

**Safety Data Sheet dated 3/24/2020, version 2**

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## 1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: MAPCOAT 138-A BASE

Other means of identification:

Trade code: 21138000B

Recommended use of the chemical and restrictions on use

Recommended use:

Solvent based 2K polyurethane paint

Restrictions on use:

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company:

MAPAERO SAS

10, Avenue de la Rijole

09100 PAMIERS

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

Emergency phone number








800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

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## 2. HAZARD(S) IDENTIFICATION

Classification of the chemical

-  Danger, Flam. Liq. 2, Highly flammable liquid and vapour.
-  Warning, Skin Irrit. 2, Causes skin irritation.
-  Warning, Eye Irrit. 2A, Causes serious eye irritation.
-  Warning, Skin Sens. 1, May cause an allergic skin reaction.
-  Warning, Repr. 2, Suspected of damaging fertility or the unborn child.
-  Warning, STOT SE 3, May cause drowsiness or dizziness.
-  Danger, STOT RE 1, Causes damage to organs through prolonged or repeated exposure.

Label elements

Hazard pictograms:



Danger

Hazard statements:

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H361 Suspected of damaging fertility or the unborn child.
- H336 May cause drowsiness or dizziness.
- H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 P264.1
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment (see supplementary instructions on this label)
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P363 Wash contaminated clothing before reuse.
- P370+P378 In case of fire, use a foam fire extinguisher to extinguish.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Hazards not otherwise classified identified during the classification process:

None

Ingredient(s) with unknown acute toxicity:

None.

Additional classification information

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### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

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## MAPCOAT 138-A BASE

AkzoNobel

>= 25% - < 50% butanone; ethyl methyl ketone

REACH No.: 01-2119457290-43, Index number: 606-002-00-3, CAS: 78-93-3, EC: 201-159-0

 B.6/2 Flam. Liq. 2 H225

 A.3/2A Eye Irrit. 2A H319

 A.8/3 STOT SE 3 H336

>= 10% - < 20% titanium dioxide

REACH No.: 01-2119489379-17, CAS: 13463-67-7, EC: 236-675-5

The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

>= 5% - < 10% xylene

REACH No.: 01-2119488216-32, Index number: 601-022-00-9, CAS: 1330-20-7, EC: 215-535-7

 B.6/3 Flam. Liq. 3 H226

 A.10/1 Asp. Tox. 1 H304

 A.1/4/Dermal Acute Tox. 4 H312

 A.2/2 Skin Irrit. 2 H315

 A.1/4/Inhal Acute Tox. 4 H332

>= 2.5% - < 5% toluene

REACH No.: 01-2119471310-51, Index number: 601-021-00-3, CAS: 108-88-3, EC: 203-625-9

 B.6/2 Flam. Liq. 2 H225

 A.10/1 Asp. Tox. 1 H304

 A.2/2 Skin Irrit. 2 H315


 A.8/3 STOT SE 3 H336

 A.7/2 Repr. 2 H361

 A.9/2 STOT RE 2 H373

>= 2.5% - < 5% mica

CAS: 12001-26-2

 A.9/1 STOT RE 1 H372

>= 2.5% - < 5% Alveolar quartz

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## MAPCOAT 138-A BASE

AkzoNobel

CAS: 14808-60-7, EC: 238-878-4

 A.9/1 STOT RE 1 H372

>= 0.5% - < 2.5% n-butyl acetate

REACH No.: 01-2119485493-29, Index number: 607-025-00-1, CAS: 123-86-4, EC: 204-658-1

 B.6/3 Flam. Liq. 3 H226

 A.8/3 STOT SE 3 H336

>= 0.5% - < 2.5% reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethandiamine

REACH No.: 01-0000017633-70, EC: 430-050-2

 A.4.2/1 Skin Sens. 1 H317

 US-HAE/C2 Aquatic Chronic 2 H411

>= 0.5% - < 2.5% 2-methoxy-1-methylethyl acetate

REACH No.: 01-2119475791-29, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9

 B.6/3 Flam. Liq. 3 H226

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### 4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately 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 ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

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

Most important symptoms/effects, acute and delayed

None

Indication of 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

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### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

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

Unsuitable extinguishing media:

None in particular.  
Specific hazards arising from the chemical  
Do not inhale explosion and combustion gases.  
Burning produces heavy smoke.  
Hazardous combustion products:  
None  
Explosive properties: N.A.  
Oxidizing properties: N.A.  
Special protective equipment and precautions for fire-fighters  
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.

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## **6. ACCIDENTAL RELEASE MEASURES**

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.  
Methods and materials for containment and cleaning up  
Wash with plenty of water.

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## **7. HANDLING AND STORAGE**

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.  
Do not use on extensive surface areas in premises where there are occupants.  
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:  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
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.  
Always keep in a well ventilated place.  
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.  
Avoid accumulating electrostatic charge.  
Keep away from food, drink and feed.  
Incompatible materials:  
None in particular.  
Instructions as regards storage premises:  
Cool and adequately ventilated.  
Safety electric system.  
Storage temperature:  
Store at ambient temperature.

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## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters  
butanone; ethyl methyl ketone - CAS: 78-93-3  
- OEL Type: VME - TWA(8h): 600 mg/m<sup>3</sup>, 200 ppm - STEL: 900 mg/m<sup>3</sup>, 300 ppm

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## MAPCOAT 138-A BASE

**AkzoNobel**

- OEL Type: TWA - TWA(8h): 600 mg/m<sup>3</sup>, 200 ppm
  - OEL Type: STEL - STEL: 900 mg/m<sup>3</sup>, 300 ppm
  - OEL Type: EU - TWA(8h): 600 mg/m<sup>3</sup>, 200 ppm - STEL: 900 mg/m<sup>3</sup>, 300 ppm
  - OEL Type: ACGIH - TWA(8h): 200 ppm - STEL: 300 ppm
  - OEL Type: AGS - TWA(8h): 600 mg/m<sup>3</sup>, 200 ppm - STEL: 600 mg/m<sup>3</sup>, 200 ppm
  - titanium dioxide - CAS: 13463-67-7
    - OEL Type: ACGIH - TWA(8h): 10 mg/m<sup>3</sup>
    - OEL Type: VME - TWA: 10 mg/m<sup>3</sup>
    - OEL Type: MAK-KZW - STEL(15min): 10 mg/m<sup>3</sup>
    - OEL Type: MAK-TMW - TWA(8h): 5 mg/m<sup>3</sup>
    - OEL Type: DFG - TWA(8h): 0.3 mg/m<sup>3</sup> - STEL(15min): 2.4 mg/m<sup>3</sup>
  - xylylene - CAS: 1330-20-7
    - OEL Type: VLE - TWA(8h): 442 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: VME - TWA(8h): 221 mg/m<sup>3</sup>, 50 ppm - STEL: 442 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: TWA - TWA(8h): 221 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: EU - TWA(8h): 221 mg/m<sup>3</sup>, 50 ppm - STEL: 442 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm
    - OEL Type: AGS - TWA(8h): 440 mg/m<sup>3</sup>, 100 ppm - STEL: 880 mg/m<sup>3</sup>, 200 ppm
    - OEL Type: MAK-TMW - TWA(8h): 221 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: MAK-KZW - STEL(15min): 442 mg/m<sup>3</sup>, 100 ppm
  - toluene - CAS: 108-88-3
    - OEL Type: TWA - TWA: 192 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: EU - TWA(8h): 192 mg/m<sup>3</sup>, 50 ppm - STEL: 384 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: ACGIH - TWA(8h): 20 ppm
    - OEL Type: TLV-FR - TWA(8h): 76.8 mg/m<sup>3</sup>, 20 ppm - STEL: 384 mg/m<sup>3</sup>, 100 ppm
  - mica - CAS: 12001-26-2
    - OEL Type: ACGIH - TWA(8h): 3 mg/m<sup>3</sup>
  - Alveolar quartz - CAS: 14808-60-7
    - OEL Type: MAK-TMW - TWA(8h): 0.15 mg/m<sup>3</sup>
    - OEL Type: ACGIH - TWA(8h): 0.025 mg/m<sup>3</sup>
  - n-butyl acetate - CAS: 123-86-4
    - OEL Type: VLE - TWA(8h): 710 mg/m<sup>3</sup>, 150 ppm - STEL: 940 mg/m<sup>3</sup>, 200 ppm
    - OEL Type: MAK - TWA: 480 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: ACGIH - TWA(8h): 50 ppm - STEL: 150 ppm
    - OEL Type: AGS - TWA(8h): 300 mg/m<sup>3</sup>, 62 ppm - STEL: 600 mg/m<sup>3</sup>, 124 ppm
    - OEL Type: TWA - TWA(8h): 724 mg/m<sup>3</sup>, 150 ppm - STEL: 966 mg/m<sup>3</sup>, 200 ppm
    - OEL Type: MAK-TMW - TWA(8h): 480 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: MAK-KZW - STEL(15min): 480 mg/m<sup>3</sup>, 100 ppm
  - 2-methoxy-1-methylethyl acetate - CAS: 108-65-6
    - OEL Type: VME - TWA(8h): 275 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: VLE - TWA(8h): 550 mg/m<sup>3</sup>, 110 ppm - STEL: 550 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: AGW - TWA(8h): 270 mg/m<sup>3</sup>, 50 ppm - STEL: 270 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: AGS - TWA(8h): 270 mg/m<sup>3</sup>, 50 ppm - STEL: 270 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: WEL - TWA(8h): 274 mg/m<sup>3</sup>, 50 ppm - STEL: 548 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: TWA - TWA(8h): 275 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: EU - TWA(8h): 275 mg/m<sup>3</sup>, 50 ppm - STEL: 550 mg/m<sup>3</sup>, 100 ppm
    - OEL Type: MAK-TMW - TWA(8h): 275 mg/m<sup>3</sup>, 50 ppm
    - OEL Type: MAK-KZW - STEL(15min): 550 mg/m<sup>3</sup>, 100 ppm
- DNEL Exposure Limit Values**
- butanone; ethyl methyl ketone - CAS: 78-93-3
    - Worker Professional: 1161 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects
    - Worker Professional: 600 mg/m<sup>3</sup> - Consumer: 106 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

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**AkzoNobel**

Consumer: 31 mg/kg bw/day - Exposure: Human

Oral - Frequency: Long Term, systemic effects

Consumer: 412 mg/kg bw/day - Exposure: Human Dermal - Frequency: Short Term, local effects

titanium dioxide - CAS: 13463-67-7

Worker Professional: 10 mg/m<sup>3</sup>

xylene - CAS: 1330-20-7

Worker Professional: 422 mg/m<sup>3</sup> - Consumer: 260 mg/m<sup>3</sup> - Exposure: Human

Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 422 mg/m<sup>3</sup> - Consumer: 260 mg/m<sup>3</sup> - Exposure: Human

Inhalation - Frequency: Short Term, local effects

Worker Professional: 3182 mg/kg - Consumer: 1872 mg/kg - Exposure: Human Dermal

- Frequency: Long Term, systemic effects

Worker Professional: 221 mg/m<sup>3</sup> - Consumer: 65.3 mg/m<sup>3</sup> - Exposure: Human

Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 289 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 77 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 12.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 221 mg/m<sup>3</sup> - Consumer: 65.3 mg/m<sup>3</sup> - Exposure: Human

Inhalation - Frequency: Long Term, local effects

toluene - CAS: 108-88-3

Worker Industry: 384 mg/m<sup>3</sup> - Worker Professional: 384 mg/m<sup>3</sup> - Consumer: 226 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 384 mg/m<sup>3</sup> - Worker Professional: 384 mg/m<sup>3</sup> - Consumer: 226 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 384 mg/m<sup>3</sup> - Worker Professional: 384 mg/m<sup>3</sup> - Consumer: 226 mg/m<sup>3</sup> - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 192 mg/m<sup>3</sup> - Worker Professional: 192 mg/m<sup>3</sup> - Consumer: 56.5 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 192 mg/m<sup>3</sup> - Worker Professional: 192 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 8.13 mg/m<sup>3</sup> - Exposure: Human Oral - Frequency: Long Term, systemic effects

n-butyl acetate - CAS: 123-86-4

Worker Professional: 960 mg/m<sup>3</sup> - Consumer: 859.7 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 960 mg/m<sup>3</sup> - Consumer: 859.7 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 480 mg/m<sup>3</sup> - Consumer: 102.34 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 480 mg/m<sup>3</sup> - Consumer: 102.34 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

Worker Professional: 275 mg/m<sup>3</sup> - Consumer: 33 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 153.5 mg/kg - Consumer: 54.8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 1.67 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

butanone; ethyl methyl ketone - CAS: 78-93-3

Target: Fresh Water - Value: 55.8 mg/l

Target: Marine water - Value: 55.8 mg/l

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**AkzoNobel**

Target: Freshwater sediments - Value: 284.7 mg/kg dwt  
Target: Soil (agricultural) - Value: 22.5 mg/kg  
titanium dioxide - CAS: 13463-67-7  
Target: Marine water - Value: 1 mg/l  
Target: Marine water sediments - Value: 100 mg/kg  
Target: Fresh Water - Value: 0.127 mg/l  
Target: Freshwater sediments - Value: 1000 mg/kg  
xylene - CAS: 1330-20-7  
Target: Fresh Water - Value: 0.327 mg/l  
Target: Marine water - Value: 0.327 mg/l  
Target: Microorganisms in sewage treatments - Value: 6.58 mg/l  
Target: Freshwater sediments - Value: 12.46 mg/kg  
Target: Marine water sediments - Value: 12.46 mg/kg  
Target: Soil (agricultural) - Value: 2.31 mg/kg  
toluene - CAS: 108-88-3  
Target: Fresh Water - Value: 0.68 mg/l  
Target: Marine water - Value: 0.68 mg/l  
Target: Soil (agricultural) - Value: 2.89 mg/kg  
Target: Freshwater sediments - Value: 16.39 mg/kg  
Target: Marine water sediments - Value: 16.39 mg/kg  
Target: Microorganisms in sewage treatments - Value: 13.61 mg/l  
n-butyl acetate - CAS: 123-86-4  
Target: Fresh Water - Value: 0.18 mg/l  
Target: Marine water - Value: 0.018 mg/l  
Target: Freshwater sediments - Value: 0.981 mg/kg  
Target: Marine water sediments - Value: 0.0981 mg/kg  
Target: Soil (agricultural) - Value: 0.0903 mg/kg  
Target: Microorganisms in sewage treatments - Value: 35.6 mg/l  
2-methoxy-1-methylethyl acetate - CAS: 108-65-6  
Target: Fresh Water - Value: 0.635 mg/l  
Target: Marine water - Value: 0.0635 mg/l  
Target: Freshwater sediments - Value: 3.29 mg/kg  
Target: Marine water sediments - Value: 0.329 mg/kg  
Target: Microorganisms in sewage treatments - Value: 100 mg/l  
Target: Soil (agricultural) - Value: 0.29 mg/kg

Appropriate engineering controls:

None

Individual protection measures

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

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	Liquid
Odour:	Solvent odor
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	-13 °F
Initial boiling point and boiling range:	174.2 °F
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	FP<73.4 °F
Evaporation rate:	N.A.
Vapour pressure:	<110 kPa (1.10 bar)
Relative density:	<1
Solubility in water:	N.A.
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	788 °F
Decomposition temperature:	N.A.
Viscosity:	N.A.
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties:	N.A.

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## 10. STABILITY AND REACTIVITY

Reactivity	It may generate dangerous reactions (See subsections below)
Chemical stability	It may generate dangerous reactions (See subsections below)
Possibility of hazardous reactions	None
Conditions to avoid	Flames and hot surfaces The accumulation of electrostatic discharges The humidity The heating
Incompatible materials	Acids Oxidizing agents Bases Water
Hazardous decomposition products	Nitrogen oxides Carbon oxides

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## 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects	
Toxicological information of the product:	N.A.

Toxicological information of the main substances found in the product:

butanone; ethyl methyl ketone - CAS: 78-93-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3300 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 7200 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 34 mg/l - Duration: 4h

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Skin - Species: Rabbit Yes

xylene - CAS: 1330-20-7

a) acute toxicity:

Test: LC50 - Route: Inhalation Gas - Species: Rat = 4500 ppm

Test: LD50 - Route: Skin = 1100 mg/kg

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

Test: LD50 - Route: Oral - Species: Rat = 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 5000 ppm - Duration: 4h

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: Mouse Negative - Source: OCDE 429

e) germ cell mutagenicity:

Test: Mutagenesis - Route: Inhalation - Species: Rabbit Negative 4350 mg/kg

f) carcinogenicity:

Test: Carcinogenicity - Route: Oral - Species: Rat Negative 500 mg/kg - Source: DIRECTIVE 67/548/CEE

g) reproductive toxicity:

Test: NOAEL - Route: Inhalation - Species: Rat > 500 ppm

i) STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat = 150 mg/kg - Duration: 90days - Source: OCDE 408

toluene - CAS: 108-88-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 20 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 5580 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat = 28.1 mg/l

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin Positive

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Skin Negative

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Salmonella Typhimurium Negative

f) carcinogenicity:

Test: Carcinogenicity Negative

g) reproductive toxicity:

Test: Reproductive Toxicity Positive

j) aspiration hazard:

Test: Respiratory Tract Irritant - Route: Oral Positive

n-butyl acetate - CAS: 123-86-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 10760 mg/kg

Test: LC50 - Route: Inhalation Mist - Species: Rat = 23.4 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 14112 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 21 mg/l - Duration: 4h

h) STOT-single exposure:

Test: Nervous system Positive

reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethandiamine

- a) acute toxicity:  
Test: LD50 - Route: Skin - Species: Rat = 2000 mg/kg  
Test: LD50 - Route: Oral - Species: Rat = 5000 mg/kg
- b) skin corrosion/irritation:  
Test: Skin Irritant - Route: Skin Yes
- c) serious eye damage/irritation:  
Test: Eye Irritant Yes
- d) respiratory or skin sensitisation:  
Test: Respiratory Tract Irritant - Route: Inhalation Yes  
2-methoxy-1-methylethyl acetate - CAS: 108-65-6
- a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat = 8532 mg/kg  
Test: LC0 - Route: Inhalation Vapour - Species: Rat > 4345 ppm - Duration: 6H  
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg  
Test: LD50 - Route: Skin - Species: Rat > 5000 mg/kg  
Test: LC50 - Route: Inhalation Mist - Species: Rat > 23.8 mg/l - Duration: 6H  
Test: LC50 - Route: Inhalation Dust - Species: Rat > 23.8 mg/l - Duration: 6H
- b) skin corrosion/irritation:  
Test: Skin Irritant - Route: Skin - Species: Rabbit Negative
- c) serious eye damage/irritation:  
Test: Eye Irritant - Route: Skin - Species: Rabbit Negative
- d) respiratory or skin sensitisation:  
Test: Skin Sensitization - Route: Skin Positive
- e) germ cell mutagenicity:  
Test: Mutagenesis - Species: Salmonella Typhimurium Negative

Substance(s) listed on the NTP report on Carcinogens:  
None.

Substance(s) listed on the IARC Monographs:  
titanium dioxide - Group 2B  
xylene - Group 3  
toluene - Group 3  
Alveolar quartz - Group 1.

Substance(s) listed as OSHA Carcinogen(s):  
None.

Substance(s) listed as NIOSH Carcinogen(s):  
titanium dioxide  
Alveolar quartz.

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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.  
butanone; ethyl methyl ketone - CAS: 78-93-3

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 2993 mg/l - Duration h: 96  
Endpoint: EC50 Daphnia = 308 mg/l - Duration h: 48  
Endpoint: EC50 Algae = 2029 mg/l - Duration h: 96

xylene - CAS: 1330-20-7

a) Aquatic acute toxicity:

Endpoint: EC50 Algae = 4.36 mg/l - Duration h: 72 - Notes: OCDE 201  
Endpoint: CI50 Daphnia = 1 mg/l - Duration h: 24 - Notes: OCDE 202  
Endpoint: LC50 Fish = 2.6 mg/l - Duration h: 96 - Notes: OCDE 203  
Endpoint: NOEC Algae = 0.44 mg/l - Duration h: 73  
Endpoint: EC50 Daphnia > 1 mg/l - Duration h: 48  
Endpoint: EC50 Daphnia = 10 mg/l - Duration h: 48  
Endpoint: CI50 Algae = 2.2 mg/l - Duration h: 72

- b) Aquatic chronic toxicity:  
Endpoint: NOEC Daphnia = 0.96 mg/l - Duration h: 168  
Endpoint: NOEC Fish > 1.3 mg/l - Duration h: 1344

- c) Bacteria toxicity:  
Endpoint: EC50 = 96 mg/l - Duration h: 24

toluene - CAS: 108-88-3

- a) Aquatic acute toxicity:  
Endpoint: LC50 Fish = 5.5 mg/l - Duration h: 96  
Endpoint: EC50 Daphnia = 3.78 mg/l - Duration h: 48  
Endpoint: CI50 Algae = 12 mg/l - Duration h: 72  
Endpoint: NOEC Bacteria = 29 mg/l - Duration h: 16  
Endpoint: EC50 Daphnia > 310000 µg/L - Duration h: 48  
Endpoint: EC50 Daphnia = 420000 µg/L - Duration h: 48  
Endpoint: LC50 Fish = 5500 µg/L - Duration h: 96  
Endpoint: LC50 Fish > 6780 µg/L - Duration h: 96  
Endpoint: LC50 Fish = 7810 µg/L - Duration h: 96

- b) Aquatic chronic toxicity:  
Endpoint: NOEC Daphnia = 28000 µg/L - Duration h: 48

- e) Plant toxicity:  
Endpoint: EC50 Algae = 134 mg/l - Duration h: 3  
Endpoint: NOEC Algae = 10 mg/l - Duration h: 72

n-butyl acetate - CAS: 123-86-4

- a) Aquatic acute toxicity:  
Endpoint: LC50 Fish = 18 mg/l - Duration h: 96  
Endpoint: EC50 Daphnia = 44 mg/l - Duration h: 48  
Endpoint: EC50 Algae = 647.7 mg/l - Duration h: 72  
Endpoint: NOEC Algae = 200 mg/l  
Endpoint: CI50 Bacteria = 356 mg/l - Duration h: 40  
Endpoint: CI50 Fish = 32 mg/l - Duration h: 48

reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethandiamine

- a) Aquatic acute toxicity:  
Endpoint: LC50 Fish > 1000 mg/l  
Endpoint: LC50 Daphnia > 15.63 mg/l  
Endpoint: LC50 Algae = 4.08 mg/l - Duration h: 72  
Endpoint: EC50 Algae = 4.48 mg/l - Duration h: 48

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

- a) Aquatic acute toxicity:  
Endpoint: LC50 Fish = 134 mg/l - Duration h: 96  
Endpoint: EC50 Daphnia > 500 mg/l - Duration h: 48  
Endpoint: EC50 Algae > 1000 mg/l - Duration h: 72  
Endpoint: EC10 Bacteria > 1000 mg/l - Duration h: 0.5  
Endpoint: LC50 Fish > 100 mg/l - Duration h: 96

- b) Aquatic chronic toxicity:  
Endpoint: NOEC Fish = 47.5 mg/l - Duration h: 336  
Endpoint: NOEC Daphnia > 100 mg/l - Duration h: 504

- c) Bacteria toxicity:  
Bacteria > 1000 mg/l - Duration h: 0.5

Persistence and degradability

xylene - CAS: 1330-20-7

Biodegradability: Readily biodegradable - Duration h: 28days - %: 87.8 - Notes: OCDE 301F (41 mg/L)

Bioaccumulative potential

N.A.

Mobility in soil

xylene - CAS: 1330-20-7

Test: Koc 39-365 - Notes: OCDE 121

Other adverse effects  
None

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### 13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal 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.

Additional disposal information:

Do not discharge into drains, water, nature.

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### 14. TRANSPORT INFORMATION



UN number

ADR-UN Number: 1263

DOT number: UN1263

IATA-UN Number: 1263

IMDG-UN Number: 1263

UN proper shipping name

ADR-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (vapour pressure at 50 °C not more than 110 kPa)

DOT-Shipping Name: Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base or Paint related material including paint thinning, drying, removing, or reducing compound

IATA-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (vapour pressure at 50 °C not more than 110 kPa)

IMDG-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (vapour pressure at 50 °C not more than 110 kPa)

Transport hazard class(es)

ADR-Class: 3

DOT Hazard Class: 3

IATA-Class: 3

IMDG-Class: 3

Packing group

ADR-Packing Group: II

DOT Packing group: II

IATA-Packing group: II

IMDG-Packing group: II

Environmental hazards

ADR-Environmental Pollutant: No

IMDG-Marine pollutant: No

# Safety Data Sheet

## MAPCOAT 138-A BASE

AkzoNobel

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

N.A.

Special precautions

DOT Special provisions: 149, B52, IB2, T4, TP1, TP8, T  
ADR-Subsidiary hazards: -  
ADR-S.P.: 163 640D 650  
ADR-Transport category (Tunnel restriction code): 2 (D/E)  
IATA-Passenger Aircraft: 353  
IATA-Subsidiary hazards: -  
IATA-Cargo Aircraft: 364  
IATA-S.P.: A3 A72  
IATA-ERG: 3L  
IMDG-EmS: F-E , S-E  
IMDG-Subsidiary hazards: -  
IMDG-Stowage and handling: Category B  
IMDG-Segregation: -

### 15. REGULATORY INFORMATION

Volatile Organic compounds - VOCs = 525.00 g/l  
Volatile CMR substances = 0.00 %  
Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %  
Organic Carbon - C = 0.00

USA - Federal regulations

TSCA - Toxic Substances Control Act

List of substances included in the TSCA inventory: butanone; ethyl methyl ketone, titanium dioxide, xylene, toluene, mica, Alveolar quartz, n-butyl acetate, 2-methoxy-1-methylethyl acetate.

List of substances not included in the TSCA inventory: reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethandiamine.

TSCA listed substances:

None.

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances: no substances listed.

Section 304 - Hazardous substances: no substances listed.

Section 313 - Toxic chemical list: xylene, toluene.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA: butanone; ethyl methyl ketone

xylene

toluene

n-butyl acetate.

CAA - Clean Air Act

CAA listed substances:

butanone; ethyl methyl ketone is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON

xylene is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON

toluene is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON

n-butyl acetate is listed in CAA Section 111.

CWA - Clean Water Act

CWA listed substances:

xylene is listed in CWA Section 311, Section 304

toluene is listed in CWA Section 304, Section 307, Section 311

n-butyl acetate is listed in CWA Section 311, Section 304.

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:  
titanium dioxide - Listed as carcinogen  
toluene - Listed as reproductive toxicant.

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:  
butanone; ethyl methyl ketone  
titanium dioxide  
xylene  
toluene  
mica  
Alveolar quartz  
n-butyl acetate.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:  
butanone; ethyl methyl ketone  
titanium dioxide  
xylene  
toluene  
mica  
Alveolar quartz  
n-butyl acetate.

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:  
butanone; ethyl methyl ketone  
titanium dioxide  
xylene  
toluene  
mica  
Alveolar quartz  
n-butyl acetate.

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**16. OTHER INFORMATION**

Full text of phrases referred to in Section 3:

- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H332 Harmful if inhaled.
- H361 Suspected of damaging fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
- H317 May cause an allergic skin reaction.
- H411 Toxic to aquatic life with long lasting effects.

Safety Data Sheet dated 3/24/2020, version 2

Sections modified from the previous revision:

1. IDENTIFICATION
2. HAZARD(S) IDENTIFICATION
3. COMPOSITION/INFORMATION ON INGREDIENTS
5. FIRE-FIGHTING MEASURES

# Safety Data Sheet

## MAPCOAT 138-A BASE



- 6. ACCIDENTAL RELEASE MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION

### Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet 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.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
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.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration.
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