Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET

Date of issue/Date of revision

: 7 June 2024

: 1.03 Version

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

1.1 Product identifier Product name : MANGER'S White Spirit **Product code** : 17002DUX038

: Not available.

REACH Registration number

Regist	ration number	Legal entity
01-2119458049-33		-
CAS number	: Not available.	
Dura dura (francis		

Product type : Liquid. Other means of

: Not available.

identification

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

Use in coatings-Consumer Use in coatings- Professional	

Product use

EC number

: Consumer applications, Professional applications, Application by non spray methods...

1.3 Details of the supplier of the safety data sheet

PPG Architectural Coatings UK Ltd.Huddersfield Road, Birstall, West Yorkshire WF17 9XA, Tel: +44 (0) 1924 354000 PPG Europe BV, Oceanenweg 2, 1047 BB Amsterdam, Netherlands. Tel: +31 (0) 204 075 050

e-mail address of person responsible for this SDS

: ps.acemea-north@ppg.com

1.4 Emergency telephone number

Supplier

+44 (0) 1924 354000 (Monday-Thursday 8.00-17.00, Friday 8.00-16.00 (GMT))

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

: UVCB **Product definition** Classification according to UK CLP/GHS

Fam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H336 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements

Code : 17002DUX038 MANGER'S White Spirit			Da	te of issue	e/Date of re	evision	: 7 June	2024
SECTION 2: Hazards	id	lentificat	ion					
Hazard pictograms	:					72		
Signal word	:	Danger						
Hazard statements	:	May be fatal May be fatal May cause of May cause of Causes dam Toxic to aqu	if swallowe drowsiness cancer. nage to orga	ed and ente or dizzines ans throug	ss. h prolonged	d or repeated	exposure.	
Precautionary statements								
General	:	Keep out of or label at h		ildren. If n	nedical adv	ice is needed	, have produ	uct container
Prevention	:	(breakthroug Viton®. Wea heat, hot sur Use only out	gh time): nit ar protective rfaces, spa tdoors or in	trile rubber e clothing. rks, open f a well-ven	thickness > Wear eye c lames and c tilated area	r protective gl = 0.55 mm - or face protect other ignition . Avoid relea smoke when t	polyvinyl ald tion. Keep a sources. No se to the en	cohol (PVA) - away from smoking. vironment.
Response	:	INHALED: C	Call a POIS	ON CENTE	ER or docto	et medical ac r if you feel u or. Do NOT i	nwell. IF SV	VALLOWED:
Storage	:	Store locked	l up. Store	in a well-v	entilated pla	ace. Keep coi	ntainer tightl	y closed.
Disposal	:	and internat	ional regula	ations.		nce with all lo P260. P270.		al, national 3 + P313, P304
		P312, P301	+ P310, P3	331, P405,	P403 + P23	33, P501		
Supplemental label elements	1	Repeated ex	xposure ma	ay cause sl	kin dryness	or cracking.		
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Restricted to	o professior	nal users.				
Special packaging requirem	en	<u>ts</u>						
Containers to be fitted with child-resistant fastenings	:	Yes, applica	ble.					
Tactile warning of danger	:	Yes, applica	ble.					
2.3 Other hazards								
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	PBT N/A	P N/A	B N/A	T Yes	vPvB N/A	vP N/A	vB N/A
Other hazards which do not result in classification	:	Prolonged o	r repeated	contact ma	ay dry skin a	and cause irri	tation.	

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SECTION 3: Composition/information on ingredients

3.1 Substances : U	VCB			
Product/ingredient name	Identifiers	%	Classification	Туре
naphtha (petroleum), hydrodesulphurized heavy Note P	EC: 265-185-4 CAS: 64742-82-1 Index: 649-330-00-2	80.6	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Туре

[1] Constituent

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

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

•	
Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects		
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	1	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	:	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Over-exposure signs/sympto	on	<u>ns</u>

Eye contact : No specific data.

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SECTION 4: Fi	rst aid measures	S	
Inhalation	: Adverse sy nausea or headache drowsiness	J. J	

	dizziness/vertigo unconsciousness
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	Adverse symptoms may include the following: nausea or vomiting

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

• • •		
Hazards from the substance or mixture	:	Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon oxides
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	ote	ctive equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

SECTION	A 6: Accidental release mea	euroe	
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SECTION 6: Accid	lental release measures
6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and materia	I for containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures	: Fut on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 5°C (32 to 41°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. 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. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

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SECTION 7: Handling and storage

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Occupational exposure limits

No exposure limit value known.

Recommended monitoring	1	Reference should be made to appropriate monitoring standards. Reference to
procedures		national guidance documents for methods for the determination of hazardous
		substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
naphtha (petroleum), hydrodesulphurized heavy Note P	DNEL	Long term Inhalation	1286 mg/m³	Workers	Systemic
	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Inhalation Short term Inhalation Cong term Inhalation Short term Inhalation Short term Inhalation Short term Inhalation Short term Inhalation Long term Dermal Long term Oral	0.41 mg/m ³ 1.9 mg/m ³ 178.57 mg/m ³ 640 mg/m ³ 837.5 mg/m ³ 1066.67 mg/m ³ 570 mg/m ³ 570 mg/m ³ 12 mg/kg bw/day 21 mg/kg bw/day	General population Workers General population General population Workers General population Workers General population General population	Systemic Local Local Local Systemic Systemic Systemic
	DNEL	Long term Dermal	21 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls	
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Individual protection measu	<u>res</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection Skin protection	: Chemical splash goggles.
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher
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SECTION 8: Exposure controls/personal protection

		(breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Gloves	:	For prolonged or repeated handling, use the following type of gloves:
		Recommended: nitrile rubber thickness >= 0.55 mm - polyvinyl alcohol (PVA) - Viton®
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Wear a respirator conforming to EN140. 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. Mask type: full-face mask half-face mask Filter type: organic vapour filter (Type A) particulate filter P3 Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Clear.
Odour	: Hydrocarbon. [Slight]
Odour threshold	: Not available.
Melting point/freezing point	 May start to solidify at the following temperature: -43.77°C (-46.8°F) This is base on data for the following ingredient: 1,2,4-trimethylbenzene. Weighted average: -63.78°C (-82.8°F)
Initial boiling point and boiling range	: 150°C (302°F)
Flammability (solid, gas)	: liquid
Upper/lower flammability or explosive limits	: Greatest known range: Lower: 1.4% Upper: 7.6% (Naphtha (petroleum), hydrodesulfurized heavy)
Flash point	: Closed cup: 40°C (104°F)
Auto-ignition temperature	: Not available.
рН	: Not applicable.
	Not applicable. insoluble in water.
Viscosity	: Kinematic (40°C): <14 mm²/s
Solubility(ies)	:
Media	Result
cold water	Not soluble
Miscible with water	: No.
Partition coefficient: n-octano water	: Not applicable.

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SECTION 9: Physical and chemical properties

Vapour pressure	: Not available.
Relative density	: 0.77
Vapour density	: Highest known value: 4.4 (Air = 1) (nonane). Weighted average: 4.24 (Air = 1)
Explosive properties	The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
Oxidising properties Particle characteristics	: Product does not present an oxidizing hazard.
Median particle size	: Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredie	nts.
10.2 Chemical stability	The product is stable.	
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur	
10.4 Conditions to avoid	When exposed to high temperatures may produce hazardous decomposition pr Refer to protective measures listed in sections 7 and 8.	roducts
10.5 Incompatible materials	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.	
10.6 Hazardous decomposition products	Depending on conditions, decomposition products may include the following materials: carbon oxides	

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Paphtha (petroleum), hydrodesulphurized heavy Note P	LD50 Oral	Rat	>5000 mg/kg	-
Conclusion/Summary	: Not available.			
<u>Acute toxicity estimates</u> N/A				
Irritation/Corrosion				
Conclusion/Summary	: Not available.			
Skin	: Not available.			
Eyes	: Not available.			
Respiratory Sensitisation	: Not available.			
Conclusion/Summary				
Skin	: Not available.			
Respiratory	: Not available.			
<u>Mutagenicity</u>				
Conclusion/Summary	: Not available.			
Carcinogenicity				
Conclusion/Summary	: Not available.			
Reproductive toxicity				

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SECTION 11: Toxicological information

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
haphtha (petroleum), hydrodesulphurized heavy Note P	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Aphtha (petroleum), hydrodesulphurized heavy Note P	Category 1		central nervous system (CNS)

Aspiration hazard

Product/ingredient name	Result
Paphtha (petroleum), hydrodesulphurized heavy Note P	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	1	No known significant effects or critical hazards.
Inhalation	:	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	1	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	:	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation dryness cracking
Ingestion	: Adverse symptoms may include the following: nausea or vomiting

Delayed and immediate effect	ts as well as chronic effects from short and long-term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

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SECTION 11: Toxicological information

Potential chronic health effects Not available. Conclusion/Summary : Not available. General : Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure. Mutagenicity : No known significant effects or critical hazards. Reproductive toxicity : No known significant effects or critical hazards.

Other information	: Not available.

SECTION 12: Ecological information

12.1 Toxicity Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil	
Soil/water partition	: Not available.
coefficient (Koc)	
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB
MANGER'S White Spirit	N/A	N/A	N/A	Yes	N/A	N/A	N/A

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods **Product** Methods of disposal The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. **Hazardous waste** : Yes. Waste catalogue Waste code Waste designation 08 01 11* waste paint and varnish containing organic solvents or other hazardous substances

Packaging

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SECTION 13: Disposal considerations

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.	
Type of packaging	Waste catalogue	
Container	15 01 02 plastic packaging	
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.	

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	UN1300	UN1300	UN1300	UN1300
14.2 UN proper shipping name	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	111	111	111	111
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	Naphtha (petroleum), hydrodesulfurized heavy)	Not applicable.

Additional information

ADR/RID	 The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
ADN	: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.

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

14.7 Transport in bulk	: Not available.
according to IMO	
instruments	

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SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Restricted to professional users. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c E2

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = GB CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Carc. 1B, H350	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 1, H372	Calculation method
Asp. Tox. 1, H304	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

⊮ 226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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SECTION 16: Other information

Full text of classifications

Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 1B	CARCINOGENICITY - Category 1B
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
History	
Date of issue/ Date of	: 7 June 2024
revision	
Date of previous issue	e : 23 October 2023
Prepared by	: EHS
Version	: 1.03

<u>Disclaimer</u>

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Annex to the extended Safety Data Sheet (eSDS)

Identification of the substance or mixture Product definition : UVCB : 17002DUX038 Code **Product name** : MANGER'S White Spirit Section 1 - Title : 919-446-0 Use in coatings-Consumer Short title of the exposure scenario List of use descriptors : Identified use name: Use in coatings-Consumer Substance supplied to that use in form of: As such 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: PC09a **Environmental contributing** : scenarios **Health Contributing** : Adhesives, sealants scenarios Anti-freeze and de-icing products **Biocidal products** Non-metal surface treatment products Ink and toners Leather treatment products Lubricants, greases, release products Polishes and wax blends Textile dyes and impregnating products Coatings and paints, thinners, paint removers Fillers, putties, plasters, modelling clay **Finger paints** Number of the ES : 1 : CEPE Industry Association : Covers the use in coatings (paints, inks, adhesives, etc) including exposures during **Processes and activities** use (including product transfer and preparation, application by brush, spray by hand covered by the exposure or similar methods) and equipment cleaning. Covers the use of formulated lubricants scenario in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.

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Section 2 - Exposure controls

olling environmental exposure for 1:
: Substance is complex UVCB. Predominantly hydrophobic
: Maximum daily site tonnage 6 kg/day
: Continuous release Emission days 365 days per year
: Local freshwater dilution factor: 10 Local marine water dilution factor: 100
: Release fraction to air from process (initial release prior to RMM): 0.985 Release fraction to wastewater from process (initial release prior to RMM): 0.01 Release fraction to soil from process (initial release prior to RMM): 0.005

Consumer

MANGER'S White Spirit	919-446-0 Use in coatings-Consumer
Conditions and measures related to sewage treatment plant	 Estimated substance removal from wastewater via municipal sewage treatment: 93.7% Maximum allowable site tonnage (M_{Safe}) based on release following total wastewater treatment removal: 1900 kg/day Assumed domestic sewage treatment plant flow: 2000 m³/d
Conditions and measures related to external treatment of waste for disposal	: External treatment and disposal of waste should comply with applicable local and/or national regulations.
Conditions and measures related to external recovery of waste	: External recovery and recycling of waste should comply with applicable local and/or national regulations.
Contributing scenario contro	lling consumer exposure for 2: Adhesives, sealants
Concentration of substance in mixture or article	: Unless otherwise stated. Covers concentrations up to 30%
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated.
Amounts used	Covers use up to 75g Covers skin contact area up to 35.73 cm ² Glues, hobby use- Covers use up to 9 g Glues DIY-use (carpet glue, tile glue, wood parquet glue)- Covers use up to 6390 g- Covers skin contact area up to 110 cm ² Glue from spray- Covers use up to 85.05 g
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day Covers exposure up to 1 h/event Glues, hobby use- Covers exposure up to 4 h/event Glues DIY-use (carpet glue, tile glue, wood parquet glue)- Covers use up to 1 days per year- Covers exposure up to 6 h/event Glue from spray- Covers use up to 6 days per year- Covers exposure up to 4 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
	ated to personal protection and hygiene
	lling consumer exposure for 3: Anti-freeze and de-icing products
Concentration of	: Washing car window- Covers concentrations up to 1 %
substance in mixture or article	Pouring into radiator- Covers concentrations up to 10 % Lock de-icer- Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	 Unless otherwise stated. Washing car window- Covers use up to 0.5 g Pouring into radiator- Covers use up to 2000 g- Covers skin contact area up to 428 cm² Lock de-icer- Covers use up to 4 g- Covers skin contact area up to 214.4 cm²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day Washing car window- Covers exposure up to 0.02 h/event Pouring into radiator- Covers exposure up to 0.17 h/event Lock de-icer- Covers use up to 0.25 h/event
Other given operational conditions affecting consumers exposure	: Covers use in a one car garage (34 m ³) under typical ventilation. Covers use in room size of 34 m ³

Conditions and measures	
related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures re	lated to personal protection and hygiene
Contributing scenario contr	olling consumer exposure for 4: Biocidal products
Concentration of substance in mixture or article	 Laundry and dish-washing products and Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)-Covers concentrations up to 5 % Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)-Covers concentrations up to 15 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	 Unless otherwise stated. Laundry and dish-washing products- Covers use up to 15 g- Covers skin contact area up to 857.5 cm² Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)- Covers use up to 27 g- Covers skin contact area up to 857.5 cm² Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)- Covers use up to 35 g- Covers skin contact area up to 428 cm²
Frequency and duration of use/exposure	 Unless otherwise stated. Covers use up to 1 uses per day Laundry and dish-washing products- Covers use up to 365 days per year- Covers exposure up to 0.5 h/event Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)- Covers use up to 128 days per year- Covers exposure up to 0.33 h/event Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)- Covers use up to 128 days per year- Covers use up to 128 days per year-
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to	: No specific risk management measure identified beyond those operational conditions stated.
consumers Conditions and measures re	lated to personal protection and hygiene
•	olling consumer exposure for 5: Non-metal surface treatment products : Unless otherwise stated.
Concentration of substance in mixture or article	 Waterborne wall paint- Covers concentrations up to 1.5 % High solid paint Waterborne paint- Covers concentrations up to 27.5 % Aerosol spray can and Removers (paint-, glue-, wall paper-, sealant-remover)- Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	 Unless otherwise stated. Waterborne wall paint- Covers use up to 2760 g- Covers skin contact area up to 428.75 cm² High solid paint Waterborne paint- Covers use up to 744 g- Covers skin contact area up to 428.75 cm² Aerosol spray can- Covers use up to 215 g Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 491 g- Covers skin contact area up to 857.5 cm²
Frequency and duration of use/exposure	 Unless otherwise stated. Covers use up to 1 uses per day Waterborne wall paint- Covers use up to 4 days per year- Covers exposure up to 2.2 h/event High solid paint Waterborne paint- Covers use up to 6 days per year- Covers exposure up to 2.2 h/event Aerosol spray can- Covers use up to 2 days per year- Covers exposure up to 0.33 h event n : 2/20/2020

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		Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 3 days per year- Covers exposure up to 2 h/event
Other given operational conditions affecting consumers exposure	:	Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation. Aerosol spray can- Covers use in a one car garage (34 m ³) under typical ventilation. Covers use in room size of 34 m ³
Conditions and measures related to information and behavioural advice to consumers	:	No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures re	elate	ed to personal protection and hygiene
Contributing scenario contro	ollir	ng consumer exposure for 6: Ink and toners
Concentration of substance in mixture or article	:	Unless otherwise stated. Covers concentrations up to 10 %
Physical state	:	liquid Vapour pressure 231 Pa
Amounts used	:	Unless otherwise stated. Covers use up to 40 g Covers skin contact area up to 71.4 cm ²
Frequency and duration of use/exposure	:	Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day Covers exposure up to 2.2 h/event
Other given operational conditions affecting consumers exposure	:	Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	:	No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures re	elate	ed to personal protection and hygiene
Contributing scenario contro	ollir	ng consumer exposure for 7: Leather treatment products
Concentration of substance in mixture or article	:	Unless otherwise stated. Covers concentrations up to 50 %
Physical state	:	liquid Vapour pressure 231 Pa
Amounts used	:	Unless otherwise stated. Covers use up to 56 g Covers skin contact area up to 430 cm ²
Frequency and duration of use/exposure	:	Unless otherwise stated. Covers use up to 1 uses per day Polishes, wax/cream (floor, furniture, shoes)- Covers use up to 29 days per year- Covers exposure up to 1.23 h/event Polishes, spray (furniture, shoes)- Covers use up to 8 days per year- Covers exposure up to 0.33 h/event
Other given operational conditions affecting consumers exposure	:	Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	:	No specific risk management measure identified beyond those operational conditions stated.
	elate	ed to personal protection and hygiene

MANGER'S White Spirit	919-446-0 Use in coatings-Consume
Contributing scenario contro	olling consumer exposure for 8: Lubricants, greases, release products
Concentration of substance in mixture or article	: Unless otherwise stated. Liquids- Covers concentrations up to 100 % Pastes- Covers concentrations up to 20 % Sprays- Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	: Unless otherwise stated. Liquids- Covers use up to 2200 g- Covers skin contact area up to 468 cm ² Pastes- Covers use up to 34 g- Covers skin contact area up to 468 cm ² Sprays- Covers use up to 73 g- Covers skin contact area up to 428.75 cm ²
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Liquids- Covers use up to 4 days per year- Covers exposure up to 0.17 h/event Pastes- Covers use up to 10 days per year- Covers exposure up to 4 h/event Sprays- Covers use up to 6 days per year- Covers exposure up to 0.17 h/event
Other given operational conditions affecting consumers exposure	 Unless otherwise stated, assumes use as ambient temperatures in a 20 m³ room. Covers use under typical household ventilation. Liquids- Covers use in a one car garage (34 m³) under typical ventilation. Covers use in room size of 34 m³
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures re	lated to personal protection and hygiene
Contributing scenario contro	olling consumer exposure for 9: Polishes and wax blends
Concentration of substance in mixture or article	: Unless otherwise stated. Covers concentrations up to 50 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	 Unless otherwise stated. Covers skin contact area up to 430 cm² Polishes, wax/cream (floor, furniture, shoes)- Covers use up to 142 g Polishes, spray (furniture, shoes)- Covers use up to 35 g
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 1 uses per day Polishes, wax/cream (floor, furniture, shoes)- Covers use up to 29 days per year- Covers exposure up to 1.23 h/event Polishes, spray (furniture, shoes)- Covers use up to 8 days per year- Covers exposure up to 0.33 h/event
Other given operational conditions affecting consumers exposure	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	: No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures re	lated to personal protection and hygiene
Contributing scenario contro	olling consumer exposure for 10: Textile dyes and impregnating products
Concentration of substance in mixture or article	: Unless otherwise stated. Covers concentrations up to 10 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	 Unless otherwise stated. Covers use up to 115 g Covers skin contact area up to 857.5 cm²
Date of issue/Date of revisio	n : 2/20/2020 18 /

MANGER'S White Spirit	919-446-0 Use in coatings-Consum
Frequency and duration of use/exposure	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day Covers exposure up to 1 h/event
Other given operational conditions affecting consumers exposure	Unless otherwise stated, assumes use as ambient temperatures in a 20 m ³ room. Covers use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers	No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures re	ted to personal protection and hygiene
Contributing scenario contro	ing consumer exposure for 11: Coatings and paints, thinners, paint removers
Concentration of substance in mixture or article	Waterborne wall paint- Covers concentrations up to 1.5 % High solid paint- Covers concentrations up to 27.5 % Aerosol spray can- Covers concentrations up to 50 % Removers (paint-, glue-, wall paper-, sealant-remover)- Covers concentrations up to 100 %
Physical state	: liquid Vapour pressure 231 Pa
Amounts used	 Unless otherwise stated. Waterborne wall paint- Covers use up to 2760 g- Covers skin contact area up to 428.75 cm² High solid paint- Covers use up to 744 g- Covers skin contact area up to 428.75 cm
	Aerosol spray can- Covers use up to 215 g Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 491 g- Covers skin contact area up to 857.7 cm ²
Frequency and duration of use/exposure	 Unless otherwise stated. Covers use up to 1 uses per day Waterborne wall paint- Covers use up to 4 days per year- Covers exposure up to 2.2 h/event High solid paint- Covers use up to 6 days per year- Covers exposure up to 2.2 h/event Aerosol spray can- Covers use up to 2 days per year- Covers exposure up to 0.33 h event Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 3 days per year- Covers exposure up to 2 h/event
Other given operational conditions affecting consumers exposure	 Unless otherwise stated, assumes use as ambient temperatures in a 20 m³ room. Covers use under typical household ventilation. Aerosol spray can- Covers use in a one car garage (34 m³) under typical ventilation Covers use in room size of 34 m³
Conditions and measures related to information and behavioural advice to consumers	 No specific risk management measure identified beyond those operational conditions stated.
Conditions and measures re	ted to personal protection and hygiene
Contributing scenario contro	ing consumer exposure for 12: Fillers, putties, plasters, modelling clay
Concentration of substance in mixture or article	 Fillers and putty and Plasters and floor equalisers- Covers concentrations up to 2 % Modelling clay- Covers concentrations up to 1%
Physical state	liquid Vapour pressure 231 Pa
Amounts used	 Unless otherwise stated. Fillers and putty- Covers use up to 85 g- Covers skin contact area up to 35.73cm² Plasters and floor equalisers- Covers use up to 13800 g- Covers skin contact area up to 857.5 cm² Modelling clay- Covers skin contact area up to 254.4 cm²- For each use event, assumes swallowed amount of 1 g

MANGER'S White Spirit		919-446-0 Use in coatings-Consumer
Frequency and duration of use/exposure	Co Fil ev Pla up	nless otherwise stated. overs use up to 1 uses per day llers and putty- Covers use up to 12 days per year- Covers exposure up to 4 h/ rent asters and floor equalisers- Covers use up to 12 days per year- Covers exposure to 2 h/event odelling clay- Covers use up to 365 days per year
Other given operational conditions affecting consumers exposure		nless otherwise stated, assumes use as ambient temperatures in a 20 m³ room. overs use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers		o specific risk management measure identified beyond those operational inditions stated.
Conditions and measures rel	ated t	o personal protection and hygiene
	lling o	consumer exposure for 13: Finger paints
Concentration of substance in mixture or article	: Ur	nless otherwise stated. Covers concentrations up to 50 %
Physical state	liq : Va	uid apour pressure 231 Pa
Amounts used	Fo	nless otherwise stated. or each use event, assumes swallowed amount of 1.35 g overs skin contact area up to 254.4 cm²
Frequency and duration of use/exposure	Co	nless otherwise stated. overs use up to 365 days per year overs use up to 1 uses per day
Other given operational conditions affecting consumers exposure		nless otherwise stated, assumes use as ambient temperatures in a 20 m³ room. overs use under typical household ventilation.
Conditions and measures related to information and behavioural advice to consumers		void using at a product concentration greater than 5 %
Conditions and measures rel	ated t	o personal protection and hygiene

Section 3 - Exposure estimation and reference to its source

Website:	:	Not applicable.
Exposure estimation and ref	ere	nce to its source - Environment: 1:
Exposure assessment (environment):	:	Hydrocarbon Block Method (Petrorisk)
Exposure estimation and reference to its source	:	Not available.
Exposure estimation and ref	ere	nce to its source - Consumers: 2: Adhesives, sealants
Exposure assessment (human):	:	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	:	Not available.
Exposure estimation and ref	ere	nce to its source - Consumers: 3: Anti-freeze and de-icing products
Exposure assessment (human):	:	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	:	Not available.

MANGER'S White Spirit	919-446-0 Use in coatings-Consumer
Exposure estimation and re	ference to its source - Consumers: 4: Biocidal products
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and re	ference to its source - Consumers: 5: Non-metal surface treatment products
Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and re	ference to its source - Consumers: 6: Ink and toners
Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and re	ference to its source - Consumers: 7: Leather treatment products
Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and re	ference to its source - Consumers: 8: Lubricants, greases, release products
Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and ret	ference to its source - Consumers: 9: Polishes and wax blends
Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and re	ference to its source - Consumers: 10: Textile dyes and impregnating products
Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and re-	ference to its source - Consumers: 11: Coatings and paints, thinners, paint
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and ret	ference to its source - Consumers: 12: Fillers, putties, plasters, modelling clay
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and re	ference to its source - Consumers: 13: Finger paints
Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.

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

MANGER'S White Spirit	919-446-0 Use in coatings-Consumer
Environment	: 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. Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).
Health	 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.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the subs	sta	nce or mixture
Product definition	:	UVCB
Code	:	17002DUX038
Product name	1	MANGER'S White Spirit
Section 1 - Title		
Short title of the exposure scenario	:	919-446-0 Use in coatings- Professional
List of use descriptors	:	Identified use name: Use in coatings- Professional Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC10, PROC13, PROC15, PROC11, PROC19 Substance supplied to that use in form of: As such Sector of end use: SU22 Subsequent service life relevant for that use: No. Environmental Release Category: ERC08a, ERC08d Market sector by type of chemical product: PC09a
Environmental contributing scenarios	:	
Health Contributing scenarios	:	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Transfer of substance or mixture (charging and discharging) at dedicated facilities Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Chemical production where opportunity for exposure arises Mixing or blending in batch processes Roller application or brushing Non industrial spraying Treatment of articles by dipping and pouring Use as laboratory reagent Manual activities involving hand contact
Number of the ES	:	1
Industry Association	:	CEPE
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, brush, spreader by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities.

Identification of the substance or mixture

Section 2 - Exposure controls

MANGER'S White Spirit	919-446-0 Use in coatings- Professional
Contributing scenario contro	lling environmental exposure for 1:
Product characteristics	: Substance is complex UVCB. Predominantly hydrophobic
Amounts used	: Maximum daily site tonnage 2.3 kg/day
Frequency and duration of use	: Continuous release Emission days: 365
Environment factors not influenced by risk management	: Local freshwater dilution factor: 10 Local marine water dilution factor: 100
Other conditions affecting environmental exposure	: Release fraction to air from process (initial release prior to RMM): 0.98 Release fraction to wastewater from process (initial release prior to RMM): 0.01 Release fraction to soil from process (initial release prior to RMM): 0.01
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	 Risk from environmental exposure is driven by soil. No wastewater treatment required. Treat on-site wastewater (prior to receiving water discharge) to provide the required removal efficiency of >= (%): 0 If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of >= (%): 0
Organisational measures to prevent/limit release from site	: Prevent discharge of undissolved substance to or recover from onsite wastewater. Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
Conditions and measures related to sewage treatment	: Estimated substance removal from wastewater via municipal sewage treatment: 93.7 %
plant	Total efficiency of removal from wastewater after on-site and off-site (municipal treatment plant) RMMs: 93.7 % Maximum allowable site tonnage (M _{Safe}) based on release following total wastewater treatment removal: 1900 Assumed domestic sewage treatment plant flow: 2000 m ³ /d
Conditions and measures related to external treatment of waste for	: External treatment and disposal of waste should comply with applicable local and/or national regulations.
disposal	
Conditions and measures related to external recovery of waste	: External recovery and recycling of waste should comply with applicable local and/or national regulations.
Contributing scenario contro discharging) at non-dedicate	lling worker exposure for 2: Transfer of substance or mixture (charging and different for a second second second
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: No specific measures identified.
Conditions and measures rel	ated to personal protection, hygiene and health evaluation
Contributing scenario contro discharging) at dedicated fac	Iling worker exposure for 3: Transfer of substance or mixture (charging and ilities
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented

MANGER'S White Spirit	919-446-0 Use in coatings- Professiona
Product safety-related measures	: No specific measures identified.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
	olling worker exposure for 4: Chemical production or refinery in closed process re or processes with equivalent containment conditions
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	 Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: Handle substance within a closed system.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
	olling worker exposure for 5: Chemical production or refinery in closed casional controlled exposure or processes with equivalent containment
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	 Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: Handle substance within a closed system.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
	olling worker exposure for 6: Manufacture or formulation in the chemical industry ith occasional controlled exposure or processes with equivalent containment
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: Handle substance within a closed system.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
Contributing scenario contro exposure arises	olling worker exposure for 7: Chemical production where opportunity for
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
	n : 2/20/2020 25/2

MANGER'S White Spirit	919-446-0 Use in coatings- Professional
Product safety-related measures	: No specific measures identified.
	lated to personal protection, hygiene and health evaluation
Contributing scenario contro	olling worker exposure for 8: Mixing or blending in batch processes
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	 Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	 Film formation - air drying Outdoor-Indoor No specific measures identified. Preparation of material for application-Outdoor-Indoor No specific measures identified.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
Contributing scenario contro	olling worker exposure for 9: Roller application or brushing
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: Outdoor-Indoor No specific measures identified.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
Contributing scenario contro	olling worker exposure for 10: Non industrial spraying
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	 Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: Manual Spraying-Indoor Provide a good standard of controlled ventilation (10 to 15 air changes per hour). or Wear a respirator conforming to EN140.
	Manual Spraying-Outdoor Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 4 hours per day. or Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
	olling worker exposure for 11: Treatment of articles by dipping and pouring
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
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Product safety-related measures	: Outdoor-Indoor Avoid manual contact with wet work pieces.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
Contributing scenario contro	olling worker exposure for 12: Use as laboratory reagent
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	 Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: No specific measures identified.
Conditions and measures re	lated to personal protection, hygiene and health evaluation
Contributing scenario contro	olling worker exposure for 13: Manual activities involving hand contact
Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100 %.
Physical state	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Other conditions affecting workers exposure	 Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Product safety-related measures	: No specific measures identified.
Conditions and mossures re	lated to personal protection, hygiene and health evaluation

Section 3 - Exposure estimation and reference to its source

Website:	:	Not applicable.
Exposure estimation and ref	ere	nce to its source - Environment: 1:
Exposure assessment (environment):	:	Hydrocarbon Block Method (Petrorisk)
Exposure estimation and reference to its source	:	Not available.
Exposure estimation and ref discharging) at non-dedicate		nce to its source - Workers: 2: Transfer of substance or mixture (charging and acilities
Exposure assessment (human):	:	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	:	Not available.
Exposure estimation and ref discharging) at dedicated fac		nce to its source - Workers: 3: Transfer of substance or mixture (charging and ies
Exposure assessment (human):	:	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	:	Not available.

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	erence to its source - Workers: 4: Chemical production or refinery in closed of exposure or processes with equivalent containment conditions
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
	erence to its source - Workers: 5: Chemical production or refinery in closed casional controlled exposure or processes with equivalent containment
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
	erence to its source - Workers: 6: Manufacture or formulation in the chemical cesses with occasional controlled exposure or processes with equivalent
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and references	erence to its source - Workers: 7: Chemical production where opportunity for
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and ref	erence to its source - Workers: 8: Mixing or blending in batch processes
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and ret	erence to its source - Workers: 9: Roller application or brushing
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and ret	erence to its source - Workers: 10: Non industrial spraying
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and ret	erence to its source - Workers: 11: Treatment of articles by dipping and pouring
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and ref	erence to its source - Workers: 12: Use as laboratory reagent
Exposure essentiation and real Exposure assessment (human):	 The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.

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Exposure estimation and reference to its source - Workers: 13: Manual activities involving hand contact	
Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.

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

Environment	:	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.
		Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).
Health	:	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.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.