



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

- **1.1 Product identifier**
- **Trade name:** Akvanor 81 Primer
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Coating
- **Application of the substance / the mixture**
 Water borne acrylic primer
 Uses in Coatings - Industrial use
 Uses in Coatings - Professional use
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Nor-Maali Oy
 Vanhatie 20, 15240 Lahti, FINLAND
- **Further information obtainable from:** MSDS (Nor-Maali Oy) tel.+358 3 874 650, sds@nor-maali.fi
- **1.4 Emergency telephone number:** Contact National Poison Center

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- Product definition: mixture
- **Classification according to Regulation (EC) No 1272/2008**
-  GHS09 environment
- Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
-  GHS07
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



- **Signal word** Warning
- **Hazard statements**
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- **Additional information:**
 EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 7779-90-0 EINECS: 231-944-3 Reg.nr.: 01-2119485044-40-	trizinc bis(orthophosphate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	1 - 2.5%
CAS: 111-76-2 EINECS: 203-905-0 Reg.nr.: 01-2119475108-36-	2-butoxyethanol Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1 - 2.5%
CAS: 108-01-0 EINECS: 203-542-8 Reg.nr.: 01-2119492298-24-	2-dimethylaminoethanol Flam. Liq. 3, H226; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; STOT SE 3, H335	1 - 2.5%
CAS: 6846-50-0 EINECS: 229-934-9 Reg.nr.: 01-2119451093-47-	1-isopropyl-2,2-dimethyltrimethylene diisobutyrate Repr. 2, H361d; Aquatic Chronic 3, H412	1 - 2.5%
CAS: 1314-13-2 EINECS: 215-222-5 Reg.nr.: 01-2119463881-32-	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.1 - 1%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Never give anything by mouth or induce vomiting to an unconscious person or a person who has convulsions.
- **After inhalation:**
Remove person to fresh air, keep patient warm and at rest. If breathing is irregular, call national emergency number, if needed start giving artificial respiration and seek medical advice.
- **After skin contact:**
Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- **After eye contact:**
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
- **After swallowing:**
If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Information for doctor:** Treatment according to symptoms.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
Evacuate people from danger area and deny access to area. Remove containers from danger area and try to cool containers which cannot be removed safely. This material is harmful to aquatic life with long lasting

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effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- **Protective equipment:** Compressed air respirator and protective clothing.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
 Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.
- **6.3 Methods and material for containment and cleaning up:**
 Absorb liquid components with liquid-binding material (sand, peat or other absorbent material). Ensure adequate ventilation.
- **6.4 Reference to other sections**
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 Handling must be organised so that skin contact with the product and splashes to eyes can be avoided.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 The product must be stored in a dry, well ventilated, cool (temperature > +5°C) space. Must be transported and stored free from frost. Containers must be kept tightly closed and away from foodstuff.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:	
111-76-2 2-butoxyethanol	
HTP	Short-term value: 250 mg/m ³ , 50 ppm Long-term value: 98 mg/m ³ , 20 ppm Sk, BMGV

- **Additional information:**
 The information is based on the valid lists at the time of manufacture (Finland 538/2018).
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the HTP, suitable respiratory protection must be worn.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

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· **Protection of hands:**



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Wear suitable gloves tested to EN374.

Recommended, gloves (breakthrough time) > 8 hours: nitrile rubber

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

The eye flushing device should be located near the the paint work area.

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Colourful
Odour:	Mild
Odour threshold:	Not determined.

· pH-value at 20 °C: 8-9

· **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C

· Flash point: Not applicable.

· Flammability (solid, gas): Not applicable.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

· Vapour pressure: Not determined.

· Density at 20 °C: 1.3 g/cm³

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water: Fully miscible.

· Partition coefficient: n-octanol/water: Not determined.

· **Viscosity:**

Dynamic:	Not determined.
Kinematic at 40 °C:	>20.5 mm ² /s

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· **9.2 Other information** No further relevant information available.

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**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
 Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **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** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

7779-90-0 trizinc bis(orthophosphate)		
Oral	LD50	> 5,000 mg/kg (rat)
111-76-2 2-butoxyethanol		
Oral	LD50	1,480 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
108-01-0 2-dimethylaminoethanol		
Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	1,370 mg/kg (rabbit)
Inhalative	LC50/4 h	3.25 mg/l (mouse)
1314-13-2 zinc oxide		
Oral	LD50	> 5,000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
 Causes skin irritation.
- **Serious eye damage/irritation**
 Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

7779-90-0 trizinc bis(orthophosphate)	
48-h EC50	> 2.34 mg/L (Daphnia magna)
111-76-2 2-butoxyethanol	
72-h EC50	1,840 mg/L (Pseudokirchneriella subcapitata) (OECD TG 201)

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48-h EC50	1,550 mg/L (Daphnia magna) (OECD TG 202)
96-h LC50	1,474 mg/L (Oncorhynchus mykiss) (OECD TG 203)
108-01-0 2-dimethylaminoethanol	
72-h EC50	35 mg/L (Algae)
48-h EC50	98 mg/L (Daphnia magna)
96-h LC50	> 100 mg/L (Fish)
1314-13-2 zinc oxide	
48-h EC50	> 1,000 ppm (Daphnia magna)
96-h LC50	1.1 - 2.5 ppm (Oncorhynchus mykiss)
<ul style="list-style-type: none"> • 12.2 Persistence and degradability Biodegradability: 2-butoxyethanol: 90 % (aerobic; activated sludge; exposure time: 28 days) (OECD 301 B); easily degrading Trizinc bis(orthophosphate): not readily zinc oxide: not readily • 12.3 Bioaccumulative potential No further relevant information available. • 12.4 Mobility in soil No further relevant information available. • 12.5 Results of PBT and vPvB assessment • PBT: Not applicable. • vPvB: Not applicable. • 12.6 Other adverse effects No further relevant information available. 	

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
 Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

• European waste catalogue	
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances

- **Uncleaned packaging:**
- **Recommendation:**
 Empty, dry paint containers (hole made to the bottom) should be taken to collection centres for metallic paint packages. If this collecting/recycling centre doesn't exist, containers can be taken to a local dump pit. For more information contact your local waste disposal authorities or paint deliverer.

SECTION 14: Transport information

• 14.1 UN-Number	
• ADR, ADN, IMDG, IATA	Not dangerous goods
• 14.2 UN proper shipping name	
• ADR, ADN, IMDG, IATA	Not dangerous goods
• 14.3 Transport hazard class(es)	
• ADR, ADN, IMDG, IATA	
• Class	Not dangerous goods
• 14.4 Packing group	
• ADR, IMDG, IATA	Not dangerous goods
• 14.5 Environmental hazards:	
• Marine pollutant:	No
• 14.6 Special precautions for user	Do not freeze. Warm transport.

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- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **UN "Model Regulation":** Not dangerous goods

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E2** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H361d Suspected of damaging the unborn child.
- 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.
- **Contact:** Nor-Maali Oy, tel. +358 3 874 650 or sds@nor-maali.fi
- **Abbreviations and acronyms:**
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity - oral – Category 4
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Repr. 2: Reproductive toxicity – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
- *** Data compared to the previous version altered.**