

# SAFETY DATA SHEET



Date of issue/Date of revision

: 23 October 2023

Version

: 1.02

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

### 1.1 Product identifier

**Product name** : MANGER'S White Spirit

**EC number** : Not available.

**REACH Registration number**

Registration number	Legal entity
01-2119458049-33	-

**CAS number** : Not available.

**Product code** : 17002DUX038

**Product description** :

**Product type** : Liquid.

**Other means of identification** : Not available.

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

#### Identified uses

Use in coatings-Consumer

Use in coatings- Professional

**Product use** : 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

**Product definition** : UVCB

**Classification according to UK CLP/GHS**

Flam. Liq. 3, H226

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

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SECTION 2: Hazards identification

Hazard pictograms	:	   
Signal word	:	Danger
Hazard statements	:	Flammable liquid and vapour. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.
<u>Precautionary statements</u>		
General	:	Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapour. Do not eat, drink or smoke when using this product.
Response	:	Collect spillage. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
Storage	:	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations. P102, P101, P210, P271, P273, P260, P270, P391, P304 + P312, P301 + P310, P331, P405, P403 + P233, P501
Supplemental label elements	:	Repeated exposure may cause skin dryness or cracking.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
<u>Special packaging requirements</u>		
Containers to be fitted with child-resistant fastenings	:	Yes, applicable.
Tactile warning of danger	:	Yes, applicable.

2.3 Other hazards

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	:	PBT	P	B	T	vPvB	vP	vB
		N/A	N/A	N/A	Yes	N/A	N/A	N/A
<b>Other hazards which do not result in classification</b>	:	Prolonged or repeated contact may dry skin and cause irritation.						

SECTION 3: Composition/information on ingredients

3.1 Substances	:	UVCB
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**SECTION 3: Composition/information on ingredients**

Product/ingredient name	Identifiers	%	Classification	Type
naphtha (petroleum), hydrodesulphurized heavy 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 <b>See Section 16 for the full text of the H statements declared above.</b>	[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.

Type

[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.

**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** : 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/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness

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## SECTION 4: First aid measures

- 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<sub>2</sub>, 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, protective 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".

### 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 material for containment and cleaning up

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- 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** : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not swallow. Avoid contact with eyes, skin and clothing. 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)**

See Section 1.2 for Identified uses.

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**MANGER'S White Spirit****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 procedures** : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
naphtha (petroleum), hydrodesulphurized heavy Nota(s) P	DNEL	Long term Inhalation	1286 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	0.41 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	1.9 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	178.57 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	640 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	837.5 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	1066.67 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	1152 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	1286.4 mg/m <sup>3</sup>	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 measures**

**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** : Chemical splash goggles.

**Skin protection**

**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 (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  $\geq$  0.55 mm - polyvinyl alcohol (PVA) - Viton®



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**MANGER'S White Spirit****SECTION 8: Exposure controls/personal protection**

- 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****Appearance**

- 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 based 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.
- Decomposition temperature** :
- pH** : Not applicable.  
Not applicable. insoluble in water.
- Viscosity** : Kinematic (40°C): <14 mm<sup>2</sup>/s
- Solubility(ies)** :

Media	Result
cold water	Not soluble

- Miscible with water** : No.
- Partition coefficient: n-octanol/ water** : Not applicable.
- 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.

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## SECTION 9: Physical and chemical properties

**Oxidising properties** : Product does not present an oxidizing hazard.  
**Particle characteristics**  
**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 ingredients.  
**10.2 Chemical stability** : The product is stable.  
**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
**10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.  
**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
naphtha (petroleum), hydrodesulphurized heavy Nota(s) P	LD50 Oral	Rat	>5000 mg/kg	-

**Conclusion/Summary** : Not available.

#### Acute toxicity estimates

N/A

#### Irritation/Corrosion

**Conclusion/Summary** : Not available.

**Skin** : Not available.

**Eyes** : Not available.

**Respiratory** : Not available.

#### Sensitisation

**Conclusion/Summary**

**Skin** : Not available.

**Respiratory** : Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

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



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## SECTION 11: Toxicological information

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

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
naphtha (petroleum), hydrodesulphurized heavy Nota(s) P	Category 1	-	central nervous system (CNS)

### Aspiration hazard

Product/ingredient name	Result
naphtha (petroleum), hydrodesulphurized heavy Nota(s) P	ASPIRATION HAZARD - Category 1

**Information on likely routes of exposure** : Not available.

### 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** : 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 effects as well as chronic effects from short and long-term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

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SECTION 11: Toxicological information

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	: No known significant effects or critical hazards.
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 coefficient (K<sub>oc</sub>) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	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 non-recyclable 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	
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 13: Disposal considerations

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	IATA
<b>14.1 UN number</b>	UN1300	UN1300	UN1300	UN1300
<b>14.2 UN proper shipping name</b>	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE
<b>14.3 Transport hazard class(es)</b>	3	3	3	3
<b>14.4 Packing group</b>	III	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
<b>Marine pollutant substances</b>	Not applicable.	Not applicable.	(Naphtha (petroleum), hydrodesulfurized heavy, nonane)	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.  
**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

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

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

## 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.

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**SECTION 15: Regulatory information**

Ozone depleting substances

Not listed.

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

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

<b>Category</b>
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 STOT SE 3, H336 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
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.

Full text of classifications

Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
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

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<b>Code</b>	<b>: 17002DUX038</b>	<b>Date of issue/Date of revision</b>	<b>: 23 October 2023</b>
<b>MANGER'S White Spirit</b>			

**SECTION 16: Other information**

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**Version** : 1.02

**Disclaimer**

*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)

Consumer

### Identification of the substance or mixture

Product definition : UVCB  
Code : 17002DUX038  
Product name : MANGER'S White Spirit

### Section 1 - Title

Short title of the exposure scenario : 919-446-0 Use in coatings-Consumer  
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 scenarios : **Adhesives, sealants**  
**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
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 product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning. Covers the use of formulated lubricants 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.

### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1:</b>	
Product characteristics	: Substance is complex UVCB. Predominantly hydrophobic
Amounts used	: Maximum daily site tonnage 6 kg/day
Frequency and duration of use	: Continuous release Emission days 365 days per year
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): 0.985 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



<b>Conditions and measures related to sewage treatment plant</b>	: Estimated substance removal from wastewater via municipal sewage treatment: 93.7% Maximum allowable site tonnage (M <sub>Safe</sub> ) based on release following total wastewater treatment removal: 1900 kg/day Assumed domestic sewage treatment plant flow: 2000 m <sup>3</sup> /d
<b>Conditions and measures related to external treatment of waste for disposal</b>	: External treatment and disposal of waste should comply with applicable local and/or national regulations.
<b>Conditions and measures related to external recovery of waste</b>	: External recovery and recycling of waste should comply with applicable local and/or national regulations.

#### Contributing scenario controlling consumer exposure for 2: Adhesives, sealants

<b>Concentration of substance in mixture or article</b>	: Unless otherwise stated. Covers concentrations up to 30%
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Covers use up to 75g Covers skin contact area up to 35.73 cm <sup>2</sup> 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 <sup>2</sup> Glue from spray- Covers use up to 85.05 g
<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation.
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.
<b>Conditions and measures related to personal protection and hygiene</b>	

#### Contributing scenario controlling consumer exposure for 3: Anti-freeze and de-icing products

<b>Concentration of substance in mixture or article</b>	: Washing car window- Covers concentrations up to 1 % Pouring into radiator- Covers concentrations up to 10 % Lock de-icer- Covers concentrations up to 50 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: 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 cm <sup>2</sup> Lock de-icer- Covers use up to 4 g- Covers skin contact area up to 214.4 cm <sup>2</sup>
<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Covers use in a one car garage (34 m <sup>3</sup> ) under typical ventilation. Covers use in room size of 34 m <sup>3</sup>

**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 related to personal protection and hygiene**

**Contributing scenario controlling 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 cm<sup>2</sup>  
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 cm<sup>2</sup>  
Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)- Covers use up to 35 g- Covers skin contact area up to 428 cm<sup>2</sup>

**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 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 m<sup>3</sup> 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 related to personal protection and hygiene**

**Contributing scenario controlling consumer exposure for 5: Non-metal surface treatment products**

**Concentration of substance in mixture or article** : Unless otherwise stated.  
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 cm<sup>2</sup>  
High solid paint Waterborne paint- Covers use up to 744 g- Covers skin contact area up to 428.75 cm<sup>2</sup>  
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 cm<sup>2</sup>

**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

<b>Other given operational conditions affecting consumers exposure</b>	Removers (paint-, glue-, wall paper-, sealant-remover)- Covers use up to 3 days per year- Covers exposure up to 2 h/event : Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation. Aerosol spray can- Covers use in a one car garage (34 m <sup>3</sup> ) under typical ventilation. Covers use in room size of 34 m <sup>3</sup>
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.
<b>Conditions and measures related to personal protection and hygiene</b>	

**Contributing scenario controlling consumer exposure for 6: Ink and toners**

<b>Concentration of substance in mixture or article</b>	: Unless otherwise stated. Covers concentrations up to 10 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Covers use up to 40 g Covers skin contact area up to 71.4 cm <sup>2</sup>
<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation.
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.
<b>Conditions and measures related to personal protection and hygiene</b>	

**Contributing scenario controlling consumer exposure for 7: Leather treatment products**

<b>Concentration of substance in mixture or article</b>	: Unless otherwise stated. Covers concentrations up to 50 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Covers use up to 56 g Covers skin contact area up to 430 cm <sup>2</sup>
<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation.
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.
<b>Conditions and measures related to personal protection and hygiene</b>	

**Contributing scenario controlling consumer exposure for 8: Lubricants, greases, release products**

<b>Concentration of substance in mixture or article</b>	: Unless otherwise stated. Liquids- Covers concentrations up to 100 % Pastes- Covers concentrations up to 20 % Sprays- Covers concentrations up to 50 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Liquids- Covers use up to 2200 g- Covers skin contact area up to 468 cm <sup>2</sup> Pastes- Covers use up to 34 g- Covers skin contact area up to 468 cm <sup>2</sup> Sprays- Covers use up to 73 g- Covers skin contact area up to 428.75 cm <sup>2</sup>
<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation. Liquids- Covers use in a one car garage (34 m <sup>3</sup> ) under typical ventilation. Covers use in room size of 34 m <sup>3</sup>
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.

**Conditions and measures related to personal protection and hygiene****Contributing scenario controlling consumer exposure for 9: Polishes and wax blends**

<b>Concentration of substance in mixture or article</b>	: Unless otherwise stated. Covers concentrations up to 50 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Covers skin contact area up to 430 cm <sup>2</sup> Polishes, wax/cream (floor, furniture, shoes)- Covers use up to 142 g Polishes, spray (furniture, shoes)- Covers use up to 35 g
<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation.
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.

**Conditions and measures related to personal protection and hygiene****Contributing scenario controlling consumer exposure for 10: Textile dyes and impregnating products**

<b>Concentration of substance in mixture or article</b>	: Unless otherwise stated. Covers concentrations up to 10 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Covers use up to 115 g Covers skin contact area up to 857.5 cm <sup>2</sup>

<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation.
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.
<b>Conditions and measures related to personal protection and hygiene</b>	

#### Contributing scenario controlling consumer exposure for 11: Coatings and paints, thinners, paint removers

<b>Concentration of substance in mixture or article</b>	: 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 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Waterborne wall paint- Covers use up to 2760 g- Covers skin contact area up to 428.75 cm <sup>2</sup> High solid paint- Covers use up to 744 g- Covers skin contact area up to 428.75 cm <sup>2</sup> 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 <sup>2</sup>
<b>Frequency and duration of use/exposure</b>	: 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
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation. Aerosol spray can- Covers use in a one car garage (34 m <sup>3</sup> ) under typical ventilation. Covers use in room size of 34 m <sup>3</sup>
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.
<b>Conditions and measures related to personal protection and hygiene</b>	

#### Contributing scenario controlling consumer exposure for 12: Fillers, putties, plasters, modelling clay

<b>Concentration of substance in mixture or article</b>	: Fillers and putty and Plasters and floor equalisers- Covers concentrations up to 2 % Modelling clay- Covers concentrations up to 1%
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. Fillers and putty- Covers use up to 85 g- Covers skin contact area up to 35.73cm <sup>2</sup> Plasters and floor equalisers- Covers use up to 13800 g- Covers skin contact area up to 857.5 cm <sup>2</sup> Modelling clay- Covers skin contact area up to 254.4 cm <sup>2</sup> - For each use event, assumes swallowed amount of 1 g

<b>Frequency and duration of use/exposure</b>	: Unless otherwise stated. Covers use up to 1 uses per day Fillers and putty- Covers use up to 12 days per year- Covers exposure up to 4 h/ event Plasters and floor equalisers- Covers use up to 12 days per year- Covers exposure up to 2 h/event Modelling clay- Covers use up to 365 days per year
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation.
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: No specific risk management measure identified beyond those operational conditions stated.
<b>Conditions and measures related to personal protection and hygiene</b>	

<b>Contributing scenario controlling consumer exposure for 13: Finger paints</b>	
<b>Concentration of substance in mixture or article</b>	: Unless otherwise stated. Covers concentrations up to 50 %
<b>Physical state</b>	: liquid Vapour pressure 231 Pa
<b>Amounts used</b>	: Unless otherwise stated. For each use event, assumes swallowed amount of 1.35 g Covers skin contact area up to 254.4 cm <sup>2</sup>
<b>Frequency and duration of use/exposure</b>	: Unless otherwise stated. Covers use up to 365 days per year Covers use up to 1 uses per day
<b>Other given operational conditions affecting consumers exposure</b>	: Unless otherwise stated, assumes use as ambient temperatures in a 20 m <sup>3</sup> room. Covers use under typical household ventilation.
<b>Conditions and measures related to information and behavioural advice to consumers</b>	: Avoid using at a product concentration greater than 5 %
<b>Conditions and measures related to personal protection and hygiene</b>	

### Section 3 - Exposure estimation and reference to its source

<b>Website:</b>	: Not applicable.
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<b>Exposure estimation and reference to its source - Environment: 1:</b>	
<b>Exposure assessment (environment):</b>	: Hydrocarbon Block Method (Petrorisk)
<b>Exposure estimation and reference to its source</b>	: Not available.

<b>Exposure estimation and reference to its source - Consumers: 2: Adhesives, sealants</b>	
<b>Exposure assessment (human):</b>	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
<b>Exposure estimation and reference to its source</b>	: Not available.

<b>Exposure estimation and reference to its source - Consumers: 3: Anti-freeze and de-icing products</b>	
<b>Exposure assessment (human):</b>	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
<b>Exposure estimation and reference to its source</b>	: Not available.



**Exposure estimation and reference 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 reference 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 reference 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 reference 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 reference 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 reference 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 reference 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 reference to its source - Consumers: 11: Coatings and paints, thinners, paint removers**

**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 reference 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 reference 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**

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 ( <a href="http://cefic.org/en/reach-for-industries-libraries.html">http://cefic.org/en/reach-for-industries-libraries.html</a> ).
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.

## Identification of the substance or mixture

**Product definition** : UVCB  
**Code** : 17002DUX038  
**Product name** : 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**

<b>Number of the ES</b>	: 1
<b>Industry Association</b>	: CEPE
<b>Processes and activities covered by the exposure scenario</b>	: 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.

## Section 2 - Exposure controls

**Contributing scenario controlling environmental exposure for 1:**

<b>Product characteristics</b>	: Substance is complex UVCB. Predominantly hydrophobic
<b>Amounts used</b>	: Maximum daily site tonnage 2.3 kg/day
<b>Frequency and duration of use</b>	: Continuous release Emission days: 365
<b>Environment factors not influenced by risk management</b>	: Local freshwater dilution factor: 10 Local marine water dilution factor: 100
<b>Other conditions affecting environmental exposure</b>	: 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
<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>	: 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 $\geq$ (%): 0 If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of $\geq$ (%): 0
<b>Organisational measures to prevent/limit release from site</b>	: 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.
<b>Conditions and measures related to sewage treatment plant</b>	: Estimated substance removal from wastewater via municipal sewage treatment: 93.7 % Total efficiency of removal from wastewater after on-site and off-site (municipal treatment plant) RMMs: 93.7 % Maximum allowable site tonnage ( $M_{\text{safe}}$ ) based on release following total wastewater treatment removal: 1900 Assumed domestic sewage treatment plant flow: 2000 m <sup>3</sup> /d
<b>Conditions and measures related to external treatment of waste for disposal</b>	: External treatment and disposal of waste should comply with applicable local and/or national regulations.
<b>Conditions and measures related to external recovery of waste</b>	: External recovery and recycling of waste should comply with applicable local and/or national regulations.

**Contributing scenario controlling worker exposure for 2: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities**

<b>Concentration of substance in mixture or article</b>	: Covers percentage substance in the product up to 100 %.
<b>Physical state</b>	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
<b>Frequency and duration of use/exposure</b>	: Covers daily exposures up to 8 hours
<b>Other conditions affecting workers exposure</b>	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
<b>Product safety-related measures</b>	: No specific measures identified.

**Conditions and measures related to personal protection, hygiene and health evaluation****Contributing scenario controlling worker exposure for 3: Transfer of substance or mixture (charging and discharging) at dedicated facilities**

<b>Concentration of substance in mixture or article</b>	: Covers percentage substance in the product up to 100 %.
<b>Physical state</b>	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
<b>Frequency and duration of use/exposure</b>	: Covers daily exposures up to 8 hours
<b>Other conditions affecting workers exposure</b>	: 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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling worker exposure for 4: Chemical production or refinery in closed process without likelihood of exposure 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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling worker exposure for 5: Chemical production or refinery in closed continuous process with occasional controlled exposure 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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling worker exposure for 6: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition**

**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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling worker exposure for 7: Chemical production where opportunity for exposure arises**

**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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling 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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling 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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling 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 related to personal protection, hygiene and health evaluation**

**Contributing scenario controlling 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



<b>Product safety-related measures</b>	: Outdoor-Indoor Avoid manual contact with wet work pieces.
<b>Conditions and measures related to personal protection, hygiene and health evaluation</b>	
<b>Contributing scenario controlling worker exposure for 12: Use as laboratory reagent</b>	
<b>Concentration of substance in mixture or article</b>	: Covers percentage substance in the product up to 100 %.
<b>Physical state</b>	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
<b>Frequency and duration of use/exposure</b>	: Covers daily exposures up to 8 hours
<b>Other conditions affecting workers exposure</b>	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
<b>Product safety-related measures</b>	: No specific measures identified.
<b>Conditions and measures related to personal protection, hygiene and health evaluation</b>	
<b>Contributing scenario controlling worker exposure for 13: Manual activities involving hand contact</b>	
<b>Concentration of substance in mixture or article</b>	: Covers percentage substance in the product up to 100 %.
<b>Physical state</b>	: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure
<b>Frequency and duration of use/exposure</b>	: Covers daily exposures up to 8 hours
<b>Other conditions affecting workers exposure</b>	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
<b>Product safety-related measures</b>	: No specific measures identified.
<b>Conditions and measures related to personal protection, hygiene and health evaluation</b>	

### Section 3 - Exposure estimation and reference to its source

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

**Exposure estimation and reference to its source - Workers: 4: Chemical production or refinery in closed process without likelihood 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.

**Exposure estimation and reference to its source - Workers: 5: Chemical production or refinery in closed continuous process with occasional controlled 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.

**Exposure estimation and reference to its source - Workers: 6: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition**

**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 reference to its source - Workers: 7: Chemical production where opportunity for exposure arises**

**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 reference 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 reference 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 reference 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 reference 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 reference to its source - Workers: 12: Use as laboratory reagent**

**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 reference to its source - Workers: 13: Manual activities involving hand contact**

<b>Exposure assessment (human):</b>	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
<b>Exposure estimation and reference to its source</b>	: Not available.

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

<b>Environment</b>	: 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 ( <a href="http://cefic.org/en/reach-for-industries-libraries.html">http://cefic.org/en/reach-for-industries-libraries.html</a> ).
<b>Health</b>	: 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**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.