

SAFETY DATA SHEET**WorléeKyd SD 6403**Product code : 111021-01838
Date of revision : 15.02.2013.Version : 2
Date of printing : 15.02.2013.**WORLÉE**[®]
seit 1851**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**Product name : **WorléeKyd SD 6403, 55% in dearomatized hydrocarbons 160-200****1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the substance/mixture : Raw materials for coatings, sealants and adhesives.

Identified uses	
1) Formulation and (re)packing of substances and mixtures	Industrial uses: Uses of substances as such or in preparations* at industrial sites Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
2) Uses in Coatings	Industrial uses: Uses of substances as such or in preparations* at industrial sites
3) Use in laboratories	Industrial uses: Uses of substances as such or in preparations* at industrial sites
4) Uses in Coatings	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
5) Use in laboratories	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
6) Uses in Coatings	Consumer uses: Private households (= general public = consumers)

1.3 Details of the supplier of the safety data sheetPrepared by : Worlée-Chemie G.m.b.H.
Soellerstrasse 14-16
D - 21481 Lauenburg
Tel. +49 (0)4153 596-0
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e-mail address of person responsible for this SDS : MSDS@worlee.de

National contact : E.H. Worlee & Co. UK Ltd.
Suite 5, 3rd Floor
GB - Staffordshire ST5 1 EZ
Tel. +441782-714614**1.4 Emergency telephone number**

National advisory body/Poison Centre

Telephone number : +49 (0)551-19240 (Emergency health information)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

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

Flam. Liq. 3, H226 On basis of test data
STOT SE 3, H336 Calculation method

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Physical/chemical hazards : Flammable.

Human health hazards : Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

See Section 16 for the full text of the R phrases or H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.**2.2 Label elements**

Hazard pictograms :



Signal word : Warning

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Hazard statements : H226 - Flammable liquid and vapour.
 H336 - May cause drowsiness or dizziness.

Precautionary statements

Prevention : P280 - Wear protective gloves. Wear eye or face protection.
 P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
 P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

Response : P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage : P235 - Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Supplemental label elements : Contains phthalic anhydride. May produce an allergic reaction.

2.3 Other hazards**Other hazards which do not result in classification**

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 3: Composition/information on ingredients

Chemical characterisation : Dissolved alkyd resin (mixture)

Product/ingredient name	Identifiers	%	Classification 67/548/EEC	Type
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	REACH #: 01-2119463258-33 EC: 919-857-5 CAS: 64742-48-9 Index: 649-327-00-6	40 - 50	R10 Xn; R65 R66, R67	[1]
phthalic anhydride	REACH #: 01-2119457017-41 EC: 201-607-5 CAS: 85-44-9 Index: 607-009-00-4	0.3 - 1	Xn; R22 Xi; R41, R37/38 R42/43	[1] [2]
See Section 16 for the full text of the R-phrases declared above.				

Product/ingredient name	Identifiers	%	Classification 1272/2008/EC (CLP)	Type
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	REACH #: 01-2119463258-33 EC: 919-857-5 CAS: 64742-48-9 Index: 649-327-00-6	40 - 50	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304	[1]
phthalic anhydride	REACH #: 01-2119457017-41 EC: 201-607-5 CAS: 85-44-9 Index: 607-009-00-4	0.3 - 1	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335	[1] [2]
See Section 16 for the full text of the H statements declared above.				

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

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[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

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

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information** : In all cases of doubt, or when symptoms persist, seek medical attention. If unconscious, place in recovery position and get medical attention immediately. Never give anything by mouth to an unconscious person. In any case show the physician the Safety Data Sheet.
- Eye contact** : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Begin with medical treatment.
- Inhalation** : Remove affected persons from dangerous area by observing suitable respiratory protection measures. Remove the casualty into fresh air and keep at rest.
- Skin contact** : Take off immediately all contaminated clothing. Wash contaminated clothing before reusing. Do not allow the product to dry on the skin. Wash skin thoroughly with soap and water or use recognised skin cleanser.
- Ingestion** : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- General information** : When inhaled or swallowed depending on the time and amount, it can give rise to the following symptoms: headaches, giddiness, tiredness, nausea, vomiting, irregular heart beat, intoxication, unconsciousness, asphyxiation and fatality.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : When inhaled or swallowed depending on the time and amount, it can give rise to the following symptoms: headaches, giddiness, tiredness, nausea, vomiting, irregular heart beat, intoxication, unconsciousness, asphyxiation and fatality.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable** : Extinguishing measures to suit surroundings. In case of fire, use water spray jet, dry extinguishing powder, foam or carbon dioxide.
- Not suitable** : water jet.

5.2 Special hazards arising from the substance or mixture

- Hazardous combustion products** : In a fire, the following may be released: carbon dioxide, carbon monoxide, not combusted hydrocarbons.

5.3 Advice for firefighters

- Special protective equipment for fire-fighters** : During fire-fighting wear self-contained breathing apparatus and protective clothing.
- 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.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- General information** : To avoid fire, eliminate ignition sources. Provide adequate ventilation. Use personal protective equipment. Avoid contact with skin.

6.2 Environmental precautions

- General information** : Do not discharge into the drains / surface waters / groundwater. Prevent spread over a wide area e.g. by containment or oil barriers.

6.3 Methods and materials for containment and cleaning up

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General information : Absorb with liquid-binding material (sand, diatomite, universal binders etc.) or use a spill kit. Containers in which spilt substance has been collected must be adequately labelled. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

6.4 Reference to other sections

General information : See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Protective measures : Keep away from sources of ignition - No smoking. Vapours may form explosive mixtures with air. Take precautionary measures against electrostatic discharges. Provide good ventilation of working area. The working procedure should be planned as far as allowed by state-of-the-art technology so as to avoid release of hazardous substances or prevent skin contact. The level of risk involved in product handling must be reduced to a minimum by means of protective and preventive measures.

7.2 Conditions for safe storage, including any incompatibilities

General information Store in a dry, cool and well-ventilated area. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations.

Packaging materials

Recommended : Glass. Stainless steel. Coated steel. Unlined steel.

Seveso II Directive - Reporting thresholds (in tonnes)**Danger criteria**

Category	Notification and MAPP threshold	Safety report threshold
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000
C6: Flammable (R10)	5000	50000

7.3 Specific end use(s)

Recommendations : Not available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limits**

Product/ingredient name	Exposure limit values
phthalic anhydride	EH40/2005 WELs (United Kingdom (UK), 1/2012). Skin sensitiser. Inhalation sensitiser. STEL: 12 mg/m ³ 15 minutes. TWA: 4 mg/m ³ 8 hours.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	DNEL	Long term Dermal	208 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	871 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	900 mg/m ³	Consumers	Systemic
	DNEL	Long term Oral	125 mg/kg bw/day	Consumers	Systemic

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PNECs

No PECs available.

8.2 Exposure controls

- Hygiene measures** : Observe the usual precautions for handling chemicals. When using do not eat, drink or smoke. Use protective skin cream for preventive skin protection. Clean skin thoroughly after work; apply skin cream.
- Eye/face protection** : Safety goggles with lateral shielding (DIN EN 166)
- Skin protection** : Usual working clothes for the chemical industry, suitable for the job.
- 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.
- Recommended gloves should be made of** : nitrile
- Material thickness** : >0,4 mm
- Permeation time** : >480 min
- Respiratory protection** : If the occupational exposure limits are exceeded, suitable respiratory protective equipment must be worn. If no occupational exposure limits are defined, sufficiently effective respiratory protective measures must be taken in the presence of aerosols and vapours. Recommended: organic vapour filter (Type A) organic vapour filter (Type AX)

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid. [Viscous liquid.]
- Colour** : Yellowish.
- Odour** : Paraffinic
- Boiling point** : 160 to 200 °C
- Flash point** : 35 to 40 °C
- Explosion limits** : Lower: 0,6%
Upper: 7%
- Oxidising properties** : Not oxidising.
- Ignition temperature** : >200 °C
- Vapour pressure** : 0,21 kPa [20 °C]
- Density** : 0,91 g/cm³ [20 °C]
- Efflux time** : >90 s [20 °C] [DIN 4]
- Solubility in water** : Not miscible

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** : No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid

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

10.5 Incompatible materials

General information : oxidising agents

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****General information**

Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. High vapour concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	LD50 Dermal	Rabbit	>5000 mg/kg	-
phthalic anhydride	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	1530 mg/kg	-

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
phthalic anhydride	Eyes - Moderate irritant	Rabbit	-	24 hours 50 milligrams	-

Evaluation

Skin : Frequent persistent contact with the skin can cause skin irritation.

Eyes : May cause mild eye irritation.

Sensitiser**Remarks**

Skin : No evidence of sensitizing effects.

Respiratory : No evidence of sensitizing effects.

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
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Category 3	Not applicable.	Narcotic effects
phthalic anhydride	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)**Remarks**

: Not available.

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Aspiration hazard

Product/ingredient name	Result
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	ASPIRATION HAZARD - Category 1

Potential chronic health effects

Remarks : Not available.

SECTION 12: Ecological information**12.1 Toxicity**

General information

Do not allow spillage to soil, waterways or waste water canal.

Product/ingredient name	Result	Species	Exposure
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Acute IC50 >1000 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute LC50 >1000 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Acute NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours

Remarks : No known significant effects or critical hazards.

12.2 Persistence and degradability

Product/ingredient name	Result
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	80 % - 28 days

Remarks : The polymer is only slightly biodegradable in view of the desired stability.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	5 to 6.7	-	high
phthalic anhydride	1,6	-	low

12.4 Mobility in soilSoil/water partition coefficient (K_{oc}) : Not available.**12.5 Results of PBT and vPvB assessment**

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Incineration in suitable incineration plant. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Packaging

Methods of disposal : 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.

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SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	1866	1866	1866
14.2 UN proper shipping name	Resin solution, flammable	Resin solution, flammable	Resin solution, flammable
14.3 Hazard class Danger labels and placards	3 	3 	3 
14.4 Packing group	III	III	III
14.5 Environmental hazards	No.	No.	No.
14.6 Special precautions for user	Not available.	Not available.	Not available.
Additional information	Exempted according to 2.2.3.1.5 (Viscous substance exemption)	Exempted according to 2.3.2.5 (Viscous substance exemption)	Not available.
Special provisions	640 E		
Classification code	F1		
Transport category	3		
HI/Kemler number	30		
Tunnel code	D/E		
Emergency schedules (EmS)		F-E;S-E	

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

Substances mentioned on the so-called "candidate list of substances of very high concern (SVHC) for authorisation" published by the ECHA are not intentionally added to this product. Therefore it is not expected, that these substances are present in amounts of $\geq 0,1\%$ in this product.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

15.2 Chemical Safety Assessment

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

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SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number

Full text of abbreviated H statements : H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.

Full text of classifications [CLP/GHS] : Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4
 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3
 Resp. Sens. 1, H334 RESPIRATORY SENSITIZATION - Category 1
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1
 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

Full text of abbreviated R phrases : R10- Flammable.
 R22- Harmful if swallowed.
 R65- Harmful: may cause lung damage if swallowed.
 R41- Risk of serious damage to eyes.
 R37/38- Irritating to respiratory system and skin.
 R42/43- May cause sensitisation by inhalation and skin contact.
 R66- Repeated exposure may cause skin dryness or cracking.
 R67- Vapours may cause drowsiness and dizziness.

Full text of classifications [DSD/DPD] : Xn - Harmful
 Xi - Irritant

Notice to reader

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Section 1: - Title

- Use Descriptor : **Identified use name:** Formulation and (re)packing of substances and mixtures
Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC09, PROC14, PROC15
Substance supplied to that use in form of: In a mixture
Sector of end use: SU03, SU10
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC02
- Health Contributing Scenarios : **General exposures (closed systems) -** PROC01, PROC02, PROC03
General exposures (open systems) - PROC04
Operation is carried out at elevated temperature (> 20°C above ambient temperature). - PROC03
Process sampling - PROC03
Laboratory activities - PROC15
Material transfers - PROC08b
Mixing operations (open systems) - PROC05
Transfer from/pouring from containers - PROC08a
Drum/batch transfers - PROC08b
Production of preparation or articles by tableting, compression, extrusion or pelletisation - PROC14
Clean-down and maintenance of equipment - PROC08a
Storage - PROC01, PROC02
- Processes and activities covered by 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: - Exposure Scenarios

2.1 Control of environmental exposure

No exposure assessment presented for the environment.

2.2 Control of worker exposure

- Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state : Liquid, vapour pressure < 0.5 kPa at STP.
- Frequency and duration of use : Covers daily exposures up to 8 hours (unless stated differently).
- Other given operational conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented
 Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Contributing exposure scenario controlling worker exposure

General exposures (closed systems)

- Process control measures : Undertake operation in enclosed conditions.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
 Material thickness: > 0.4 mm
 Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
 Wear a respirator conforming to EN140 with Type A filter or better.

General exposures (open systems)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

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

Process control measures : Formulate in enclosed or ventilated mixing vessels.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Process sampling

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Laboratory activities

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Material transfers

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Mixing operations (open systems)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Transfer from/pouring from containers

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Drum/batch transfers

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 mm

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Production of preparation or articles by tableting, compression, extrusion or pelletisation

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Clean-down and maintenance of equipment

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Storage

Process control measures : Store substance within a closed system.

Section 3: - Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment) : No exposure assessment presented for the environment.

Exposure estimation and reference to its source - Workers

Exposure assessment (human) : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment : No exposure assessment presented for the environment.

Health : Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Section 1: - Title

- Use Descriptor : **Identified use name:** Uses in Coatings
Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC07, PROC08a, PROC08b, PROC09, PROC10, PROC13, PROC14, PROC15
Substance supplied to that use in form of: In a mixture
Sector of end use: SU03
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC04
- Health Contributing Scenarios : **General exposures (closed systems) - PROC01**
General exposures (closed systems) with sample collection - PROC02, PROC03
Film formation - force drying, stoving and other technologies - Operation is carried out at elevated temperature (> 20°C above ambient temperature). - PROC02
Mixing operations (closed systems) - PROC03
Film formation - air drying - PROC04
Mixing operations (open systems) - PROC05
Spraying (automatic/robotic) - PROC07
Spraying/fogging by manual application - PROC07
Material transfers - PROC08a, PROC08b
Roller, spreader, flow application - PROC10
Dipping, immersion and pouring - PROC13
Laboratory activities - PROC15
Transfer from/pouring from containers - PROC09
Production of preparation or articles by tableting, compression, extrusion or pelletisation - PROC14
Equipment cleaning and maintenance - PROC08a
Storage - PROC01
- Processes and activities covered by 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: - Exposure Scenarios

2.1 Control of environmental exposure

No exposure assessment presented for the environment.

2.2 Control of worker exposure

- Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state : Liquid, vapour pressure < 0.5 kPa at STP.
- Frequency and duration of use : Covers daily exposures up to 8 hours (unless stated differently).
- Other given operational conditions affecting workers exposure : Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene has been implemented

Contributing exposure scenario controlling worker exposure

General exposures (closed systems)

- Process control measures : Undertake operation in enclosed conditions.

General exposures (closed systems) with sample collection

Process control measures : Store substance within a closed system.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Film formation - force drying, stoving and other technologies - Operation is carried out at elevated temperature (> 20°C above ambient temperature).

Process control measures : Store substance within a closed system.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Mixing operations (closed systems)

Process control measures : Undertake operation in enclosed conditions.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Film formation - air drying

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Mixing operations (open systems)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Spraying (automatic/robotic)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Spraying/fogging by manual application

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Material transfers

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Roller, spreader, flow application

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Dipping, immersion and pouring

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Laboratory activities

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
Wear a respirator conforming to EN140 with Type A filter or better.

Transfer from/pouring from containers

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
Wear a respirator conforming to EN140 with Type A filter or better.

Production of preparation or articles by tableting, compression, extrusion or pelletisation

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
Wear a respirator conforming to EN140 with Type A filter or better.

Equipment cleaning and maintenance

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
Wear a respirator conforming to EN140 with Type A filter or better.

Storage

- Process control measures : No other specific measures identified.

Section 3: - Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

- Exposure assessment (environment) : No exposure assessment presented for the environment.

Exposure estimation and reference to its source - Workers

- Exposure assessment (human) : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

- Environment : No exposure assessment presented for the environment.
- Health : Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.
Risk Management Measures are based on qualitative risk characterisation.
Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Section 1: - Title

- Use Descriptor : **Identified use name:** Use in laboratories
Process Category: PROC10, PROC15
Substance supplied to that use in form of: In a mixture
Sector of end use: SU03
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC02, ERC04
- Health Contributing Scenarios : **Laboratory activities - PROC15**
Cleaning - PROC10
- Processes and activities covered by the exposure scenario : Use of the substance within laboratory settings, including material transfers and equipment cleaning.

Section 2: - Exposure Scenarios

2.1 Control of environmental exposure

No exposure assessment presented for the environment.

2.2 Control of worker exposure

- Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state : Liquid, vapour pressure < 0.5 kPa at STP.
- Frequency and duration of use : Covers daily exposures up to 8 hours (unless stated differently).
- Other given operational conditions affecting workers exposure : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
 Assumes a good basic standard of occupational hygiene has been implemented

Contributing exposure scenario controlling worker exposure

Laboratory activities

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
 Material thickness: > 0.4 mm
 Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
 Wear a respirator conforming to EN140 with Type A filter or better.

Cleaning

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
 Material thickness: > 0.4 mm
 Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
 Wear a respirator conforming to EN140 with Type A filter or better.

Section 3: - Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment) : No exposure assessment presented for the environment.

Exposure estimation and reference to its source - Workers

Exposure assessment (human) : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment : No exposure assessment presented for the environment.

Health : Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Section 1: - Title

- Use Descriptor : **Identified use name:** Uses in Coatings
Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC10, PROC11, PROC13, PROC15, PROC19
Substance supplied to that use in form of: In a mixture
Sector of end use: SU22
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC08a, ERC08d
- Health Contributing Scenarios : **General exposures (closed systems) - PROC01**
Filling/preparation of equipment from drums or containers - PROC02
Preparation of material for application - PROC03
Film formation - air drying (Outdoor use) - PROC04
Film formation - air drying (Indoor use) - PROC04
Preparation of material for application (Indoor) - PROC05
Preparation of material for application (Outdoor) - PROC05
Material transfers - PROC08a, PROC08b
Roller, spreader, flow application (Indoor use) - PROC10
Roller, spreader, flow application (Outdoor use) - PROC10
Spraying/fogging by manual application (Indoor use) - PROC11
Spraying/fogging by manual application (Outdoor use) - PROC11
Dipping, immersion and pouring (Indoor use) - PROC13
Dipping, immersion and pouring (Outdoor use) - PROC13
Laboratory activities - PROC15
Hand application - fingerpaints, pastels, adhesives (Indoor use) - PROC19
Hand application - fingerpaints, pastels, adhesives (Outdoor use) - PROC19
- Processes and activities covered by 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: - Exposure Scenarios

2.1 Control of environmental exposure

No exposure assessment presented for the environment.

2.2 Control of worker exposure

- Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state : Liquid, vapour pressure < 0.5 kPa at STP.
- Frequency and duration of use : Covers daily exposures up to 8 hours (unless stated differently).
- Other given operational conditions affecting workers exposure : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
 Assumes a good basic standard of occupational hygiene has been implemented

Contributing exposure scenario controlling worker exposure

General exposures (closed systems)

- Process control measures : Undertake operation in enclosed conditions.

Filling/preparation of equipment from drums or containers

Process control measures : Undertake operation in enclosed conditions.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Preparation of material for application

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Film formation - air drying (Outdoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Film formation - air drying (Indoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Preparation of material for application (Indoor)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Preparation of material for application (Outdoor)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Material transfers

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Roller, spreader, flow application (Indoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Roller, spreader, flow application (Outdoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Spraying/fogging by manual application (Indoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Spraying/fogging by manual application (Outdoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Dipping, immersion and pouring (Indoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Dipping, immersion and pouring (Outdoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Laboratory activities

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Hand application - fingerpaints, pastels, adhesives (Indoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Hand application - fingerpaints, pastels, adhesives (Outdoor use)

Process control measures : No other specific measures identified.

Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min

Eye protection: Safety goggles with lateral shielding (DIN EN 166)

If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.

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

Section 3: - Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment) : No exposure assessment presented for the environment.

Exposure estimation and reference to its source - Workers

Exposure assessment (human) : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment : No exposure assessment presented for the environment.

Health : Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Section 1: - Title

- Use Descriptor : **Identified use name:** Use in laboratories
Process Category: PROC10, PROC15
Substance supplied to that use in form of: In a mixture
Sector of end use: SU22
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC08a
- Health Contributing Scenarios : **Laboratory activities - PROC15**
Cleaning - PROC10
- Processes and activities covered by the exposure scenario : Use of small quantities within laboratory settings, including material transfers and equipment cleaning.

Section 2: - Exposure Scenarios

2.1 Control of environmental exposure

No exposure assessment presented for the environment.

2.2 Control of worker exposure

- Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently).
- Physical state : Liquid, vapour pressure < 0.5 kPa at STP.
- Frequency and duration of use : Covers daily exposures up to 8 hours (unless stated differently).
- Other given operational conditions affecting workers exposure : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Assumes a good basic standard of occupational hygiene has been implemented

Contributing exposure scenario controlling worker exposure

Laboratory activities

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
Wear a respirator conforming to EN140 with Type A filter or better.

Cleaning

- Process control measures : No other specific measures identified.
- Product safety-related measures : Recommended gloves should be made of: Nitrile.
Material thickness: > 0.4 mm
Permeation time: > 480 min
- Eye protection: Safety goggles with lateral shielding (DIN EN 166)
- If technical extraction or ventilation is not possible or inadequate, respiratory protection must be worn.
Wear a respirator conforming to EN140 with Type A filter or better.

Section 3: - Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment) : No exposure assessment presented for the environment.

Exposure estimation and reference to its source - Workers

Exposure assessment (human) : The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment : No exposure assessment presented for the environment.

Health : Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Risk Management Measures are based on qualitative risk characterisation. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Section 1: - Title

- Use Descriptor : **Identified use name:** Uses in Coatings
Substance supplied to that use in form of: In a mixture
Sector of end use: SU21
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC08a, ERC08d
Market sector by type of chemical product: PC01, PC09a, PC09b, PC09c, PC15, PC18, PC34
- Health Contributing Scenarios : **Sealants and adhesives - PC01**
Sealants and adhesives - PC01
Sealants and adhesives - PC01
Sealants and adhesives - PC01
Coatings and paints, thinners, paint removers - PC09a
Coatings and paints, thinners, paint removers - PC09a
Coatings and paints, thinners, paint removers - PC09a
Coatings and paints, thinners, paint removers - PC09a
Fillers, putties, plasters, modelling clay - PC09b
Fillers, putties, plasters, modelling clay - PC09b
Fillers, putties, plasters, modelling clay - PC09b
Finger paints - PC09c
Non-metal-surface treatment products - PC15
Non-metal-surface treatment products - PC15
Non-metal-surface treatment products - PC15
Non-metal-surface treatment products - PC15
Ink and toners - PC18
Textile dyes, finishing and impregnating products; including bleaches and other processing aids - PC34
- Processes and activities covered by the exposure scenario : Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

Section 2: - Exposure Scenarios

2.1 Control of environmental exposure

No exposure assessment presented for the environment.

2.2 Control of consumer exposure

- Physical state : liquid
- Other given operational conditions affecting consumers exposure : Covers use at ambient temperatures.

Contributing scenario controlling consumer exposure for Sealants and adhesives

- Further specification : **Glues, hobby use**
- Concentration of substance in mixture or article : Covers concentrations up to 3 %
- Amounts used : For each use event, covers use amounts up to 5 g
- Frequency and duration of use/exposure : Covers use up to 365 days/year
Covers exposure up to 4 h
- Human factors not influenced by risk management : Covers skin contact area up to 35.73 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.

Sealants and adhesives

- Further specification : **Glues DIY-use (carpet glue, tile glue, wood parquet glue)**
- Concentration of substance in mixture or article : Covers concentrations up to 3.3 %
- Amounts used : For each use event, covers use amounts up to 6390 g
- Frequency and duration of use/exposure : Covers use up to 1 days/year
Covers exposure up to 6 h
- Human factors not influenced by risk management : Covers skin contact area up to 110 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.
Avoid using when windows closed.

Sealants and adhesives

- Further specification : **Spraying adhesive**
- Concentration of substance in mixture or article : Covers concentrations up to 11 %
- Amounts used : For each use event, covers use amounts up to 85.05 g
- Frequency and duration of use/exposure : Covers use up to 6 days/year
Covers exposure up to 4 h
- Human factors not influenced by risk management : Covers skin contact area up to 35.73 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.

Sealants and adhesives

- Further specification : **Sealants**
- Concentration of substance in mixture or article : Covers concentrations up to 2.5 %
- Amounts used : For each use event, covers use amounts up to 25 g
- Frequency and duration of use/exposure : Covers use up to 365 days/year
Covers exposure up to 1 h
- Human factors not influenced by risk management : Covers skin contact area up to 35.73 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.
Avoid using when windows closed.

Coatings and paints, thinners, paint removers

- Further specification : **Water-borne latex wall paint**
- Concentration of substance in mixture or article : Covers concentrations up to 1.5 %
- Amounts used : For each use event, covers use amounts up to 2760 g
- Frequency and duration of use/exposure : Covers use up to 4 days/year
Covers exposure up to 2.2 h
- Human factors not influenced by risk management : Covers skin contact area up to 428.75 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.
Avoid using when windows closed.

Coatings and paints, thinners, paint removers

- Further specification : **Solvent-rich, high-solid, water-borne paint**
- Concentration of substance in mixture or article : Covers concentrations up to 5 %
- Amounts used : For each use event, covers use amounts up to 744 g
- Frequency and duration of use/exposure : Covers use up to 6 days/year
Covers exposure up to 2.2 h
- Human factors not influenced by risk management : Covers skin contact area up to 428.75 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.
Avoid using when windows closed.

Coatings and paints, thinners, paint removers

- Further specification : **Aerosol spray can**
- Concentration of substance in mixture or article : Covers concentrations up to 50 %
- Amounts used : For each use event, covers use amounts up to 215 g
- Frequency and duration of use/exposure : Covers use up to 2 days/year
Covers exposure up to 0.33 h
- Human factors not influenced by risk management : Covers skin contact area up to 6600 cm²
- Other given operational conditions affecting consumers exposure : Covers use in a one car garage (34 m³) under typical ventilation.
Do not use in a room with a room volume below 34 m³

Coatings and paints, thinners, paint removers

- Further specification : **Removers (paint-, glue-, wall paper-, sealant-remover)**
- Concentration of substance in mixture or article : Covers concentrations up to 14 %
- Amounts used : For each use event, covers use amounts up to 491 g
- Frequency and duration of use/exposure : Covers use up to 3 days/year
Covers exposure up to 2 h
- Human factors not influenced by risk management : Covers skin contact area up to 857.5 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.
Avoid using when windows closed.

Fillers, putties, plasters, modelling clay

- Further specification : **Fillers and putty**
- Concentration of substance in mixture or article : Covers concentrations up to 2 %
- Amounts used : For each use event, covers use amounts up to 85 g
- Frequency and duration of use/exposure : Covers use up to 12 days/year
Covers exposure up to 4 h
- Human factors not influenced by risk management : Covers skin contact area up to 35.73 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.

Fillers, putties, plasters, modelling clay

- Further specification : **Plasters and floor equalisers**
- Concentration of substance in mixture or article : Covers concentrations up to 1.8 %
- Amounts used : For each use event, covers use amounts up to 900 g
- Frequency and duration of use/exposure : Covers use up to 12 days/year
Covers exposure up to 2 h
- Human factors not influenced by risk management : Covers skin contact area up to 857.5 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.
Avoid using when windows closed.

Fillers, putties, plasters, modelling clay

- Further specification : **Modelling clay**
- Concentration of substance in mixture or article : Covers concentrations up to 0.027 %
- Amounts used : For each use event, covers use amounts up to 37500 g
For each use event, assumes swallowed amount of 1 g
- Frequency and duration of use/exposure : Covers use up to 365 days/year
Covers exposure up to 8 h
- Human factors not influenced by risk management : Covers skin contact area up to 254.4 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.

Finger paints

- Further specification : **Finger paints**
- Concentration of substance in mixture or article : Covers concentrations up to 0.025 %
- Amounts used : For each use event, covers use amounts up to 37500 g
For each use event, assumes swallowed amount of 1.35 g
- Frequency and duration of use/exposure : Covers use up to 365 days/year
Covers exposure up to 8 h
- Human factors not influenced by risk management : Covers skin contact area up to 254.4 cm²
- Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.

Non-metal-surface treatment products

- Further specification : **Water-borne latex wall paint**
- Concentration of substance in mixture or article : Covers concentrations up to 1.5 %
- Amounts used : For each use event, covers use amounts up to 2760 g
- Frequency and duration of use/exposure : Covers use up to 4 days/year
Covers exposure up to 2.2 h
- Human factors not influenced by risk management : Covers skin contact area up to 428.75 cm²

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Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.
Avoid using when windows closed.

Non-metal-surface treatment products

Further specification : **Solvent-rich, high-solid, water-borne paint**
 Concentration of substance in mixture or article : Covers concentrations up to 5 %
 Amounts used : For each use event, covers use amounts up to 744 g
 Frequency and duration of use/exposure : Covers use up to 6 days/year
 Covers exposure up to 2.2 h
 Human factors not influenced by risk management : Covers skin contact area up to 428.75 cm²
 Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
 Covers use under typical household ventilation.
 Avoid using when windows closed.

Non-metal-surface treatment products

Further specification : **Aerosol spray can**
 Concentration of substance in mixture or article : Covers concentrations up to 50 %
 Amounts used : For each use event, covers use amounts up to 215 g
 Frequency and duration of use/exposure : Covers use up to 2 days/year
 Covers exposure up to 0.33 h
 Human factors not influenced by risk management : Covers skin contact area up to 6600 cm²
 Other given operational conditions affecting consumers exposure : Covers use in a one car garage (34 m³) under typical ventilation.
 Do not use in a room with a room volume below 34 m³

Non-metal-surface treatment products

Further specification : **Removers (paint-, glue-, wall paper-, sealant-remover)**
 Concentration of substance in mixture or article : Covers concentrations up to 14 %
 Amounts used : For each use event, covers use amounts up to 491 g
 Frequency and duration of use/exposure : Covers use up to 3 days/year
 Covers exposure up to 2 h
 Human factors not influenced by risk management : Covers skin contact area up to 857.5 cm²
 Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
 Covers use under typical household ventilation.
 Avoid using when windows closed.

Ink and toners

Further specification : **Inks and toners**
 Concentration of substance in mixture or article : Covers concentrations up to 0.45 %
 Amounts used : For each use event, covers use amounts up to 40 g
 Frequency and duration of use/exposure : Covers use up to 365 days/year
 Covers exposure up to 2.2 h

Human factors not influenced by risk management : Covers skin contact area up to 71.4 cm²

Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.

Textile dyes, finishing and impregnating products; including bleaches and other processing aids

Further specification : **Textile dyes, finishing and impregnating products; including bleaches and other processing aids**

Concentration of substance in mixture or article : Covers concentrations up to 1.1 %

Amounts used : For each use event, covers use amounts up to 45 g

Frequency and duration of use/exposure : Covers use up to 365 days/year
Covers exposure up to 1 h

Human factors not influenced by risk management : Covers skin contact area up to 857.5 cm²

Other given operational conditions affecting consumers exposure : Do not use in a room with a room volume below 20 m³
Covers use under typical household ventilation.

Section 3: - Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment) : Not applicable.

Exposure estimation and reference to its source - Consumers

Exposure assessment (human) : Not applicable.

Section 4: - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment : Not applicable.

Health : Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.
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.