

SAFETY DATA SHEET



MM 921 WaterBase 900+ Series Oxide Red

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

1.1 Product identifier

Product name : MM 921 WaterBase 900+ Series Oxide Red
Product code : 9921
Product description : Not available.
Product type : Liquid.

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

Identified uses

Professional spray painting, near-industrial setting
 Use in coatings - Basecoat

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

Valspar b.v.
 Zuiveringweg 89
 8243 PE Lelystad
 The Netherlands
 tel: +31 (0)320 292200

e-mail address of person responsible for this SDS : msds@valspar.com

National contact

Sherwin-Williams UK Limited
 Avenue One Station Lane, Witney, United Kingdom
 Oxfordshire OX28 4XR

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : UK: 0-800-014-8126
 CALL: +(44)-870-8200418 (Hours of operation - 24 hours)

Supplier

Telephone number : Call: +31 (0)320 292200 (8:30AM - 5PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Skin Sens. 1, H317

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

Hazard pictograms :



Signal word : Warning

SECTION 2: Hazards identification

Hazard statements	: May cause an allergic skin reaction.
Precautionary statements	
Prevention	: Wear protective gloves. Avoid breathing vapour or spray.
Response	: Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirements	
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
2-butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0	<10	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2]
2,4,7,9-tetramethyldec-5-yne-4,7-diol	REACH #: 01-2119954390-39 EC: 204-809-1 CAS: 126-86-3	≤0.3	Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	[1]
(2-methoxymethylethoxy)propanol	REACH #: 01-2119450011-60 EC: 252-104-2 CAS: 34590-94-8	≤0.3	Not classified.	[2]
manganese	EC: 231-105-1 CAS: 7439-96-5	≤0.1	Not classified.	[2]
chromium	REACH #: 01-2119485652-31 EC: 231-157-5 CAS: 7440-47-3	≤0.1	Not classified.	[2]
3(2H)-Isothiazolone, 2-methyl-	REACH #: 01-2120764690-50 EC: 220-239-6 CAS: 2682-20-4	<0.01	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400	[1]

SECTION 3: Composition/information on ingredients

methanol	EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X	<0.1	(M=10) Aquatic Chronic 1, H410 (M=1) EUH071 Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370	[1] [2]
1,4-dioxane	EC: 204-661-8 CAS: 123-91-1 Index: 603-024-00-5	≤0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 EUH019 EUH066	[1] [2]
formaldehyde	REACH #: 01-2119488953-20 EC: 200-001-8 CAS: 50-00-0 Index: 605-001-00-5	<0.1	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H335	[1] [2]
ethylene oxide	EC: 200-849-9 CAS: 75-21-8 Index: 603-023-00-X	<0.1	Flam. Gas 1A, H220 Press. Gas (Comp.), H280 Acute Tox. 3, H301 Acute Tox. 3, H331 Skin Corr. 1, H314 Eye Dam. 1, H318 Muta. 1B, H340 Carc. 1B, H350 Repr. 1B, H360Fd STOT SE 3, H335 STOT SE 3, H336 STOT RE 1, H372 (nervous system) See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 4: First aid measures

- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. 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

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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 an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/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.
- 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. 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).

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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 in accordance with local regulations. 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. 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)

- Recommendations** : Not available.

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SECTION 7: Handling and storage

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
2-butoxyethanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 50 ppm 15 minutes. TWA: 25 ppm 8 hours.
(2-methoxymethylethoxy)propanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. TWA: 308 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
manganese	EH40/2005 WELs (United Kingdom (UK), 1/2020). [manganese and its inorganic compounds inhalable fraction/respirable fraction, as Mn] TWA: 0.2 mg/m ³ , (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.05 mg/m ³ , (as Mn) 8 hours. Form: Respirable fraction
chromium	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 0.5 mg/m ³ 8 hours.
methanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 333 mg/m ³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 266 mg/m ³ 8 hours. TWA: 200 ppm 8 hours.
1,4-dioxane	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. TWA: 20 ppm 8 hours. TWA: 73 mg/m ³ 8 hours.
formaldehyde	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 2.5 mg/m ³ 15 minutes. STEL: 2 ppm 15 minutes. TWA: 2.5 mg/m ³ 8 hours. TWA: 2 ppm 8 hours.
ethylene oxide	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. TWA: 1 ppm 8 hours. TWA: 1.8 mg/m ³ 8 hours.

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
2-butoxyethanol	DNEL	Long term Oral	6.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	26.7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	59 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	98 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	147 mg/m ³	General population	Local
	DNEL	Short term Inhalation	246 mg/m ³	Workers	Local
	DNEL	Short term	426 mg/m ³	General	Systemic

SECTION 8: Exposure controls/personal protection

2,4,7,9-tetramethyldec-5-yne-4,7-diol	DNEL	Inhalation Short term	1091 mg/m ³	population Workers	Systemic	
	DNEL	Inhalation Long term Oral	0.25 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Inhalation	0.43 mg/m ³	General population	Systemic	
	DNEL	Long term Dermal	0.5 mg/kg bw/day	Workers	Systemic	
	DNEL	Short term Oral	0.75 mg/kg bw/day	General population	Systemic	
	DNEL	Short term Dermal	0.75 mg/kg bw/day	General population	Systemic	
	DNEL	Short term Inhalation	1.29 mg/m ³	General population	Systemic	
	DNEL	Short term Dermal	1.5 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	1.76 mg/m ³	Workers	Systemic	
	(2-methoxymethylethoxy)propanol	DNEL	Short term Inhalation	5.28 mg/m ³	Workers	Systemic
		DNEL	Long term Oral	36 mg/kg bw/day	General population [Consumers]	Systemic
		DNEL	Long term Oral	36 mg/kg bw/day	General population	Systemic
		DNEL	Long term Inhalation	37.2 mg/m ³	General population	Systemic
DNEL		Long term Dermal	121 mg/kg bw/day	General population	Systemic	
DNEL		Long term Dermal	283 mg/kg bw/day	Workers	Systemic	
DNEL		Long term Inhalation	308 mg/m ³	Workers	Systemic	
manganese		DNEL	Long term Inhalation	0.2 mg/m ³	Workers	Local
		DNEL	Short term Inhalation	0.2 mg/m ³	Workers	Local
		DNEL	Long term Inhalation	0.041 mg/m ³	General population	Local
	DNEL	Long term Inhalation	0.041 mg/m ³	General population	Local	
	DNEL	Long term Dermal	0.0021 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	0.00414 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	1.79 µg/m ³	General population	Systemic	
	DNEL	Long term Inhalation	10.1 µg/m ³	Workers	Systemic	
	chromium	DNEL	Long term Oral	91.4 µg/kg bw/day	General population	Systemic
		DNEL	Long term Inhalation	0.027 mg/m ³	General population	Local
DNEL		Long term Inhalation	0.5 mg/m ³	Workers	Local	
3(2H)-Isothiazolone, 2-methyl-		DNEL	Long term Inhalation	0.021 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	0.043 mg/m ³	Workers	Local	
	DNEL	Long term	0.021 mg/	General	Local	

SECTION 8: Exposure controls/personal protection

methanol		Inhalation	m ³	population [Consumers]	
	DNEL	Short term Inhalation	0.043 mg/ m ³	General population [Consumers]	Local
	DNEL	Long term Oral	0.027 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Oral	0.053 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	26 mg/m ³	General population [Consumers]	Local
	DNEL	Long term Oral	4 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Oral	4 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	formaldehyde	DNEL	Short term Inhalation	26 mg/m ³	General population
DNEL		Long term Inhalation	26 mg/m ³	General population	Local
DNEL		Short term Inhalation	26 mg/m ³	General population	Systemic
DNEL		Long term Inhalation	26 mg/m ³	General population	Systemic
DNEL		Short term Inhalation	130 mg/m ³	Workers	Local
DNEL		Long term Inhalation	130 mg/m ³	Workers	Local
DNEL		Short term Inhalation	130 mg/m ³	Workers	Systemic
DNEL		Long term Inhalation	130 mg/m ³	Workers	Systemic
DNEL		Long term Dermal	0.037 mg/ cm ²	Workers	Local
DNEL		Long term Dermal	0.012 mg/ cm ²	General population [Consumers]	Local
DNEL		Long term Dermal	12 ng/cm ²	General population	Local
DNEL		Long term Dermal	37 ng/cm ²	Workers	Local
DNEL		Long term Inhalation	0.1 mg/m ³	General population	Local
DNEL		Long term Inhalation	0.375 mg/ m ³	Workers	Local
DNEL	Short term Inhalation	0.75 mg/m ³	Workers	Local	
DNEL	Long term Inhalation	3.2 mg/m ³	General population	Systemic	

SECTION 8: Exposure controls/personal protection

ethylene oxide	DNEL	Long term Oral	4.1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	9 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	102 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	240 mg/kg bw/day	Workers	Systemic
	DMEL	Long term Inhalation	1.8 mg/m ³	Workers	Local
	DMEL	Long term Inhalation	1.8 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	10 mg/m ³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
2-butoxyethanol	Fresh water	8.8 mg/l	-
	Marine water	0.88 mg/l	-
	Sewage Treatment Plant	463 mg/l	-
	Fresh water sediment	34.6 mg/kg dwt	-
	Marine water sediment	3.46 mg/kg dwt	-
	Soil	2.33 mg/kg dwt	-
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Secondary Poisoning	20 mg/kg	-
	Fresh water	0.04 mg/l	-
	Marine water	0.004 mg/l	-
	Sewage Treatment Plant	7 mg/l	-
	Fresh water sediment	0.32 mg/kg dwt	-
	Marine water sediment	0.032 mg/kg dwt	-
(2-methoxymethylethoxy)propanol	Soil	0.028 mg/kg dwt	-
	Fresh water	19 mg/l	Assessment Factors
	Marine water	1.9 mg/l	Assessment Factors
	Sewage Treatment Plant	4168 mg/l	Assessment Factors
	Fresh water sediment	70.2 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	7.02 mg/kg dwt	Equilibrium Partitioning
manganese	Soil	2.74 mg/kg dwt	Equilibrium Partitioning
	Fresh water	0.034 mg/l	Assessment Factors
	Marine water	0.0034 mg/l	Assessment Factors
	Sewage Treatment Plant	100 mg/l	Assessment Factors
	Fresh water sediment	3.3 mg/kg dwt	Assessment Factors
	Marine water sediment	0.34 mg/kg dwt	Assessment Factors
chromium	Soil	3.4 mg/kg dwt	Assessment Factors
	Fresh water	6.5 µg/l	Assessment Factors
	Fresh water sediment	205.7 mg/kg dwt	Sensitivity Distribution
	Soil	21.1 mg/kg dwt	Assessment Factors
	Fresh water	3.39 µg/l	Assessment Factors
	Marine water	3.39 µg/l	Assessment Factors
3(2H)-Isothiazolone, 2-methyl-	Sewage Treatment Plant	0.23 mg/l	Assessment Factors
	Soil	0.047 mg/kg dwt	Assessment Factors
	Fresh water	20.8 mg/l	Assessment Factors
	Marine water	2.08 mg/l	Assessment Factors
	Sewage Treatment Plant	100 mg/l	Assessment Factors
	Fresh water sediment	77 mg/kg dwt	Equilibrium Partitioning
methanol	Marine water sediment	7.7 mg/kg dwt	Equilibrium Partitioning
	Soil	100 mg/kg dwt	Assessment Factors
	Fresh water	0.44 mg/l	Sensitivity Distribution
	Marine water	0.44 mg/l	Assessment Factors
	Sewage Treatment Plant	0.19 mg/l	Assessment Factors
	Fresh water	0.44 mg/l	Assessment Factors
formaldehyde	Soil	100 mg/kg dwt	Assessment Factors
	Fresh water	0.44 mg/l	Sensitivity Distribution
	Marine water	0.44 mg/l	Assessment Factors
	Sewage Treatment Plant	0.19 mg/l	Assessment Factors

SECTION 8: Exposure controls/personal protection

	Plant		
	Fresh water sediment	2.3 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	2.3 mg/kg dwt	Equilibrium Partitioning
	Soil	0.2 mg/kg dwt	Equilibrium Partitioning

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: chemical splash goggles and/or face shield.

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.
 > 8 hours (breakthrough time): Recommended EN 374 foil butyl rubber fluor rubber
 >= 0.7 mm
 < 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (>= 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.

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. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.

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 : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: EN 405:2001 + A1:2009 organic vapour (Type A) and particulate filter FFA2P3 R D

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 : Red.
Odour : Characteristic.

SECTION 9: Physical and chemical properties

Odour threshold	: Not available.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: 100°C (212°F)
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Lower: 1.1% Upper: 10.6%
Flash point	: Closed cup: >93.3°C (>199.9°F)
Auto-ignition temperature	: 230°C (446°F)
Decomposition temperature	: Not applicable.
pH	: 7.9 to 8.1 [Conc. (% w/w): 100%]
Viscosity	: Kinematic (40°C): >20.5 mm ² /s
Solubility(ies)	:

Media	Result
cold water	Soluble
hot water	Easily soluble

Solubility in water	: Not applicable.
Miscible with water	: Yes.
Partition coefficient: n-octanol/ water	: Not applicable.
Vapour pressure	: 2.3 kPa (17.5 mm Hg)
Evaporation rate	: 89 (butyl acetate = 1)
Relative density	: 1.051
Density	: 1.051 g/cm ³
Vapour density	: 1 [Air = 1]
Explosive properties	: Not available.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

9.2 Other information

Heat of combustion	: 2.721 kJ/g
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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	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
2,4,7,9-tetramethyldec-5-yne-4,7-diol	LD50 Oral	Rat	>1860 mg/kg	-
manganese	LD50 Oral	Rat	9 g/kg	-
3(2H)-Isothiazolone, 2-methyl-methanol	LD50 Oral	Rat	2131 mg/kg	-
1,4-dioxane	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
	LD50 Oral	Rat	4200 mg/kg	-
formaldehyde	LC50 Inhalation Gas.	Rat	250 ppm	4 hours
	LD50 Dermal	Rabbit	270 mg/kg	-
	LD50 Oral	Rat	100 mg/kg	-
ethylene oxide	LC50 Inhalation Gas.	Rat	800 ppm	4 hours
	LD50 Oral	Rat	72 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
MM 921 WaterBase 900+ Series Oxide Red	15633.4	N/A	N/A	39.1	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
manganese	9000	N/A	N/A	N/A	N/A
3(2H)-Isothiazolone, 2-methyl-methanol	100	300	N/A	0.5	N/A
1,4-dioxane	4200	N/A	64000	3	N/A
formaldehyde	100	270	250	N/A	N/A
ethylene oxide	100	N/A	700	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Eyes - Severe irritant	Rabbit	-	0.1 MI	-
	Skin - Mild irritant	Rabbit	-	0.5 gm	-
(2-methoxymethylethoxy) propanol	Eyes - Mild irritant	Human	-	8 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
manganese	Skin - Mild irritant	Rabbit	-	500 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	40 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-

SECTION 11: Toxicological information

1,4-dioxane	Eyes - Moderate irritant Eyes - Moderate irritant	Guinea pig Rabbit	- -	10 ug 24 hours 100 mg	- -
formaldehyde	Eyes - Severe irritant Skin - Mild irritant Eyes - Mild irritant	Rabbit Rabbit Human	- - -	100 mg 515 mg 6 minutes 1 ppm	- - -
	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
	Eyes - Severe irritant Skin - Mild irritant	Rabbit Human	- -	750 ug 72 hours 150 ug l	- -
	Skin - Mild irritant Skin - Moderate irritant	Rabbit Rabbit	- -	540 mg 24 hours 50 mg	- -
	Skin - Severe irritant Skin - Severe irritant Skin - Severe irritant	Human Rabbit Rabbit	- - -	0.01 % 0.8 % 24 hours 2 mg	- - -
ethylene oxide	Eyes - Moderate irritant	Rabbit	-	6 hours 18 mg	-

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : 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)

Product/ingredient name	Category	Route of exposure	Target organs
methanol	Category 1	-	-
1,4-dioxane	Category 3	-	Respiratory tract irritation
formaldehyde	Category 3	-	Respiratory tract irritation
ethylene oxide	Category 3	-	Respiratory tract irritation
	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylene oxide	Category 1	-	nervous system

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

SECTION 11: Toxicological information

- Skin contact** : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 irritation
 redness
Ingestion : No specific data.

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.
General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
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

Product/ingredient name	Result	Species	Exposure
2-butoxyethanol	Acute EC50 911 mg/l	Algae - <i>Pseudokrichneriella subcapitata</i>	72 hours
	Acute EC50 1550 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i>	48 hours
	Acute LC50 1250 ppm Marine water	Fish - Inland silverside - <i>Menidia beryllina</i>	96 hours
	Chronic NOEC 100 mg/l	Daphnia - <i>Daphnia magna</i>	21 days
	Chronic NOEC >100 mg/l	Fish - <i>Brachydanio rerio</i>	21 days
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Acute EC50 82 mg/l	Algae - <i>Selenastrum capricornutum</i>	72 hours
	Acute EC50 91 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
(2-methoxymethylethoxy) propanol	Acute LC50 36 mg/l	Fish - <i>Elrits Pimephales</i>	96 hours
	Acute EC50 >1000 mg/l	Daphnia	48 hours
manganese	Acute LC50 >1000 mg/l	Fish	96 hours
	Acute EC50 31000 µg/l Fresh water	Aquatic plants - Duckweed - <i>Lemna minor</i>	4 days
	Acute LC50 29000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	48 hours
	Acute LC50 28 mg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	96 hours

SECTION 12: Ecological information

chromium	Acute EC50 0.2 ppm Marine water	Algae - Diatom Division - <i>Bacillariophyta</i>	72 hours	
	Acute EC50 5 ppm Marine water	Algae - Giant kelp - <i>Macrocystis pyrifera</i> - Young	4 days	
	Acute EC50 35000 µg/l Fresh water	Aquatic plants - Duckweed - <i>Lemna minor</i>	4 days	
	Acute LC50 45 µg/l Fresh water	Crustaceans - Water flea - <i>Ceriodaphnia reticulata</i>	48 hours	
	Acute LC50 22 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	48 hours	
	Acute LC50 13.9 ppm Fresh water	Fish - American Eel - <i>Anguilla rostrata</i>	96 hours	
	Chronic NOEC 50 mg/l Marine water	Algae - Dinoflagellate - <i>Glenodinium halli</i>	72 hours	
	Chronic NOEC 5 ppb Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	21 days	
	Chronic NOEC 0.19 µg/l Fresh water	Fish - common carp - <i>Cyprinus carpio</i>	4 weeks	
	3(2H)-Isothiazolone, 2-methyl-	Acute EC50 0.157 mg/l	Algae - <i>pseudokirchneriella subcapitata</i>	72 hours
Acute EC50 1.68 mg/l		Daphnia	48 hours	
Acute LC50 6 mg/l		Fish	96 hours	
Chronic NOEC 0.03 mg/l		Algae - <i>pseudokirchneriella subcapitata</i>	72 hours	
Chronic NOEC 0.55 mg/l		Daphnia	21 days	
Chronic NOEC 2.38 mg/l		Fish	28 days	
Acute EC50 16.912 mg/l Marine water		Algae - Green algae - <i>Ulva pertusa</i>	96 hours	
methanol	Acute LC50 2500000 µg/l Marine water	Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i> - Adult	48 hours	
	Acute LC50 3289 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	48 hours	
	Acute LC50 290 mg/l Fresh water	Fish - Zebra danio - <i>Danio rerio</i> - Egg	96 hours	
	Chronic NOEC 9.96 mg/l Marine water	Algae - Green algae - <i>Ulva pertusa</i>	96 hours	
	1,4-dioxane	Acute LC50 1.5 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	48 hours
		Acute LC50 6700 ppm Marine water	Fish - Inland silverside - <i>Menidia beryllina</i>	96 hours
		Chronic NOEC 145 mg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	32 days
formaldehyde	Acute EC50 3.48 mg/l Fresh water	Algae - Green algae - <i>Desmodesmus subspicatus</i>	72 hours	
	Acute EC50 0.442 mg/l Marine water	Algae - Green algae - <i>Ulva pertusa</i>	96 hours	
	Acute EC50 3.26 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Embryo	48 hours	
	Acute LC50 11.41 mg/l Fresh water	Crustaceans - Water flea - <i>Ceriodaphnia dubia</i>	48 hours	
	Acute LC50 1.41 ppm Fresh water	Fish - Rainbow trout, donaldson trout - <i>Oncorhynchus mykiss</i>	96 hours	
	Chronic NOEC 0.005 mg/l Marine water	Algae - Haptophyte - <i>Isochrysis galbana</i> - Exponential growth phase	96 hours	
	Chronic NOEC 3000 ppm Fresh water	Crustaceans - European crayfish - <i>Astacus astacus</i> - Egg	21 days	
	Chronic NOEC 0.81 to 1.07 mg/l	Daphnia - Water flea - <i>Daphnia magna</i>	21 days	
	Chronic NOEC 1.56 mg/l Fresh water	Fish - Nile tilapia - <i>Oreochromis niloticus</i> - Fingerling	12 weeks	
	ethylene oxide	Acute LC50 490000 µg/l Marine water	Crustaceans - Brine shrimp - <i>Artemia sp.</i>	48 hours

SECTION 12: Ecological information

	Acute LC50 137000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	48 hours
	Acute LC50 84000 µg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2-butoxyethanol	-	90.4 % - Readily - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-butoxyethanol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2-butoxyethanol	0.81	-	Low
(2-methoxymethylethoxy) propanol	0.004	-	Low
methanol	-0.77	<10	Low
1,4-dioxane	-0.42	0.3 to 0.7	Low
ethylene oxide	-0.3	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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 : The classification of the product may meet the criteria for a hazardous waste.

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.

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

MM 921 WaterBase 900+ Series Oxide Red

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

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.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

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 not controlled under the Seveso Directive.

National regulations

SECTION 15: Regulatory information

Product/ingredient name	List name	Name on list	Classification	Notes
formaldehyde	UK Occupational Exposure Limits EH40 - WEL	formaldehyde; methanal	Carc.	-
ethylene oxide	UK Occupational Exposure Limits EH40 - WEL	ethylene oxide; epoxyethane	Carc.	-

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- Australia** : At least one component is not listed.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.
- Eurasian Economic Union** : **Russian Federation inventory**: Not determined.
- Japan** : **Japan inventory (CSCL)**: At least one component is not listed.
Japan inventory (ISHL): Not determined.
- New Zealand** : All components are listed or exempted.
- Philippines** : Not determined.
- Republic of Korea** : All components are listed, exempted, or notified.
- Taiwan** : Not determined.
- Thailand** : Not determined.
- Turkey** : Not determined.
- United States** : Not determined.
- Viet Nam** : Not determined.

15.2 Chemical safety assessment

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

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
Skin Sens. 1, H317	Calculation method

Full text of abbreviated H statements

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH019	May form explosive peroxides.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

Full text of classifications

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 1B	CARCINOGENICITY - Category 1B
Carc. 2	CARCINOGENICITY - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Gas 1A	FLAMMABLE GASES - Category 1A
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Muta. 1B	GERM CELL MUTAGENICITY - Category 1B

SECTION 16: Other information

Muta. 2	GERM CELL MUTAGENICITY - Category 2
Press. Gas (Comp.)	GASES UNDER PRESSURE - Compressed gas
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT SE 1	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SUMI

Safe Use of Mixtures

Information for end-users



Title : Professional spray painting, near-industrial setting

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor spray painting by professionals with efficient ventilation such as spray booth or local exhaust ventilation

Operational conditions

Place of use : Indoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation	
			Type	ach (air changes per hour)
Preparation of material for application	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10
Loading of application equipment and handling of coated parts before curing	PROC08a	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10
Professional application of coatings and inks by spraying	PROC11	More than 4 hours	Local exhaust ventilation	Refer to relevant technical standards
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Enhanced (mechanical) room ventilation	Refer to relevant technical standards
Cleaning	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10
Waste management	PROC08a	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10

Contributing activity	Process category (ies)	Respiratory	Eye	Hands
Loading of application equipment and handling of coated parts before curing	PROC08a	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Professional application of coatings and inks by spraying	PROC11	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	None	None
Cleaning	PROC05	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08a	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.

See chapter 8 of this Safety Data Sheet for specifications.



Disclaimer

The information in this Safe Use of Mixture Information sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the SDS and the label of the product.

No liability is accepted for any damage, no matter of what kind, which is direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.