MATERIAL SAFETY DATA SHEET - MSDS

MASSA FLEX

Review: 00

Date: 10/02/2014

MTE-001

Page - 1 - of 7

1. PRODUCT AND COMPANY IDENTIFICATION

MASSA

2. HAZARD IDENTIFICATION

Most important hazards:

- May cause eyes and skin and respiratory tract irritation.
- May cause nausea and vomiting if inhaled in high concentration

Product Purpose

Adverse Human Health Effects: May cause eyes and skin and respiratory tract irritation. Environmental Effects: This product is not expected to be hazardous to the environment. Physico-Chemical Hazards:

• Not flammable.

Main Symptoms: Eyes redness and tearing. Skin redness. Nausea, irritability. Respiratory tract Irritation.

Hazard Class of the Product: Class 5.

Class System adopted: ABNT-NBR 14725 Standard - Part 2:2009.

Adoption of the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS) **Emergency Overview:** Keep away from children.

Appropriate Labelling Elements

Pictogram: N/A

Signal Word: Caution.

Hazard Statements: May be harmful if swallowed, inhaled and in contact with skin.

Precautionary statements:

Keep away from children.

Keep container tightly closed and in a well-ventilated place.

Do not eat, drink or smoke while using the product.

Avoid eye contact.

Wear proper personal protective equipment: gloves and goggles for eye protection.

If you feel unwell, seek medical advice.

If swallowed, do not induce vomiting. Consult a physician immediately and show the package or the label.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture: Prepared Chemicals

Chemical Nature: Architectural coating

MTE-001

MATERIAL SAFETY DATA SHEET - MSDS

MASSA FLEX

Review: 00	Date: 10/02/2014	Page - 2 - of 7

Does not contain ingredients which cause hazard. Classification system adopted:

ABNT-NBR14725 Standard-Part 2:2009.

Adoption of the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

4.	FIRST-AID MEASURES	

Inhaling:

Remove victim to safe place and keep at rest.

Monitor respiratory function. If a victim is breathing hard, provide oxygen. If necessary, give artificial respiration. Get medical attention. Take this MSDS.

Skin Contact:

Remove contaminated clothing and shoes. Wash the skin with plenty of water for at least 15 minutes. Wash contaminated clothing and shoes before reusing them. Seek medical attention. Take this MSDS.

Eye Contact:

Wash with running water for at least 15 minutes keeping the eyelids wide open. Remove the contact lenses when appropriate. Seek medical attention. Take this MSDS.

Ingestion:

Wash the victim's mouth with water. Provide plenty of water for the victim to drink. Seek medical attention. Take this MSDS.

Actions which should be avoided:

DO NOT INDUCE VOMITING. Do not give anything orally to any unconscious person.

First-aid provider protection and/or notes for the physician:

Avoid contact with the product while assisting the victim. Keep the victim warm and resting. The symptomatic treatment should include, above all, measured of support as correction of hydroelectrolytic and metabolic disturbances, and respiratory care as well.

Notes for the first-aid provider:

In all the cases, seek medical attention. In the event of a major accident, the first-aid provider should provide all necessary PPE. Remove the contaminated clothing. Take the product package.

Notes for the physician:

Symptomatic treatment. There is no antidote. Remove contaminated clothing.

5. **FIRE-FIGHTING MEASURES**

Suitable extinguishing media:

Non-flammable product. In case of fire involving the product, cool using dry chemical powder; carbon dioxide; mechanical foam; water fog.

Unsuitable extinguishing media: Water spray directly as it may cause flame spread and also get material spread.

Specific hazards in firefighting: N/A

Special methods of fire-fighting: Evacuate area and fight fire at a safe distance.

MTE 001

MATERIAL SAFETY DATA SHEET - MSDS

MASSA FLEX

		MILE 001
Review: 00	Date: 10/02/2014	Page - 3 - of 7

Firefighter / fireman protective equipment: The responsible for the firefighting/ fire control must wear self-contained breathing apparatus (SCBA), with positive pressure and full fire protective clothing.

6.	ACCIDENTAL RELEASE MEASURES	

PERSONAL PRECAUTIONS

Removal of ignition source: Non-flammable product.

Inhalation prevention and skin, mucosa and eyes contact prevention:

Do not touch in damaged containers or spilled material without wearing proper clothing. Avoid inhalation, skin or eye contact. Wear proper personal protective equipment as described in section 8.

ENVIRONMENTAL PRECAUTIONS

Procedures to be taken:

Do not allow product to reach sewage system. Make a containment dam.

Cleaning methods:

Procedures to be taken:

Use either natural barriers or spill containment.

Collect spilled product and place into proper containers. Recover the released liquid with inert absorbent material (dry sand, earth, sawdust, clay, or any other inert material).

Disposal: Incineration or industrial landfill in accordance to local legislation.

Secondary hazards prevention:

Do not dispose into the environment or into the sewage system. Do not reuse packaging.

7. HANDLING AND STORAGE

Proper technical measures for the handling

Prevention of worker exposure: Handle in a well-ventilated area or with general ventilation / exhaustion system.

Fire and Explosion Prevention: Non-flammable product.

Precautions and guidelines for safe handling: Avoid skin and eye and clothing contact. Wear proper personal protective equipment as described in section 8.

Hygiene Measures: Do not eat, drink or smoke while handling the product. Wash the hands with plenty of water before eating, drinking, smoking or going to the restroom. Contaminated clothing must be changed and washed before its reuse.

Proper technical measures for the storage

Proper: Keep the product in its original packaging and in a cool, dry place away from direct sunlight. Keep the containers well-closed. Storage them away from food and children.

MATERIAL SAFETY DATA SHEET - MSDS

MASSA FLEX		MTE-001
Review: 00	Date: 10/02/2014	Page - 4 - of 7

To be avoided: Very high temperatures. Contact with incompatible materials. **Risk sign:** Do not smoke.

Compatible products and materials: Calcium hypochlorite, silver oxide and ammonia and strong oxidants.

Safe materials for packaging

Recommended: Plastic /metallic packaging with water based varnish coating.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Specific Control Parameters:

Occupational exposure limits:

Ingredient	TLV – TWA (ACGIH)	REL – TWA (NIOSH)	PEL –TWA (OSHA)	LT (NR-15)
	(ppm)	(ppm)	(ppm)	(ppm)
Does not contain ingredients that are known to cause hazards				

Engineering control measures: Provide ventilation with local exhaust in case of possible formation of product vapors / mists. It is recommended also to make emergency showers and eyewash available on the work area. The engineering control measures are the most effective in reducing product exposure.

Proper personal protective equipment

Respiratory protection: Respiratory protective equipment with a vapor / mist filter.

Hands protection: Natural rubber glove protection.

Eye protection: Protection goggles for chemicals. (Anti-spill goggles).

Skin and body protection: Proper safety clothing, PVC or cotton apron and proper shoes.

Special precautions: According to working conditions. (e.g. Avoid contact lenses while handling the product).

9. PHYSICAL AND CHEMICAL PROPERTIES

Aspect: Consistent mass Odor: Characteristic Color: White PH: 8,5 - 9,5

Melting Point/ Freezing Point: N/A Initial Boiling Point and Boiling Point Range: N/A Flash Point: N/A Evaporation Rate: N/A

Inflammability: Non-flammable.

MTE 001

MATERIAL SAFETY DATA SHEET - MSDS

MASSA FLEX

Review: 00	Date: 10/02/2014	Page - 5 - of 7

Lower / Upper Explosivity Limit: N/A Lower: N/A Upper: N/A

Steam Tension: N/A Density: 0,40 – 0,44 Solubility: Miscible in water. Partitioning Coefficient– n-octanol/ water: N/A Self-ignition Temperature: N/A Decomposition Temperature: N/A Viscosity: N/A.

10. ESTABILITY AND REACTIVITY

Stability and Reactivity:

Chemical Stability: Stable under normal conditions of handling and storage. **Reactivity**: Stable product if stored and handled under proper and indicated conditions.

Possible hazardous reactions: None when the product is processed, stored and applied correctly. Conditions to be avoid: High temperatures. Contact with incompatible materials. Incompatible substances or materials: Strong acids, bases and oxidants. Hazardous decomposition products: Monoxide and carbon dioxide (in case of fire)

11. TOXICOLOGICAL INFORMATION

The ingredients in this product are diluted in water, which is a completely non-toxic material. Therefore, there is no danger and the data for toxicological information are not applicable. In conformity with ABNT NBR 14725-2:2009 5.2.3.1 Dilution.

12. ECOLOGICAL INFORMATION

The ingredients in this product are diluted in water, which is a completely non-toxic material. There is, therefore, no danger and the data for ecological information are not applicable. In conformity with ABNT NBR 14725-2:2009 6.3.3.1 Dilution.

13. DISPOSAL CONSIDERATION

Recommended Methods for Treatment and Disposal applied to the:

Product: It must be disposed of as waste according to Resolution CONAMA 005/1993, NBR 10.004/2004 to the NBR 10.007/2004. It may be disposed of in landfills, sent to an appropriate incineration plant or other forms of disposal provided since they comply with the requirements of local legislation.

Product residues: Keep product residues in their original containers and properly closed. Disposal should be as established for the product. The absorbent material (dry sand, earth, sawdust, clay) must be disposed of according to current legislation.

Used Packaging: Do not reuse empty containers. Those may contain product residues and must be kept closed and routed to be disposed of in an appropriate place. In some cases, the packaging must be returned to the registrant or supplier. Recycling may be applied subject to compliance with relevant legislation.

MTE 001

MATERIAL SAFETY DATA SHEET - MSDS

MASSA FLEX

Review: 00	Date: 10/02/2014	Page - 6 - de 7

Observe local regulations for treatment and disposal.

14.	TRANSPORT INFORMATION	

Product classified as non-hazardous for transport. National and international regulations:

Terrestrial Regulations:

The National Agency of Land Transportation (ANTT) – Regulations N°. 420/04, 701/04, 1644/06, 2657/08 and 2975/08.

Resolution n°96.044 from May 18th 1988 Approves the Regulation for Road Transport of Dangerous Goods and makes other provisions.

Maritime regulations:

IMO – International Maritime Organization

Maritime Dangerous Goods Cod-e Incorporating Amendment 34-08; 2008 Edition.

DPC: Board of Ports and Coasts (Transportation in Brazilian waters).

Brazilian Maritime Auditing Standards (NORMAM).

NORMAM 01/DPC: The Brazilian Maritime Authority Standard to Vessels Employed in Open Sea Navigation. NORMAM 02/DPC: Vessels Employed in Inland Navigation

Aviation Regulations:

IATA - International Air Transport Association

Dangerous Goods Regulation (DGR) – 50th Edition, 2009.

DAC – Department of Civil Aviation: IAC 153-1001. Civil Aviation Instruction - Standards for the transport of dangerous goods and other provisions in civil aircraft.

15. **REGULATIONS**

- CETESB State Law nº997, May 31st 1976, regulated by resolution nº8468, from September 8th 1976.
- Federal Police Department Law nº10.357, from December 27th 2001.
- São Paulo's Military Police State Resolution nº46.076/01.
- ABNT Standard NBR 14725:2009.

16. OTHER INFORMATION

This MSDS was developed based on the current knowledge of the chemical and based on the protection, safety, health and the environment.

It is advised that the handling of any chemical substance requires prior knowledge of its hazards by the user. It is up to the user company to promote the training of its employees and contractors regarding the possible risks coming from the product.

Important information, not specifically described into the previous sections.

Acronyms and abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists;

CEATOX – Toxicological Assistance Center;

CETESB – Environmental Sanitation Technology Company;

MTE-001

MATERIAL SAFETY DATA SHEET - MSDS

MASSA FLEX

Review: 00	Date: 10/02/2014	Page - 7 - of 7

CONAMA – National Council for the Environment;
PPE's – Personal Protective Equipment
KU – Krebs Units;
TL– Tolerance Limit;
N/A – Not Applicable;
UN: United Nations;
OSHA - Occupational Safety and Health Administration;
PEL –Permissible Exposure Limits;
REL – Recommended Exposure Limits;
TLV - Threshold limit value;
TWA – Time Weighted Average.

Bibliographic:

[ABNT] THE BRAZILIAN ASSOSSIATION FOR TECHNICAL STANDARDS, NBR14725-Part 2, 3 and 4:2009. Brochure and CD: MSDS Interpretation and elaboration in accordance with ABNT-NBR14725 – Review 2009. Prof. MSc.

Fabriciano Pinheiro, São Paulo, March of 2010.

[IARC] INTERNATIONAL AGENCY FOR RESEARCH. ON CANCER http://monographs.iarc.fr/ENG/Classification/index.php

[NIOSH] NATIONAL INSTITUTE OF OCCUPATIONAL AND SEATFY. Pocket Guide to Chemical Hazards. <u>http://www.cdc.gov/niosh/npg/npgdcas.html</u>

TECHNICAL BULLETIN

MASSA FLEX

Massa Flex Paris Tintas is an innovative product developed to the levelling and filling. It is recommended for holes in walls, drills in masonry and for holes in wood and plaster, stabilized cracks and fissures and it can be applied not only into inside but also outside areas. It is easy to both apply and sand, also available in multiple colors.

Composition: Acrylic resin, special mineral fillers, additives and water.

Application: Either a spatula or a trowel can be used.

Notice:

- A) Apply the Massa Flex Paris only into stabilized fissures;
- **B)** Apply the product under the Temperature between 10°C and 40°C and under the Relative Humidity between 40% and 80%. Do not apply in moist or rainy days;
- **C)** The product accepts water-based paint or solvent; Paint for 24 hours healing.
- **D)** The product's expiration date is shown on its label, after package has been opened, it must be consumed within 6 months, since it has been kept closed and properly stored;
- E) For the application of the product, the surface must be cleaned, with no dust, dried and

also, preserved, containing no grease, oil or loosen particles.

Productivity

Every application will have a variable according to the depth, the size and the porosity of the surface.

<u>Drying</u>

Touch dry - 1 hour

Total: 6 hours

<u>Coating:</u>

It must be applied only one coat.