GIARDINI DI GIARDINI ANGELO & C. SNC MXE410M

Revision nr.1 Dated 21/8/2014 Printed on 27/8/2014 Page n. 1 / 7

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name MXE410M

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

Intended use METAL EDGE PAINT - TINGIBORDO METAL

1.3. Details of the supplier of the safety data sheet

Name GIARDINI DI GIARDINI ANGELO & C. SNC

Full address Via Breda, scn

District and Country 62012 Civitanova Marche (MC)

ITALIA

Tel. +39 0733 897878 Fax +39 0733 897886

e-mail address of the competent person

responsible for the Safety Data Sheet

msds@giardinigroup.it

1.4. Emergency telephone number

For urgent inquiries refer to +39 0733 897878

2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

Eye Irrit. 2 H319

2.1.2. Directive 67/548/EEC and following amendments and adjustments.

Danger Symbols: Xn

R phrases: 41-63

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.

EN

GIARDINI DI GIARDINI ANGELO & C. SNC

MXE410M

Revision nr.1 Dated 21/8/2014 Printed on 27/8/2014 Page n. 2 / 7

Precautionary statements:

P264 Wash . . . thoroughly after handling.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

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

rinsina

P337+P313 If eye irritation persists: Get medical advice / attention.

2.3. Other hazards.

Information not available.

3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification. Conc. %. Classification 67/548/EEC. Classification 1272/2008 (CLP).

N-ETHYL-2-PYRROLIDONE

CAS. 2687-91-4 2.5 - 4 Repr. Cat. 3 R63, Xi R41 Repr. 2 H361ft, Acute Tox. 4 H302, Eye Dam. 1 H318

EC. -INDEX. -

TRIBUTOXYETHYL PHOSPHATE

CAS. 78-51-3 1 - 2 Xn R20/21/22, Xi R36/37/38 Acute Tox. 4 H302, Acute Tox. 4 H312, Acute

EC. 201-122-9

INDEX. -

1-METHOXY-2-PROPANOL

CAS. 107-98-2 1 - 2 R10, R67 Flam. Liq. 3 H226, STOT SE 3 H336

EC. 203-539-1 INDEX. 603-064-00-3

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

Dangerous for the Environment(N)

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

4. First aid measures.

4.1. Description of first aid measures.

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.

INHALATION: Remove to open air. If breathing is irregular, seek medical advice.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

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

For symptoms and effects caused by the contained substances see chap. 11.

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

Information not available.

5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

None in particular.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

GIARDINI DI GIARDINI ANGELO & C. SNC

MXE410M

Revision nr.1 Dated 21/8/2014 Printed on 27/8/2014 Page n. 3 / 7

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and antistatic), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of fume.

6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

6.3. Methods and material for containment and cleaning up.

Use inert absorbent material (sand, vermiculite, diatomeous earth, Kieselguhr, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage.

7.1. Precautions for safe handling.

Do not smoke while handling and use.

7.2. Conditions for safe storage, including any incompatibilities.

Store in a well ventilated place, keep far away from sources of heat, bright flames and sparks and other sources of ignition.

7.3. Specific end use(s).

Information not available.

8. Exposure controls/personal protection.

8.1. Control parameters.

Name	Туре	Country	y TWA/8h		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	
1-METHOXY-2-PROPANOL	WEL	UK		100		150	SKIN
	OEL	IRL		100		300	SKIN
	OEL	EU	375	100	568	150	SKIN
	TLV-ACGIH		369	100	553	150	SKIN

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION

Protect hands with category I (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in latex, PVC or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

. . . FYE PROTECTION

Wear protective airtight goggles (ref. standard EN 166).

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

RESPIRATORY PROTECTION

EN

GIARDINI DI GIARDINI ANGELO & C. SNC

MXE410M

Revision nr.1 Dated 21/8/2014 Printed on 27/8/2014 Page n. 4 / 7

If the threshold value (if available) for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an A or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance Not available. Colour Odour characteristic Odour threshold. Not available. Not available. pΗ. Melting or freezing point. Not available. Initial boiling point. Not available Not available. Boiling range. °C. Flash point. 60 **Evaporation Rate** Not available. Flammability of solids and gases Not available. Lower inflammability limit. Not available. Upper inflammability limit. Not available. Not available Lower explosive limit. Not available. Upper explosive limit. Vapour pressure. Not available. Vapour density Not available. Specific gravity. Not available. Solubility Not available Partition coefficient: n-octanol/water Not available. Not available Ignition temperature. Decomposition temperature. Not available. Viscosity Not available. Reactive Properties Not available

9.2. Other information.

VOC (Directive 1999/13/EC) : 10,93 % VOC (volatile carbon) : 0,56 %

10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

TRIBUTOXYETHYL PHOSPHATE: may react with oxidising agents.

1-METHOXY-2-PROPANOL: absorbs and disolves in water and in organic solvents, dissolves various plastic materials; it is stable but with air it may slowly form explosive peroxides.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

1-METHOXY-2-PROPANOL: can react dangerously with strong oxidising agents and strong acids.

10.4. Conditions to avoid.

Avoid overheating, electrostatic discharge and all sources of ignition.

1-METHOXY-2-PROPANOL: avoid exposure to the air.

10.5. Incompatible materials.

1-METHOXY-2-PROPANOL: oxidising agents, strong acids and alkaline metals.

GIARDINI DI GIARDINI ANGELO & C. SNC MXE410M

Revision nr.1 Dated 21/8/2014 Printed on 27/8/2014 Page n. 5 / 7

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

TRIBUTOXYETHYL PHOSPHATE: phosphorus oxides.

11. Toxicological information.

11.1. Information on toxicological effects.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

Vapour inhalation may moderately irritate the upper respiratory trait. Contact with skin may cause slight irritation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

1-METHOXY-2-PROPANOL: the main way of entry is the skin, whereas the respiratory way is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause eye irritation, nose and oropharynx. At 1000 ppm disturbance in the equilibrium and severe eye irritation is observed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man.

1-METHOXY-2-PROPANOL

 LD50 (Oral):
 5300 mg/kg Rat

 LD50 (Dermal):
 13000 mg/kg Rabbit

 LC50 (Inhalation):
 54,6 mg/l/4h Rat

N-ETHYL-2-PYRROLIDONE

LD50 (Oral): 3200 mg/kg Ratto

12. Ecological information.

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity.

Information not available.

12.2. Persistence and degradability.

Information not available.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

Information not available.

12.6. Other adverse effects.

Information not available.

13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information.

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.

EN

GIARDINI DI GIARDINI ANGELO & C. SNC

MXE410M

Revision nr.1 Dated 21/8/2014 Printed on 27/8/2014 Page n. 6 / 7

15. Regulatory information.

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product

Point. 3

Substances in Candidate List (Art. 59 REACH).

None

Substances subject to authorisarion (Annex XIV REACH).

None

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3
Repr. 2
Acute Tox. 4
Eye Dam. 1
Eye Irrit. 2
Skin Irrit. 2
Flammable liquid, category 3
Reproductive toxicity, category 2
Acute toxicity, category 4
Serious eye damage, category 1
Eye irritation, category 2
Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

H226 Flammable liquid and vapour.
H361f Suspected of damaging fertility.

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

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.

H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10 FLAMMABLE.

R20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

R36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

R41 RISK OF SERIOUS DAMAGE TO EYES.

R63 POSSIBLE RISK OF HARM TO THE UNBORN CHILD.R67 VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

GENERAL BIBLIOGRAPHY

- 1. Directive 1999/45/EC and following amendments
- 2. Directive 67/548/EEC and following amendments and adjustments
- 3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 6. Regulation (EC) 453/2010 of the European Parliament
- 7. The Merck Index. 10th Edition
- 8. Handling Chemical Safety
- 9. Niosh Registry of Toxic Effects of Chemical Substances
- 10. INRS Fiche Toxicologique (toxicological sheet)

GIARDINI DI GIARDINI ANGELO & C. SNC MXE410M

Revision nr.1 Dated 21/8/2014 Printed on 27/8/2014 Page n. 7 / 7

- 11. Patty Industrial Hygiene and Toxicology
- 12. N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- 13. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.