Safaty Data Shaat datad 20/11/2018 varaian 1			
Safety Data Sheet dated 30/11/2018, version 1			
Regulation (EU) 2015/830			
SECTION 1: Identification of the substance/mixture and of the			
company/undertaking			
1.1. Product identifier			
Identification of the mixture:			
Trade name:	OSC AF HM PREMIUM BLUE		
Trade code:	21604.002		
Antifouling paint 1.3. Details of the supplier of the sa Company: BOERO BARTOLOMEO S.p	o.A Via Macaggi 19 - 16121 Genova - Tel. +39 010 55001 - Fax VA/REG. IMPRESE DI GENOVA 00267120103 for the safety data sheet: o.A Tel.+39 010 55001 10 pm		

## **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP) The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). 2.2. Label elements Hazard pictograms: None Hazard statements: None Precautionary statements: None Special Provisions: None

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

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Adverse physicochemical, human health and environmental effects: The main adverse physical-chemical effects for human health and the environment are listed in accordance with Sections 9 to 12 of the safety data sheet vPvB Substances: None - PBT Substances: None Other Hazards:

No other hazards

## SECTION 3: Composition/information on ingredients

- 3.1. Substances
  - not measured
- 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification: >= 20% - < 25% zinc oxide

REACH Reg.No.: 01-2119463881-32-XXXX, Index number: 030-013-00-7, CAS: 1314-13-2, EC: 215-222-5

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

#### >= 20% - < 25% hydrocarbons, C9, aromatics

EC: 918-668-5

Flam. Liq. 3 H226 Flammable liquid and vapour.

STOT SE 3 H335 May cause respiratory irritation.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking. DECLP (CLP)\*

>= 20% - < 25% copper thiocyanate

Index number: 029-015-00-0, CAS: 1111-67-7, EC: 214-183-1 Aquatic Acute 1 H400 Very toxic to aquatic life. M=10. Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. M=10. EUH032 Contact with acids liberates very toxic gas.

>= 8% - < 9% rosin; colophony

REACH Reg.No.: 01-2119480418-32-XXXX, Index number: 650-015-00-7, CAS: 8050-09-7, EC: 232-475-7

Skin Sens. 1,1A,1B H317 May cause an allergic skin reaction.

>= 7% - < 8% xylene [4]

REACH Reg.No.: 01-2119488216-32-XXXX, CAS: 1330-20-7, EC: 215-535-7 Flam. Liq. 3 H226 Flammable liquid and vapour. Asp. Tox. 1 H304 May be fatal if swallowed and enters airways. Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation. STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure. Acute Tox. 4 H332 Harmful if inhaled.

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Acute Tox. 4 H312 Harmful in contact with skin. Skin Irrit. 2 H315 Causes skin irritation.

>= 6% - < 7% zinc pyrithione

CAS: 13463-41-7, EC: 236-671-3 Acute Tox. 3 H301 Toxic if swallowed. Acute Tox. 3 H331 Toxic if inhaled. Eye Dam. 1 H318 Causes serious eye damage. Aquatic Acute 1 H400 Very toxic to aquatic life. M=100. Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. M=10.

>= 1% - < 2% ethylbenzene

Index number: 601-023-00-4, CAS: 100-41-4, EC: 202-849-4 Flam. Liq. 2 H225 Highly flammable liquid and vapour. STOT RE 2 H373 H373.5 Acute Tox. 4 H332 Harmful if inhaled. Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

\*DECLP (CLP): Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008. The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

#### SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

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

If breathing is irregular or stopped, administer artificial respiration.

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

None

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

None

#### SECTION 5: Firefighting measures

5.1. Extinguishing media Suitable extinguishing media:

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Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons: None in particular.

- 5.2. Special hazards arising from the substance or mixture Avoid inhaling the fumes.
- 5.3. Advice for firefighters

Use suitable breathing apparatus .

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.

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 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

## SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Adequately ventilated premises.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep the containers tightly closed.

Keep away from food, drink and feed.

- Incompatible materials:
- None in particular.

Instructions as regards storage premises:

- Adequately ventilated premises.
- 7.3. Specific end use(s) See section 1.2

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

8.1. Control parameters zinc oxide - CAS: 1314-13-2 ACGIH - TWA(8h): 2 mg/m3 - STEL: 10 mg/m3 - Notes: (R) - Metal fume fever

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VLE1 - TWA: 5 mg/m3 VLE - STEL: 10 mg/m3 hydrocarbons, C9, aromatics EU - STEL: 100 mg/m3, 20 ppm AGS - TWA(8h): 250-350 mg/m3 rosin; colophony - CAS: 8050-09-7 ACGIH - Notes: (L), DSEN, RSEN - Skin sens, dermatitis, asthma xylene [4] - CAS: 1330-20-7 EU - TWA(8h): 221 mg/m3, 50 ppm - STEL: 442 mg/m3, 100 ppm - Notes: Skin AGS - TWA(8h): 221 mg/m3 - STEL((15 min)): 442 mg/m3 - Notes: (Anm. H: Ämnet kan lätt upptas genom huden) ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm - Notes: A4, BEI - URT and eve irr, CNS impair AGS - TWA(8h): 221 mg/m3 - STEL((15 min)): 442 mg/m3 - Notes: (Anm. H: Ämnet kan lätt upptas genom huden) VLE1 - TWA(8h): 211 mg/m3, 50 ppm VLE - STEL: 442 mg/m3, 100 ppm - Notes: Skin ethylbenzene - CAS: 100-41-4 EU - TWA(8h): 442 mg/m3, 100 ppm - STEL: 884 mg/m3, 200 ppm - Notes: Skin AGS - TWA(8h): 200 mg/m3 - STEL((15 min)): 450 mg/m3 ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - URT irr, kidney dam (nephropathy), cochlear impair VLE1 - TWA(8h): 442 mg/m3, 100 ppm VLE - STEL: 884 mg/m3, 200 ppm **DNEL Exposure Limit Values** hydrocarbons, C9, aromatics Worker Industry: 25 mg/kg - Consumer: 11 mg/kg - Exposure: Human Dermal -Frequency: Long Term, systemic effects Worker Industry: 150 mg/m3 - Consumer: 32 mg/m3 - Exposure: Human Inhalation -Frequency: Long Term, systemic effects Consumer: 11 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects rosin; colophony - CAS: 8050-09-7 Worker Industry: 25 mg/kg - Consumer: 15 mg/kg - Exposure: Human Dermal -Frequency: Long Term (repeated) Worker Industry: 176 mg/m3 - Consumer: 52 mg/m3 - Exposure: Human Inhalation -Frequency: Long Term, systemic effects Consumer: 15 mg/kg - Exposure: Human Oral - Frequency: Long Term (repeated) xylene [4] - CAS: 1330-20-7 Worker Industry: 289 mg/m3 - Consumer: 174 mg/m3 - Exposure: Human Inhalation -Frequency: Short Term, systemic effects Worker Industry: 289 mg/m3 - Consumer: 174 mg/m3 - Exposure: Human Inhalation -Frequency: Short Term, local effects Worker Industry: 180 mg/kg - Consumer: 108 mg/kg - Exposure: Human Dermal -Frequency: Long Term, systemic effects Worker Industry: 77 mg/m3 - Consumer: 14.8 mg/m3 - Exposure: Human Inhalation -Frequency: Long Term, systemic effects Consumer: 1.6 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects **PNEC Exposure Limit Values** 

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rosin; colophony - CAS: 8050-09-7 Target: Freshwater sediments - Value: 0.02 mg/kg Target: Microorganisms in sewage treatments - Value: 1000 mg/L xylene [4] - CAS: 1330-20-7 Target: Fresh Water - Value: 0.327 mg/L Target: Marine water - Value: 0.327 mg/L Target: Freshwater sediments - Value: 12.46 mg/kg Target: Marine water sediments - Value: 12.46 mg/kg Target: Microorganisms in sewage treatments - Value: 6.58 mg/L **Biological Exposure Index** xylene [4] - CAS: 1330-20-7 Value: 1.50 mg/L - medium: Blood - Sampling Period: End of turn Value: 1.50 gg creatinina - medium: Blood - Sampling Period: End of turn ethylbenzene - CAS: 100-41-4 Value: 1.50 mg/L - medium: Blood - Sampling Period: DU Value: 2 ppm - medium: Air at the end of exhalation - Sampling Period: A Value: 1.50 gg creatinina - medium: Urine - Biological Indicator: 78 - Sampling Period: End of turn; End of working week 8.2. Exposure controls Eye protection: Use goggles/facemask certified UNI EN 166. Protection for skin: Suitable protective clothing is required for complete skin protection: for example coveralls with long sleeves and trousers, rubber boots and apron, etc., according to UNI EN 14325. Protection for hands: Use protective gloves: waterproof rubber gloves certified UNI EN 374. Nitrile gloves provide good protection. Use care in selecting a penetration time of the gloves longer than the foreseen usage time. Respiratory protection: Use adequate protective respiratory equipment: a carbon filter mask with filters certified UNI EN 149 or dust masks certified UNI EN 140. Filters of types A and P types may be considered. Thermal Hazards: None Environmental exposure controls: See sections 6 and 13 Appropriate engineering controls: None

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

9.1. Information on basic physical and chemical properties

Appearance :liquidOdour:not measuredColour:bluepH:not measuredMelting point / freezing point:not measuredBoiling point (°C):bp>35 °CInitial boiling point and boiling range:not measuredSolid/gas flammability:not measured

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Upper/lower flammability or explosive limits: not measured Vapour density: not measured 35 °C Flash point: Evaporation rate: not measured Vapour pressure: not measured Specific gravity (Kg/L) 20°C : 1.5290 Solubility in water: not measured Lipid solubility: not measured Partition coefficient (n-octanol/water): not measured Auto-ignition temperature: not measured Decomposition temperature: not measured Kinematic viscosity at 40°C (mm2/s): kv > 20.5 Viscosity (23°C+-0.5°C): min 8000 - max 10000 Methodology: BROOKFIELD (cP) Spindle: 5 Speed (rpm): 10 9.2. Other information No further information Miscibility: not measured Fat Solubility: not measured Conductivity: not measured

Substance Groups relevant properties not measured

# SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

- 10.2. Chemical stabilityStable under normal conditions10.3. Possibility of hazardous reactions
- None
- 10.4. Conditions to avoid Stable under normal conditions.
- 10.5. Incompatible materials None in particular.
- 10.6. Hazardous decomposition products None.

# SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

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h) STOT-single exposure i) STOT-repeated exposure j) aspiration hazard Toxicological information of the product: There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture. The toxicological information relating to the main substances in the mixture are referred in the following: hydrocarbons, C9, aromatics a) acute toxicity: Test: LD50 - Route: oral - Species: rat > 3492 mg/kg Test: LD50 - Route: dermal - Species: rat > 3160 mg/kg Test: LC50 - Route: inhalation - Species: rat > 6193 mg/m3 - Duration: 4h rosin; colophony - CAS: 8050-09-7 a) acute toxicity: Test: LD50 - Route: oral - Species: rat = 2800 mg/kg Test: LD50 - Route: dermal - Species: rat > 2000 mg/kg xylene [4] - CAS: 1330-20-7 a) acute toxicity: Test: LD50 - Route: oral - Species: rat > 3500 mg/kg Test: LD50 - Route: dermal - Species: rabbit > 4200 mg/kg Test: LC50 - Route: inhalation of vapours - Species: rat > 20 ml/l c) serious eye damage/irritation: Test: Eye Irritant Positive ethylbenzene - CAS: 100-41-4 a) acute toxicity: Test: LC50 - Route: inhalation - Species: rat = 17.2 mg/l - Duration: 4h

## **SECTION 12: Ecological information**

```
12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
hydrocarbons, C9, aromatics
a) Aquatic acute toxicity:
      Endpoint: LC50 - Species: Fish = 9.2 mg/l - Duration h: 96
      Endpoint: EC50 - Species: Daphnia = 3.2 mg/l - Duration h: 48
rosin; colophony - CAS: 8050-09-7
a) Aquatic acute toxicity:
      Endpoint: LC50 - Species: Fish = 60.3 mg/l - Duration h: 96
      Endpoint: EC50 - Species: Daphnia = 911 mg/l - Duration h: 48
      Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72
xylene [4] - CAS: 1330-20-7
a) Aquatic acute toxicity:
      Endpoint: LC50 - Species: Fish > 1 ml/l - Duration h: 96
      Endpoint: EC50 - Species: Daphnia = 1 mg/l - Duration h: 24
      Endpoint: EC50 - Species: Algae 18204.2 5 mg/l - Duration h: 72
zinc pyrithione - CAS: 13463-41-7
a) Aquatic acute toxicity:
      Endpoint: LC50 - Species: Fish = 0.0026 mg/l - Duration h: 96
```

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Endpoint: EC50 - Species: Daphnia = 0.0082 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 0.0012 mg/l - Duration h: 120

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Bioaccumulative:

There is no data available on the preparation itself.

12.4. Mobility in soil

There is no data available on the preparation itself.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

There is no data available on the preparation itself.

#### SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Directives 91/156/CEE, 91/689/CEE, 94/62/CE. EWC CODE 080120

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

- 14.1. UN number UN 1263
- 14.2 Proper shipping name:Paint.
- 14.3 Transport hazard class(es) and Packing Group: 3 PG III
- 14.4. Environmental hazards Dangerous for the environment /Marine Pollutant: Yes
- 14.5. Special precautions for user

#### None Other informations

#### Other informations

Land transport ADR/RID/ADN

ADR Classification code: F1 Maximum quantity for Limited Quiantities: 5L/Kg

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Tunnel code :D/E
```

```
Transport category: 3
```

```
Marittime transport (IMDG)
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Maximum quantity for Limited Quiantities: 5L/Kg

- EmS number:
- Stowage provisions:
- Air transport(IATA/ICAO)
  - Maximum quantity for Limited Quiantities: 5L/Kg
- Pkg. inst. passenger and cargo aircraft: 309 Pkg. inst. cargo aircraft only: 310

#### Erg-code: 3L SECTION 15: Regulatory information

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

F-E/S-E

А

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Dir. 89/391/CEE and subsequent amendments (Risks related to chemical agents at work and Occupational exposure limit values). Directive 1999/13/EC and subsequent amendments (limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations). Regulation (CE) n. 1907/2006, Regulation (CE) 830/2015 and subsequent amendments (concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals - REACH). Regulation (CE) n.1272/2008 and subsequent amendments (on classification, labeling and packaging of substances and mixtures - CLP). International Maritime Dangerous Goods Code, IATA Dangerous Goods Regulation, International Carriage of Dangerous Goods by Road (ADR).

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

No limits set.

Where applicable, refer to the following regulatory provisions :

Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products. Regulation UE No 649/2012 concerning the export and import of dangerous chemicals. Regulation UE n. 528/2012 concerning the making available on the market and use of biocidal products.

Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (Detergents).

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 Product belongs to category: P5c, E1

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

## **SECTION 16: Other information**

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
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. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2

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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

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 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.
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.
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.

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