# **AkzoNobel**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

## SAFETY DATA SHEET

FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

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

1.1 Product identifier

Product name : FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

**SDS code** : 55609006B

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

**Identified uses** 

Waterborne paint. Professional use Industrial use

Uses advised against

All other uses

**Product use** : Waterborne coating for interior use.

#### 1.3 Details of the supplier of the safety data sheet

MAPAERO SAS 10, Avenue de la Rijole CS30098 09103 PAMIERS Cedex France

e-mail address of person

: PSRA PAMIERS@akzonobel.com

responsible for this SDS

#### 1.4 Emergency telephone number

#### National advisory body/Poison Center

**Telephone number** : +33 (0)1 40 05 48 48

**Supplier** 

**Telephone number** : +33 (0)5 34 01 34 01

+33 (0)5 61 60 23 30

Hours of operation :

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

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

Skin Sens. 1, H317

The product is classified as hazardous according to Regulation (EC) 1272/2008 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

Date of issue/Date of revision: 20-10-2022Version: 1.02

Date of previous issue : 3-10-2022 1/17 AkzoNobel

#### **SECTION 2: Hazards identification**

**Hazard pictograms** 

Signal word : Warning

**Hazard statements**: May cause an allergic skin reaction.

**Precautionary statements** 

**Prevention**: Wear protective gloves. Avoid breathing vapor.

**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.

**Hazardous ingredients** : **✓**-morpholinecarbaldehyde

C(M)IT/MIT(3:1)

: Not applicable.

Supplemental label

elements

: Warning! Hazardous respirable droplets may be formed when sprayed. Do not

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

breathe spray or mist.

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

articles

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.

VF VD

1907/2006, Annex XIII Other hazards which do

: None known.

not result in classification

# SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
2-butoxyethanol  4-morpholinecarbaldehyde acetone	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0 CAS: 4394-85-8 REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	<1 <1 ≤0.3	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2] [1] [1] [2]

Date of issue/Date of revision : 20-10-2022 Version : 1.02

Date of previous issue :3-10-2022 2/17 AkzoNobel

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

SECTION 3: Composition/information on ingredients					
C(M)IT/MIT(3:1)	REACH #: 01-2120764691-48 CAS: 55965-84-9 Index: 613-167-00-5	<0.0025	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071	[1]	
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, 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
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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.

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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

Date of issue/Date of revision : 20-10-2022 Version : 1.02

Date of previous issue : 3-10-2022 3/17 AkzoNobel

#### **SECTION 4: First aid measures**

#### 4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 4-morpholinecarbaldehyde, C(M)IT/MIT(3:1). May produce an allergic reaction.

#### 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
halogenated compounds
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.

Date of issue/Date of revision : 20-10-2022 Version : 1.02

Date of previous issue : 3-10-2022 4/17 AkzoNobel

### **SECTION 5: Firefighting measures**

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

#### 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized 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 spilled 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 materials 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 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

#### 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 vapor 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

#### 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

: 20-10-2022 Date of issue/Date of revision Version: 1.02 **AkzoNobel** Date of previous issue : 3-10-2022 5/17

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

### **SECTION 7: Handling and storage**

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 unlabeled 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.
Industrial sector specific : Not available.
solutions

### **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
2-butoxyethanol	Ministry of Labor (France, 3/2020). Absorbed through skin. Notes: Binding regulatory limit values (article R. 4412-149 of
	the Labor Code) TWA: 10 ppm 8 hours. TWA: 49 mg/m³ 8 hours. STEL: 246 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes.
acetone	Ministry of Labor (France, 3/2020). Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)  TWA: 1210 mg/m³ 8 hours. Form: Risk for sensitisation  TWA: 500 ppm 8 hours. Form: Risk for sensitisation  STEL: 2420 mg/m³ 15 minutes.  STEL: 1000 ppm 15 minutes.

# Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
<b>2</b> -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/m³	General population	Systemic
	DNEL	Long term Dermal	75 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	89 mg/kg bw/day	General population	Systemic

Date of issue/Date of revision: 20-10-2022Version: 1.02Date of previous issue: 3-10-20226/17AkzoNobel

### **SECTION 8: Exposure controls/personal protection**

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DNEL	Short term Dermal	89 mg/kg	Workers	Systemic
DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
DNEL	Long term Dermal	125 mg/kg bw/dav	Workers	Systemic
DNEL	Short term	147 mg/m³	General population	Local
DNEL	Short term	246 mg/m³	Workers	Local
DNEL	Short term	426 mg/m <sup>3</sup>	General	Systemic
DNEL	Short term	1091 mg/ m³	Workers	Systemic
DNEL	Long term Oral	8 mg/kg	General population	Systemic
DNEL	Long term Dermal	8 mg/kg	General	Systemic
DNEL	Long term Dermal	14 mg/kg	Workers	Systemic
DNEL	Long term Inhalation	29 mg/m³	General population	Systemic
DNEL	Long term	98 mg/m³	Workers	Systemic
DNEL	Long term Oral	62 mg/kg bw/dav	General population	Systemic
DNEL	Long term Dermal	62 mg/kg	General	Systemic
DNEL	Long term Dermal	186 mg/kg	Workers	Systemic
DNEL	Long term	200 mg/m <sup>3</sup>	General population	Systemic
DNEL	Long term	1210 mg/ m³	Workers	Systemic
DNEL	Short term Inhalation	2420 mg/ m³	Workers	Local
	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	DNEL Long term Inhalation DNEL Short term Inhalation DNEL Long term Oral DNEL Long term Dermal DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term Oral DNEL Long term Oral DNEL Long term Dermal DNEL Long term Inhalation DNEL Long term Inhalation DNEL Short term	DNEL Long term Inhalation DNEL Short term Inhalation DNEL Long term Oral 8 mg/kg bw/day DNEL Long term Dermal 8 mg/kg bw/day DNEL Long term Dermal 14 mg/kg bw/day DNEL Long term Dermal 15 mg/kg bw/day DNEL Long term Dermal 16 mg/kg bw/day DNEL Long term Dermal 18 mg/kg bw/day	DNEL Long term Inhalation DNEL Short term Inhalation DNEL Long term Oral Smg/kg General population DNEL Long term Dermal Smg/kg General bw/day population DNEL Long term Dermal Inhalation DNEL Long term Dermal Smg/kg General population DNEL Long term Dermal Inhalation DNEL Long term Smg/m³ General population DNEL Long term Smg/m³ General population DNEL Long term Smg/m³ General population DNEL Long term Dermal Smg/kg General population DNEL Long term Smg/m³ General population DNEL Long term Dermal Smg/kg bw/day Population DNEL Long term Dermal Smg/kg Bom/kg

#### **PNECs**

No PNECs available.

#### 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.

#### **Skin protection**

Date of issue/Date of revision: 20-10-2022Version: 1.02Date of previous issue: 3-10-20227/17AkzoNobel

### **SECTION 8: Exposure controls/personal 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 >480 minutes according to EN374) is recommended. Recommended gloves: Viton @ or Nitrile, thickness  $\ge 0.38$  mm. When only brief contact is expected, a glove with protection class of 2 or higher (breakthrough time >30 minutes according to EN374) is recommended.

Recommended gloves: Nitrile, thickness ≥ 0.12 mm.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

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.

**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.

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.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

#### **Appearance**

Physical state : Liquid.
Color : White.

Odor : Characteristic.
Odor threshold : Not available.

**pH** : 8

Melting point/freezing point : Not available.

Initial boiling point and : Not available.

boiling range

Flash point : Closed cup: 105°C

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Upper/lower flammability or : Not available.

explosive limits

Vapor pressure : Not available.

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

### SECTION 9: Physical and chemical properties

: Highest known value: (Oxirane, 2-methyl-, polymer with oxirane, monobutyl Vapor density

ether).

**Density** : 1.229 g/cm<sup>3</sup>

Solubility(ies) : Easily soluble in the following materials: cold water.

Partition coefficient: n-octanol/ : Not available.

**Auto-ignition temperature** : Not available. **Decomposition temperature** : Not available.

: Kinematic (room temperature): 4.72 cm<sup>2</sup>/s **Viscosity** 

Kinematic (40°C): 2.01 cm<sup>2</sup>/s

### 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
<b>2</b> -butoxyethanol	LC50 Inhalation Gas.	Mouse	700 ppm	7 hours
	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LC50 Inhalation Vapor	Mouse	3380 mg/m <sup>3</sup>	7 hours
	LC50 Inhalation Vapor	Rat	2900 mg/m <sup>3</sup>	7 hours
	LD50 Dermal	Guinea pig	230 uL/kg	-
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Intraperitoneal	Mouse	536 mg/kg	-
	LD50 Intraperitoneal	Rabbit	220 mg/kg	-
	LD50 Intraperitoneal	Rat	220 mg/kg	-
	LD50 Intravenous	Mouse	1130 mg/kg	-
	LD50 Intravenous	Rabbit	252 mg/kg	-
	LD50 Intravenous	Rat	307 mg/kg	-
	LD50 Oral	Guinea pig	1200 mg/kg	-
	LD50 Oral	Mouse	1230 mg/kg	-
	LD50 Oral	Mouse	1167 mg/kg	-
	LD50 Oral	Rabbit	300 mg/kg	-
	LD50 Oral	Rabbit	320 mg/kg	-
	LD50 Oral	Rat	917 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
	LD50 Route of exposure unreported	Mouse	1050 mg/kg	-
	LD50 Route of exposure unreported	Rat	917 mg/kg	-

Date of issue/Date of revision : 20-10-2022 Version: 1.02

**AkzoNobel** Date of previous issue : 3-10-2022 9/17

### **SECTION 11: Toxicological information**

4-morpholinecarbaldehyde	LD50 Oral	Rat	6500 uL/kg	-
acetone	LC50 Inhalation Vapor	Mouse	44 g/m³	4 hours
	LC50 Inhalation Vapor	Rat	50100 mg/m <sup>3</sup>	8 hours
	LD50 Intraperitoneal	Mouse	1297 mg/kg	-
	LD50 Intravenous	Rat	5500 mg/kg	-
	LD50 Oral	Mouse	3 g/kg	-
	LD50 Oral	Rabbit	5340 mg/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
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**Conclusion/Summary** 

: Not available.

#### **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	-
4-morpholinecarbaldehyde	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
acetone	Eyes - Mild irritant	Rabbit	-	10 UI	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Mild irritant	Rabbit	-	395 mg	-

Conclusion/Summary

: Not available.

**Sensitization** 

**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
acetone	Category 3	-	Narcotic effects

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

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely

: Not available.

routes of exposure

Potential acute health effects

**Eye contact**: No known significant effects or critical hazards.

Date of issue/Date of revision : 20-10-2022 Version : 1.02

Date of previous issue : 3-10-2022 10/17 AkzoNobel

### **SECTION 11: Toxicological information**

**Inhalation**: No known significant effects or critical hazards.

**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 and also chronic effects from short and long term exposure

#### **Short term exposure**

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

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

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

Product/ingredient name	Result	Species	Exposure
<b>2</b> -butoxyethanol	Acute EC50 >1000 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
,	Acute LC50 800000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1490000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 1250000 µg/l Marine water	Fish - Menidia beryllina	96 hours
acetone	Acute EC50 11493300 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 11727900 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 7200000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 7550000 µg/l Fresh water	Crustaceans - Asellus aquaticus	48 hours
	Acute LC50 4.42589 ml/L Marine water	Crustaceans - Acartia tonsa -	48 hours

Date of issue/Date of revision : 20-10-2022 Version : 1.02

Date of previous issue : 3-10-2022 11/17 AkzoNobel

### **SECTION 12: Ecological information**

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		Copepodid	
	Acute LC50 11.26487 ml/L Fresh water	Crustaceans - Gammarus pulex	48 hours
		- Juvenile (Fledgling, Hatchling,	
		Weanling)	
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 8098000 µg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours
		dubia - Neonate	
	Acute LC50 7460000 μg/l Fresh water	Daphnia - Daphnia cucullata	48 hours
	Acute LC50 7810000 µg/l Fresh water	Daphnia - Daphnia cucullata	48 hours
	Acute LC50 10000 μg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 9218000 μg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Neonate	
	Acute LC50 8800000 µg/l Fresh water	Daphnia - Daphnia pulex	48 hours
	Acute LC50 7280000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 8120000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 6210000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Acute LC50 8000 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 100 ul/L Marine water	Algae - Skeletonema costatum	72 hours
	Chronic NOEC 100 ul/L Marine water	Algae - Skeletonema costatum	96 hours
	Chronic NOEC 0.5 ml/L Marine water	Algae - Karenia brevis	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Chydoridae	21 days
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Maxillopoda	21 days
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Bosminidae	21 days
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Macrothricidae	21 days
	Chronic NOEC 1 g/L Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 1 g/L Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna -	21 days
	Observice NOFO 0.4 mal/L Freeds weeken	Neonate	04 -1
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna -	21 days
	Ob	Neonate	04 -1
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna -	21 days
	Chronic NOTO 0.4 may/ Fresh water	Neonate Fish - Fundulus heteroclitus	4 weeks
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Fundulus neteroclitus Fish - Fundulus heteroclitus	4 weeks
	Chronic NOEC 0.1 mg/l Fresh water		
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus -	42 days
	Chronic NOEC 5 ug/l Morino water	Larvae Fish - Gasterosteus aculeatus -	42 dove
	Chronic NOEC 5 µg/l Marine water		42 days
	Chronic NOEC 5 ug/l Morino water	Larvae Fish - Gasterosteus aculeatus -	42 dove
	Chronic NOEC 5 μg/l Marine water		42 days
		Larvae	

**Conclusion/Summary**: Not available.

#### 12.2 Persistence and degradability

Conclusion/Summary : Not available.

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2-butoxyethanol	0.81	-	low
4-morpholinecarbaldehyde	-	<1.9	low
acetone	-0.23	-	low

12.4 Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Date of issue/Date of revision: 20-10-2022Version: 1.02Date of previous issue: 3-10-202212/17AkzoNobel

### **SECTION 12: Ecological information**

**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 minimized 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.

**Disposal considerations** 

: Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no

longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
EWC 08 01 12	waste paint and varnish other than those mentioned in 08 01 11

#### **Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste

packaging should be recycled. Incineration or landfill should only be considered

when recycling is not feasible.

**Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from

the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or

national legal provisions.

**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.

### **SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-

Date of issue/Date of revision: 20-10-2022Version: 1.02

Date of previous issue : 3-10-2022 13/17 AkzoNobel

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

SECTION 14: Transport information				
14.3 Transport hazard class(es)	-	-	-	
14.4 Packing group	-	-	-	
14.5 Environmental hazards	No.	No.	No.	

user

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

the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

: Not applicable.

### SECTION 15: Regulatory information

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

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

#### Annex XIV - List of substances subject to authorization

#### **Annex XIV**

None of the components are listed.

#### Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the

product label and/or technical data sheet for further information.

**VOC for Ready-for-Use** 

**Mixture** 

: Not applicable.

Industrial emissions (integrated pollution

prevention and control) -

Air Industrial emissions

(integrated pollution prevention and control) - : Not listed

: Not listed

Water

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

**Seveso Directive** 

Date of issue/Date of revision : 20-10-2022 Version: 1.02

**AkzoNobel** Date of previous issue : 3-10-2022 14/17

### **SECTION 15: Regulatory information**

This product is not controlled under the Seveso Directive.

**National regulations** 

**Industrial use** : The information contained in this safety data sheet does not constitute the user's

own assessment of workplace risks, as required by other health and safety

legislation. The provisions of the national health and safety at work regulations apply

to the use of this product at work.

Social Security Code, Articles L 461-1 to L 461-7 : Z-butoxyethanol RG 84 acetone RG 84

Reinforced medical surveillance

: Decree n  $^{\circ}$  2012-135 of January 30, 2012 relating to the organization of

occupational medicine: not applicable

**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** 

**Europe** : Not determined.

15.2 Chemical Safety

Assessment

: No Chemical Safety Assessment has been carried out.

### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = 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 according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Sens. 1, H317	Calculation method

#### Full text of abbreviated H statements

Date of issue/Date of revision: 20-10-2022Version: 1.02

Date of previous issue : 3-10-2022 15/17 AkzoNobel

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

### **SECTION 16: Other information**

<b>⊮</b> 225	Highly flammable liquid and vapor.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

#### Full text of classifications [CLP/GHS]

Tan toxt or oldoomoutions [92170110]	
Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) -
	Category 3

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#### Notice to reader

#### FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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Date of issue/Date of revision: 20-10-2022Version: 1.02Date of previous issue: 3-10-202216/17AkzoNobel

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 FR2-55 FLEX SEMI-GLOSS BASE WHITE ALUMINIUM RAL 9006

Date of issue/Date of revision : 20-10-2022 Version : 1.02

Date of previous issue :3-10-2022 17/17 AkzoNobel