

Safety Data Sheet dated 11/4/2022, version 4

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

1.1. Product identifier

Mixture identification:

Trade name: MARCOTECH AU METAL PRIMER

Trade code: 332

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

Recommended use: Coating material

1.3. Details of the supplier of the safety data sheet

Company:

SAN MARCO GROUP S.P.A.

Via Alta 10

30020 MARCON (VE) - Italy -

Tel.+39 041 4569322

Fax. +39 041 5950153

Competent person responsible for the safety data sheet:

sicurezza.prodotti@sanmarcogroup.it

1.4. Emergency telephone number

Technical information: SAN MARCO GROUP SPA +39 041 4569322 (Monday – Friday 9.00-12.30 : 13.30-17.00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

None

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P501 Dispose of contents / container in accordance with national regulations.

Special Provisions:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH208 Contains reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

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

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

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3.1. Substances

N.A.

3.2. Mixtures

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

Qty	Name	Ident. Numb	er	Classification
>= 0.25% - < 0.5%	trizinc bis(orthophosphate)	Index number: CAS: EC: REACH No.:	030-011-00-6 7779-90-0 231-944-3 01- 2119485044 -40-XXXX	 ◆4.1/A1 Aquatic Acute 1 H400 M=1. ◆4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 0.1% - < 0.25%	ethylene glycol	Index number: CAS: EC: REACH No.:	107-21-1 203-473-3	
>= 0.1% - < 0.25%	zinc oxide	Index number: CAS: EC: REACH No.:	1314-13-2 215-222-5	 ♦ 4.1/A1 Aquatic Acute 1 H400 M=1. ♦ 4.1/C1 Aquatic Chronic 1 H410 M=1.
	1,2-benzisothiazol- 3(2H)-one	Index number: CAS: EC:	613-088-00-6 2634-33-5 220-120-9	 3.1/2/Inhal Acute Tox. 2 H330
>= 0. 00015% - < 0. 0015%	reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Index number: CAS:	613-167-00-5 55965-84-9	 3.1/2/Inhal Acute Tox. 2 H330 3.1/2/Dermal Acute Tox. 2 H310 3.1/3/Oral Acute Tox. 3 H301 3.2/1C Skin Corr. 1C H314 3.3/1 Eye Dam. 1 H318 3.4.2/1A Skin Sens. 1A H317 4.1/A1 Aquatic Acute 1 H400 M=100. 4.1/C1 Aquatic Chronic 1 H410 M=100. EUH071 Specific Concentration Limits: C >= 0,6%: Skin Corr. 1C H314 0,06% <= C < 0.6%: Skin Irrit. 2 H315



	C >= 0,6%: Eye Dam. 1 H318 0,06% <= C < 0.6%: Eye Irrit. 2 H319 C >= 0,0015%: Skin Sens. 1A H317
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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 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.

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:

Water.

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

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 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.

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

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)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethylene glycol - CAS: 107-21-1

- OEL Type: EU - TWA(8h): 52 mg/m3, 20 ppm - STEL: 104 mg/m3, 40 ppm - Notes: Skin

- OEL Type: ACGIH - TWA(8h): 25 ppm - STEL: 50 ppm - Notes: (V), A4 - URT irr

- OEL Type: ACGIH - STEL: 10 mg/m3 - Notes: (I, H), A4 - URT irr

zinc oxide - CAS: 1314-13-2

- OEL Type: ACGIH - TWA(8h): 2 mg/m3 - STEL: 10 mg/m3 - Notes: (R) - Metal fume fever

DNEL Exposure Limit Values

trizinc bis(orthophosphate) - CAS: 7779-90-0

Consumer: 0.83 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 83 mg/kg - Consumer: 83 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

Worker Professional: 5 mg/m3 - Consumer: 2.5 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

ethylene glycol - CAS: 107-21-1

Worker Professional: 35 mg/m3 - Consumer: 7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 106 mg/kg - Consumer: 53 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

zinc oxide - CAS: 1314-13-2

Consumer: 0.83 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 8.3 mg/kg - Consumer: 8.3 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects Worker Professional: 2.5 mg/m3 - Consumer: 1.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

trizinc bis(orthophosphate) - CAS: 7779-90-0

Target: Fresh Water - Value: 20.6 µg/l

Target: Marine water - Value: 6.1 µg/l

Target: Freshwater sediments - Value: 117.8 mg/kg Target: Marine water sediments - Value: 56.5 mg/kg

Target: Soil (agricultural) - Value: 35.6 mg/kg

Target: Microorganisms in sewage treatments - Value: 100 µg/l



ethylene glycol - CAS: 107-21-1

Target: Fresh Water - Value: 10 mg/l Target: Marine water - Value: 1 mg/l

Target: Freshwater sediments - Value: 37 mg/kg Target: Marine water sediments - Value: 3.7 mg/kg

Target: Microorganisms in sewage treatments - Value: 199.5 mg/l

Target: Soil (agricultural) - Value: 1.53 mg/kg

zinc oxide - CAS: 1314-13-2

Target: Fresh Water - Value: 0.0206 mg/l Target: Marine water - Value: 0.0061 mg/l

Target: Freshwater sediments - Value: 117.8 mg/kg Target: Marine water sediments - Value: 56.5 mg/kg

Target: Soil (agricultural) - Value: 35.6 mg/kg

Target: Microorganisms in sewage treatments - Value: 0.052 mg/l

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid		
Colour:	Grey		
Odour:	characteristic		
Melting point/freezing point:	N.A.		
Boiling point or initial boiling point and boiling range:	N.A.		
Flammability:	N.A.		
Lower and upper explosion limit:	N.A.		
Flash point:	N.A.		
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		



pH:	8,5			
Kinematic viscosity:	N.A.			
Solubility in water:				
Solubility in oil:	N.A.			
Partition coefficient n-octanol/water (log value):	N.A.			
Vapour pressure:	N.A.			
Density and/or relative density:	1.28 kg/l			
Relative vapour density:	N.A.			
Particle characteristics:				
Particle size:	N.A.			

9.2. Other information

No other relevant information

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 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 hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product:

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a) acute toxicity

Not classified

No data available for the product

b) skin corrosion/irritation

Not classified

No data available for the product

c) serious eye damage/irritation

Not classified

No data available for the product

d) respiratory or skin sensitisation

Not classified

No data available for the product



e) germ cell mutagenicity

Not classified

No data available for the product

f) carcinogenicity

Not classified

No data available for the product

g) reproductive toxicity

Not classified

No data available for the product

h) STOT-single exposure

Not classified

No data available for the product

i) STOT-repeated exposure

Not classified

No data available for the product

i) aspiration hazard

Not classified

No data available for the product

Toxicological information of the main substances found in the product:

trizinc bis(orthophosphate) - CAS: 7779-90-0

a) acute toxicity:

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

ethylene glycol - CAS: 107-21-1

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Mouse > 3500 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 2.5 mg/l - Duration: 6h

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

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The product is classified: Aquatic Chronic 3 - H412

trizinc bis(orthophosphate) - CAS: 7779-90-0

ethylene glycol - CAS: 107-21-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 72860 mg/l - Duration h: 96 - Notes: Pimephales

promelas

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 15380 mg/l - Notes: Pimephales promelas

Endpoint: NOEC 8590 mg/l - Notes: Ceriodaphnia sp.

zinc oxide - CAS: 1314-13-2

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

a) Aquatic acute toxicity:

Endpoint: EC10 - Species: Algae 0.04 mg/l - Duration h: 72 - Notes: (Selenastrum capricornutum) (OECD 201)

Endpoint: EC50 - Species: Algae 0.11 mg/l - Duration h: 72 - Notes: (Selenastrum

capricornutum) (OECD 201) \$2238 Endpoint: EC50 - Species: Daphnia 3.27 mg/l - Duration h: 48 - Notes: (OECD 202) S

2240 Endpoint: LC50 - Species: Fish 1.6 mg/l - Duration h: 96 - Notes: (Oncorhynchus mykiss)

(OECD 203) S 2746

Endpoint: NOEC - Species: Daphnia 1.2 mg/l - Notes: 21 d (OECD 211) S 803



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Endpoint: NOEC - Species: Fish 0.21 mg/l - Notes: 28 d (OECD 215) S 805 reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) - CAS: 55965-84-9

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 0.1 mg/l - Duration h: 48 - Notes: daphnia magna Endpoint: EC50 - Species: Algae 0.048 mg/l - Duration h: 72 - Notes: pseudokirchneriella subcapitata

Endpoint: EC50 - Species: Fish 0.22 mg/l - Duration h: 96 - Notes: oncorhynchus mykiss Endpoint: NOEC - Species: Algae 0.00064 mg/l - Duration h: 48 - Notes: skeletonema costatum

Endpoint: NOEC - Species: Daphnia 0.004 mg/l - Duration h: 504 - Notes: daphnia magna Endpoint: NOEC - Species: Fish 0.098 mg/l - Duration h: 672 - Notes: oncorhynchus mykiss

Endpoint: NOEC - Species: Algae 0.0012 mg/l - Duration h: 72 - Notes: pseudokirchneriella subcapitata

12.2. Persistence and degradability

ΝΔ

12.3. Bioaccumulative potential

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

Test: Kow - Partition coefficient 0.7 - Notes: (n-octanol/water) OECD 117 Log Kow (HPLC method)

Test: BCF - Bioconcentrantion factor 6.95 - Notes: (fish) OECD 305 reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) - CAS: 55965-84-9

Not bioaccumulative - Test: BCF - Bioconcentrantion factor 3.16 - Notes: (calculated) S 1177

Not bioaccumulative - Test: Kow - Partition coefficient 0.71 - Notes: (n-octanol/water) S 5

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

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.

SECTION 14: Transport information

14.1. UN number or ID number

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A

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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) n. 2020/878

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)

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

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

Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 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

Restrictions related to the substances contained:

Restriction 75

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)

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

Seveso III category according to Annex 1, part 1

None

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:

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

H330 Fatal if inhaled.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

H310 Fatal in contact with skin.

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

EUH071 Corrosive to the respiratory tract.

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H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Acute Tox. 2	3.1/2/Dermal	Acute toxicity (dermal), Category 2
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
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. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
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

This safety data sheet has been completely updated in compliance to Regulation 2020/878. 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
Aquatic Chronic 3, H412	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 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.