# **AkzoNobel**

## Safety Data Sheet dated 23/11/2020, version 10

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

1.1. Product identifier

Trade name: FINISH F69 TUK
Trade code: 21069XXXK

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

Recommended use: Amine epoxy paint

1.3. Details of the supplier of the safety data sheet

Company:

MAPAERO SAS

10. Avenue de la Rijole CS30098

09103 PAMIERS Cedex

**FRANCE** 

Tel: +33 (0)5 34 01 34 01 / Fax: +33 (0)5 61 60 23 30

Competent person responsible for the safety data sheet:

PSRA\_PAMIERS@akzonobel.com

1.4. Emergency telephone number

Tel: 0044 151 951 3317

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

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- Warning, Flam. Liq. 3, Flammable liquid and vapour.
- Danger, Skin Corr. 1C, Causes severe skin burns and eye damage.
- Danger, Eye Dam. 1, Causes serious eye damage.
- Warning, Skin Sens. 1B, May cause an allergic skin reaction.
- Warning, Muta. 2, Suspected of causing genetic defects.
- ♦ Danger, Repr. 1B, May damage fertility or the unborn child.
- Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



### Danger

### Hazard statements:

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H360 May damage fertility or the unborn child.

H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements:

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a doctor.

P370+P378 In case of fire, use a foam fire extinguisher to extinguish.

Special Provisions:



EUH205 Contains epoxy constituents. May produce an allergic reaction.

EUH208 Contains bis-[4-(2,3-epoxipropoxi)phenyl]propane. May produce an allergic reaction.

### Contains

1,3-propanediol,2-ethyl-2-(hydroxymethyl)-,polymer

3-(oxiranylméthoxy)propyl-triméthoxy-silane

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

### 2.3. Other hazards

vPvB Substances:

>= 2.5% - < 5% terphenyl, hydrogenated - REACH No.: 01-2119488183-33, CAS:

61788-32-7, EC: 262-967-7

PBT Substances: None

Other Hazards:

No other hazards

### **SECTION 3: Composition/information on ingredients**

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number		Classification
>= 25% - < 30%	titanium dioxide	CAS: EC: REACH No.:	13463-67-7 236-675-5 01- 2119489379 -17	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
>= 10% - < 20%	butan-2-ol	Index number: CAS: EC: REACH No.:	78-92-2 201-158-5	<ul> <li>◆ 2.6/3 Flam. Liq. 3 H226</li> <li>◆ 3.3/2 Eye Irrit. 2 H319</li> <li>◆ 3.8/3 STOT SE 3 H335</li> <li>◆ 3.8/3 STOT SE 3 H336</li> </ul>
>= 10% - < 20%	bis-[4-(2,3- epoxipropoxi)phenyl] propane	Index number: CAS: EC: REACH No.:	1675-54-3 216-823-5	<ul> <li>◆ 3.3/2 Eye Irrit. 2 H319</li> <li>◆ 4.1/C2 Aquatic Chronic 2 H411</li> <li>◆ 3.2/2 Skin Irrit. 2 H315</li> <li>◆ 3.4.2/1 Skin Sens. 1 H317</li> </ul>
>= 5% - < 10%	nitroethane	CAS: EC: REACH No.:	79-24-3 201-188-9 01- 2119966158 -27	<ul> <li></li></ul>
>= 5% - < 10%	1,3-propanediol,2-ethyl- 2-(hydroxymethyl)-, polymer	CAS: EC: REACH No.:	30499-70-8 608-489-8 01- 2120078341 -60	<ul> <li>♦ 3.2/1C Skin Corr. 1C H314</li> <li>♦ 3.3/1 Eye Dam. 1 H318</li> <li>♦ 3.4.2/1B Skin Sens. 1B H317</li> <li>♦ 3.5/2 Muta. 2 H341</li> <li>♦ 3.7/1B Repr. 1B H360F</li> <li>♦ 4.1/C2 Aquatic Chronic 2 H411</li> </ul>
>= 2.5%	terphenyl, hydrogenated	CAS:	61788-32-7	♦ 4.1/C2 Aquatic Chronic 2 H411

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- < 5%		EC: REACH No.:	262-967-7 01- 2119488183 -33	
>= 0.5% - < 2.5%	zinc oxide	CAS: EC: REACH No.:	1314-13-2 215-222-5 01- 2119463881 -32	<ul><li>♦ 4.1/A1 Aquatic Acute 1 H400</li><li>♦ 4.1/C1 Aquatic Chronic 1 H410</li></ul>
>= 0.5% - < 2.5%	3-(oxiranylméthoxy) propyl-triméthoxy-silane	CAS: EC: REACH No.:	2530-83-8 219-784-2 01- 2119513212 -58	♦ 3.3/1 Eye Dam. 1 H318
>= 0.5% - < 2.5%	silane, dichlorodimethyl-, reaction prodcuts with silica	CAS: EC:	68611-44-9 271-893-4	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
>= 0.1% - < 0.5%	Propylidynetrimethanol	CAS: EC: REACH No.:	77-99-6 201-074-9 01- 2119486799 -10	

### **SVHC Substances**:

>= 2.5% - < 5% terphenyl, hydrogenated

REACH No.: 01-2119488183-33, CAS: 61788-32-7, EC: 262-967-7

Substance vPvB and SVHC

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

### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or



safety data sheet if possible). Treatment: None

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

### 5.1. Extinguishing media

Suitable extinguishing media: In case of fire, use a foam fire extinguisher to extinguish. Water with AFFF (Aqueous Film Forming Foam) additive

Foam

Unsuitable methods of extinction:

Water

Water jet

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases. Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

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### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

#### 7.2. Conditions for safe storage, including any incompatibilities

Stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

### 7.3. Specific end use(s)

None in particular

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

### 8.1. Control parameters

titanium dioxide - CAS: 13463-67-7

- OEL Type: ACGIH TWA(8h): 10 mg/m3
- OEL Type: VME TWA: 10 mg/m3
- OEL Type: MAK-KZW STEL(15min): 10 mg/m3
- OEL Type: MAK-TMW TWA(8h): 5 mg/m3
- OEL Type: DFG TWA(8h): 0.3 mg/m3 STEL(15min): 2.4 mg/m3

### butan-2-ol - CAS: 78-92-2

- OEL Type: ACGIH TWA(8h): 100 ppm
- OEL Type: VME TWA: 300 mg/m3, 100 ppm
- OEL Type: WEL TWA(8h): 308 mg/m3, 100 ppm STEL: 462 mg/m3, 150 ppm
- OEL Type: NIOSH TWA(8h): 305 mg/m3, 100 ppm STEL: 455 mg/m3, 150 ppm
- OEL Type: MAK-TMW TWA(8h): 150 mg/m3, 50 ppm
- OEL Type: MAK-KZW STEL(15min): 600 mg/m3, 200 ppm

### nitroethane - CAS: 79-24-3

- OEL Type: ACGIH TWA(8h): 100 ppm
- OEL Type: VME TWA(8h): 310 mg/m3, 100 ppm
- OEL Type: EU TWA(8h): 62 mg/m3, 20 ppm STEL: 312 mg/m3, 100 ppm
- OEL Type: AGS TWA(8h): 31 mg/m3, 10 ppm STEL(15min): 124 mg/m3, 40 ppm
- OEL Type: DFG TWA(8h): 31 mg/m3, 10 ppm STEL(15min): 124 mg/m3, 40 ppm
- OEL Type: MAK-TMW TWA(8h): 62 mg/m3, 20 ppm
- OEL Type: MAK-KZW STEL(15min): 312 mg/m3, 100 ppm

#### terphenyl, hydrogenated - CAS: 61788-32-7

- OEL Type: ACGIH TWA(8h): 0.5 ppm
- OEL Type: EU TWA(8h): 19 mg/m3, 2 ppm STEL: 48 mg/m3, 5 ppm
- OEL Type: AGS TWA(8h): 19 mg/m3 STEL(15min): 47.5 mg/m3
- OEL Type: MAK-TMW TWA(8h): 19 mg/m3, 2 ppm
- OEL Type: MAK-KZW STEL(15min): 48 mg/m3, 5 ppm

#### zinc oxide - CAS: 1314-13-2

- OEL Type: ACGIH TWA(8h): 2 mg/m3 STEL: 10 mg/m3
- OEL Type: VME TWA(8h): 10 mg/m3

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- OEL Type: VME - TWA(8h): 5 mg/m3 - Notes: Fume
            - OEL Type: MAK-TMW - TWA(8h): 5 ppm
      3-(oxiranylméthoxy)propyl-triméthoxy-silane - CAS: 2530-83-8
            - OEL Type: VLE - TWA(8h): 5 ppm - STEL: 10 ppm
      silane, dichlorodimethyl-, reaction prodcuts with silica - CAS: 68611-44-9
            - OEL Type: VME - TWA(8h): 5 mg/m3
            - OEL Type: VME - TWA(8h): 10 mg/m3
DNEL Exposure Limit Values
      titanium dioxide - CAS: 13463-67-7
            Worker Professional: 10 mg/m3
      butan-2-ol - CAS: 78-92-2
            Worker Industry: 405 mg/kg p.c. /jour - Exposure: Human Dermal
            Worker Industry: 212 mg/m3 - Exposure: Human Inhalation
            Consumer: 203 mg/kg p.c. /jour - Exposure: Human Dermal
            Consumer: 52 mg/m3 - Exposure: Human Oral
            Consumer: 15 mg/kg p.c. /jour - Exposure: Human Oral
      nitroethane - CAS: 79-24-3
            Worker Professional: 8.4 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term.
            systemic effects
            Worker Professional: 17 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term,
            systemic effects
            Worker Professional: 25 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term,
            local effects
            Worker Professional: 50 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term,
            local effects
            Worker Professional: 350 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long
            Term, systemic effects
            Worker Professional: 2100 mg/kg bw/day - Exposure: Human Dermal - Frequency: Short
            Term, systemic effects
            Consumer: 2 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic
            Consumer: 5 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic
            Consumer: 5 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
            Consumer: 15 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local
            effects
            Consumer: 210 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long Term,
            systemic effects
            Consumer: 1250 mg/kg bw/day - Exposure: Human Dermal - Frequency: Short Term,
            systemic effects
      terphenyl, hydrogenated - CAS: 61788-32-7
            Worker Professional: 46.3 mg/kg bw/day - Consumer: 27.8 mg/kg bw/day - Exposure:
            Human Dermal - Frequency: Long Term, systemic effects
            Worker Professional: 8.38 mg/m3 - Consumer: 2.5 mg/m3 - Exposure: Human Inhalation
            - Frequency: Long Term, systemic effects
            Worker Professional: 0.2 mg/cm<sup>2</sup> - Consumer: 0.12 mg/cm<sup>2</sup> - Exposure: Human Dermal -
            Frequency: Long Term, local effects
            Worker Professional: 83.8 mg/m3 - Consumer: 25 mg/m3 - Exposure: Human Inhalation -
            Frequency: Long Term, local effects
      3-(oxiranylméthoxy)propyl-triméthoxy-silane - CAS: 2530-83-8
            Worker Professional: 21 mg/kg bw/day - Exposure: Human Dermal - Frequency: Short
            Term, systemic effects
            Worker Professional: 147 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term,
            systemic effects
            Worker Professional: 21 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long
            Term, systemic effects
            Worker Professional: 147 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term,
```

PNEC Exposure Limit Values

titanium dioxide - CAS: 13463-67-7

systemic effects

Target: Marine water - Value: 1 mg/l

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Target: Marine water sediments - Value: 100 mg/kg

Target: Fresh Water - Value: 0.127 mg/l

Target: Freshwater sediments - Value: 1000 mg/kg

butan-2-ol - CAS: 78-92-2

Target: Fresh Water - Value: 47.1 mg/l Target: Marine water - Value: 47.1 mg/l

Target: Freshwater sediments - Value: 196.19 mg/kg Target: Marine water sediments - Value: 196.19 mg/kg

Target: Soil (agricultural) - Value: 11.58 mg/kg

nitroethane - CAS: 79-24-3

Target: Fresh Water - Value: 48.8 µg/L Target: Marine water - Value: 4.88 µg/L

Target: Freshwater sediments - Value: 0.268 mg/kg

terphenyl, hydrogenated - CAS: 61788-32-7
Target: Fresh Water - Value: 0.0001 mg/l
Target: Marine water - Value: 0.00001 mg/l

Target: Freshwater sediments - Value: 3.16 mg/kg dwt Target: Marine water sediments - Value: 0.316 mg/kg dwt Target: Soil (agricultural) - Value: 0.631 mg/kg dwt

Target: Microorganisms in sewage treatments - Value: 10.3 mg/l

3-(oxiranylméthoxy)propyl-triméthoxy-silane - CAS: 2530-83-8

Target: Fresh Water - Value: 1 mg/l Target: Marine water - Value: 0.1 mg/l

Target: Freshwater sediments - Value: 0.79 mg/kg Target: Soil (agricultural) - Value: 0.13 mg/kg

Target: Microorganisms in sewage treatments - Value: 10 mg/l

### 8.2. Exposure controls

#### Eye protection:

Before handling, wear safety goggles with protective sides accordance with standard EN166.

#### Protection for skin:

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

### Protection for hands:

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

### Respiratory protection:

Full-/Half-/quarter-face masks (DIN EN 136/140).

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387: A2

Particle filter according to standard EN143: P3

#### Thermal Hazards:

None

### Environmental exposure controls:

It is recommended using all available means to prevent and regulate exposure in compliance with legal requirements.

Use all the appropriate means to keep suspended dust levels under exposure limits.

Appropriate engineering controls:

None

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

## **AkzoNobel**

Appearance and colour: Liquid
Odour: Solvent odor

Odour threshold: N.A. pH: N.A. Melting point / freezing point: -89 °C

Initial boiling point and boiling range: 99 °C

Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Flash point: 23 <= PE <= 55 °C

Evaporation rate: N.A.

Vapour pressure: <110 kPa (1.10 bar)

Relative density: 1.3
Solubility in water: N.A.
Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: 406 °C Decomposition temperature: N.A. Viscosity: N.A. Explosive properties: N.A. Oxidizing properties: N.A.

#### 9.2. Other information

Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

Substance Groups relevant properties N.A.

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Stable under normal conditions

## 10.2. Chemical stability

Stable under normal conditions

### 10.3. Possibility of hazardous reactions

Exposed to high temperatures, the mixture can release hazardous decomposition products.

#### 10.4. Conditions to avoid

Flames and hot surfaces

The accumulation of electrostatic discharges

The heating The heat

The humidity

### 10.5. Incompatible materials

Acids

Oxidizing agents

Bases

Water

### 10.6. Hazardous decomposition products

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Nitrogen oxides Carbon oxides

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

11.1. Information on toxicological effects

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Toxicological information of the product:
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N.A

Toxicological information of the main substances found in the product:

butan-2-ol - CAS: 78-92-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 6500 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 48.5 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Positive

nitroethane - CAS: 79-24-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1083 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 6.7 mg/l

1,3-propanediol,2-ethyl-2-(hydroxymethyl)-,polymer - CAS: 30499-70-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

b) skin corrosion/irritation:

Test: Skin Corrosive Yes

c) serious eye damage/irritation:

Test: Eve Corrosive Yes

d) respiratory or skin sensitisation:

Test: Skin Sensitization Yes

g) reproductive toxicity:

Test: NOAEL - Route: Oral - Species: Rat = 100 mg/kg

zinc oxide - CAS: 1314-13-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 1500 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 5.7 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Mouse = 7950 mg/kg

3-(oxiranylméthoxy)propyl-triméthoxy-silane - CAS: 2530-83-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 8025 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 5300 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit = 4250 mg/kg

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Skin Yes

i) STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat = 1000 mg/kg - Duration: 28days

Test: NOAEL - Route: Inhalation - Species: Rat = 0.225 mg/l - Duration: 2weeks

silane, dichlorodimethyl-, reaction prodcuts with silica - CAS: 68611-44-9

a) acute toxicity

Test: LC50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 0.477 mg/l - Duration: 4h

Propylidynetrimethanol - CAS: 77-99-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 14000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 0.29 mg/l

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bis-[4-(2,3-epoxipropoxi)phenyl]propane - CAS: 1675-54-3 LD50 (RAT) ORAL: 11 G/KG (11000 MG/KG)

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity:
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- i) aspiration hazard.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

```
Adopt good working practices, so that the product is not released into the environment.
butan-2-ol - CAS: 78-92-2
a) Aquatic acute toxicity:
      Endpoint: CE0 Bacteria = 500 mg/l - Duration h: 16
      Endpoint: EC50 Daphnia = 3750 mg/l - Duration h: 24
      Endpoint: LC50 Fish = 3670 mg/l - Duration h: 96
      Endpoint: NOEC Algae = 95 mg/l - Duration h: 168
      Endpoint: LC50 Fish > 100 mg/l - Duration h: 96
      Endpoint: LC50 Daphnia > 100 mg/l - Duration h: 24
      Endpoint: LC50 Algae > 100 mg/l - Duration h: 168
nitroethane - CAS: 79-24-3
a) Aquatic acute toxicity:
      Endpoint: LC50 Fish = 880 mg/l - Duration h: 48
      Endpoint: EC50 Daphnia > 21.9 mg/l - Duration h: 48
      Endpoint: EC50 Algae = 17.4 mg/l - Duration h: 72
1,3-propanediol,2-ethyl-2-(hydroxymethyl)-,polymer - CAS: 30499-70-8
a) Aquatic acute toxicity:
      Endpoint: LC0 Fish = 56 mg/l - Duration h: 96
      Endpoint: LC50 Fish = 75 mg/l - Duration h: 96
      Endpoint: EC50 Daphnia = 3.7 mg/l - Duration h: 48
      Endpoint: EC50 Algae = 9 mg/l - Duration h: 72
      Endpoint: EC10 Bacteria = 6.310 mg/l - Duration h: 18
      Endpoint: EC50 Bacteria > 10 mg/l - Duration h: 18
zinc oxide - CAS: 1314-13-2
a) Aquatic acute toxicity:
      Endpoint: LC50 Daphnia = 98 µg/L - Duration h: 48
      Endpoint: LC50 Fish = 1.1 ppm - Duration h: 96
      Endpoint: EC50 Algae = 0.042 mg/l - Duration h: 72
3-(oxiranylméthoxy)propyl-triméthoxy-silane - CAS: 2530-83-8
a) Aquatic acute toxicity:
      Endpoint: LC50 Fish = 55 mg/l - Duration h: 96
      Endpoint: LC50 Daphnia = 324 mg/l - Duration h: 48
      Endpoint: EC50 Algae = 119 mg/l - Duration h: 168
      Endpoint: EC10 Algae = 40 mg/l - Duration h: 168
      Endpoint: NOEC Algae = 50 mg/l - Duration h: 168
silane, dichlorodimethyl-, reaction prodcuts with silica - CAS: 68611-44-9
a) Aquatic acute toxicity:
      Endpoint: LC50 Fish > 10000 mg/l - Duration h: 96
      Endpoint: EC50 Daphnia > 10000 mg/l - Duration h: 24
```

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Endpoint: CI50 Algae > 10000 mg/l - Duration h: 72

Propylidynetrimethanol - CAS: 77-99-6

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 21700 mg/l - Duration h: 48 Endpoint: EC50 Daphnia = 13000 mg/l - Duration h: 48

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

Propylidynetrimethanol - CAS: 77-99-6 Not bioaccumulative -2.37

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances:

>= 2.5% - < 5% terphenyl, hydrogenated - CAS: 61788-32-7

PBT Substances: None

12.6. Other adverse effects

None

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. The codes for waste (Decision 2001/573/CE, Directive 2006/12/CEE, Directive 94/31/CEE on hazardous waste):

08 01 11\* waste paint and varnish containing organic solvents or other hazardous substances 15 01 10\* packaging containing residues of or contaminated by hazardous substances Additional disposal information:

Do not discharge into drains, water, nature.

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

### 14.1. UN number

ADR-UN Number: 3469
IATA-UN Number: 3469
IMDG-UN Number: 3469

## 14.2. UN proper shipping name

ADR-Shipping Name: PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE IATA-Shipping Name: PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE

14.3. Transport hazard class(es)

## **AkzoNobel**







ADR-Class: 3
ADR - Hazard identification number: 38

IATA-Class: 3 IATA-Label: 3 + 8 IMDG-Class: 3

## 14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

### 14.5. Environmental hazards

ADR-Environmental Pollutant: Yes

IMDG-Marine pollutant: Marine Pollutant
Most important toxic component: zinc oxide

### 14.6. Special precautions for user

ADR-Subsidiary hazards: 8

ADR-S.P.: 163 367

ADR-Transport category (Tunnel restriction code): 3 (D/E)

IATA-Passenger Aircraft: 354 IATA-Subsidiary hazards: 8 IATA-Cargo Aircraft: 365

IATA-S.P.: A3 A72 A192 A803

IATA-ERG: 3C

IMDG-EmS: F-E , S-C

IMDG-Subsidiary hazards: 8

IMDG-Stowage and handling: Category A SW2

IMDG-Segregation: -

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

## **SECTION 15: Regulatory information**

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

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Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3
Restriction 40

Restrictions related to the substances contained:

Restriction 70

Volatile Organic compounds - VOCs = 350.00 g/l

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.00

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

**SVHC Substances**:

Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):

terphenyl, hydrogenated

vPvB

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c, E2

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

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

Full text of phrases referred to in Section 3:

H411 Toxic to aquatic life with long lasting effects.

H226 Flammable liquid and vapour.

H319 Causes serious eve irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H361 Suspected of damaging fertility or the unborn child.

H412 Harmful to aquatic life with long lasting effects.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H341 Suspected of causing genetic defects.

H360F May damage fertility.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4



Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
Muta. 2	3.5/2	Germ cell mutagenicity, Category 2
Repr. 1B	3.7/1B	Reproductive toxicity, Category 1B
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3
		-

Paragraphs modified from the previous revision:

SECTION 9: Physical and chemical properties

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Skin Corr. 1C, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1B, H317	Calculation method
Muta. 2, H341	Calculation method
Repr. 1B, H360	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It

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refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.