission to provide a typical removal efficiency of (%): 0

Water

Sludge treatment: Incineration or in a landfill

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

Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%): 93.6

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/day): 4600

Assumed domestic sewage treatment plant flow (m3/d): 2000

Soil Use bunds or dykes around storage facilities to prevent soil and water pollution in the event of a spill.

Disposal measures

External treatment and disposal of waste should comply with applicable local and/or national regulations.

External recovery and recycling of waste should comply with applicable local and/or national regulations.

Waste type Partially emptied and uncleaned packaging

Notes 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: DD-Lackfarbe, mixing rate 2:1

Date of printing: 07.11.2025



SECTION 3: Exposure estimation

Worker (oral) No significant oral exposure.

Worker (dermal)

PROC 1:

Exposure estimate: 0.34 mg/kg/day

RCR: 0

PROC 2:

Exposure estimate: 0.14 mg/kg/day

RCR: 0

PROC 3 / 15:

Exposure estimate: 0.03 mg/kg/day

RCR: 0

PROC 4 (innen) / 8b:

Exposure estimate: 6.86 mg/kg/day

RCR: 0.04

PROC 4 (außen):

Exposure estimate: 1.37 mg/kg/day

RCR: 0.01

PROC 5 / 8a:

Exposure estimate: 13.71 mg/kg/day

RCR: 0.08

PROC 10:

Exposure estimate: 27.43 mg/kg/day

RCR: 0.15

PROC 11 (innen):

Exposure estimate: 2.14 mg/kg/day

RCR: 0.01

PROC 11 (außen):

Exposure estimate: 21.43 mg/kg/day

RCR: 0.12

PROC 13:

Exposure estimate: 0.69 mg/kg/day

RCR: 0

PROC 19:

Exposure estimate: 28.29 mg/kg/day

RCR: 0.16

Worker (inhalation)

PROC 1:

Exposure estimate: 0.1 ppm

RCR: 0.01

PROC 2:

Exposure estimate: 4 ppm

RCR: 0.23

PROC 3:

Exposure estimate: 7.5 ppm

RCR: 0.42

PROC 4 (innen):

Exposure estimate: 3.5 ppm

RCR: 0.2

PROC 4 + 10 + 13 (jew. außen):

Exposure estimate: 7 ppm

RCR: 0.39

PROC 5 (innen) / 19 (innen):

Exposure estimate: 6 ppm

RCR: 0.34

Annex to the extended Safety Data Sheet (eSDS)

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

Product name: DD-Lackfarbe, mixing rate 2:1
Date of printing: 07.11.2025



PROC 5 (außen) / 8a:

Exposure estimate: 14 ppm

RCR: 0.79

PROC 8b:

Exposure estimate: 15 ppm

RCR: 0.85

PROC 10 (innen):

Exposure estimate: 3 ppm

RCR: 0.17

PROC 11 (innen):

Exposure estimate: 5 ppm

RCR: 0.28

PROC 11 (außen):

Exposure estimate: 10.5 ppm

RCR: 0.59

PROC 13 (innen):

Exposure estimate: 12 ppm

RCR: 0.68

PROC 15:

Exposure estimate: 0.6 ppm

RCR: 0.03

PROC 19 (außen):

Exposure estimate: 8.4 ppm

RCR: 0.47

Environment *The calculated value is smaller than the PNEC.*

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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.