



PASSIVATION LIQUID™

DESCRIPTION

PASSIVATION LIQUID is an innovative, concentrated liquid product specifically engineered to passivate pickled installations and tank surface areas made of austenitic stainless steel. It provides a protective oxide layer against corrosion contamination. Furthermore, when it is diluted with water, it can be safely used to clean aluminum surfaces, aluminum parts and their metal alloy compounds.

ADVANTAGES AND CHARACTERISTICS

- ◆ Efficiently binds to pickled austenitic stainless steel surfaces to deactivate erosive conditions and to protect against further corrosion.
 - ◆ Can safely be used to clean aluminum installations, parts and surface areas when diluted with water.
 - ◆ Provides a quick and thorough treatment.
 - ◆ Cannot be used until after the pickling process.
 - ◆ Non-flammable, non-conductive and non-toxic.
 - ◆ Has no known effect on rubber or plastic.
 - ◆ May be combined with a specific range of other products.
 - ◆ No heating is required upon application and it is water-soluble.
 - ◆ Cost effective, easy to apply and use.
- ▶ **PASSIVATION LIQUID** is not harmful to the marine environment as per MARPOL MEPC 63 Annex V Amendment [MEPC. 71/17/Add.1 Annex 21, Resolution MEPC 295 (71)].

PHYSICAL PROPERTIES

PASSIVATION LIQUID is an aqueous concentrated liquid blend of strong acids, non-ionic surface-active agents and advanced corrosion inhibitors.

| | |
|------------------|--|
| Appearance/Color | : Clear, colorless liquid. |
| Specific gravity | : 1.15 - 1.20 gr/cm ³ at 20°C |
| Solubility | : Appreciable |
| pH value | : 0.80 - 1.20 |
| Odor | : Characteristic |

PACKAGING

| | |
|--------------|--------------------|
| Order Number | : 833024 (30 ltrs) |
| Container | : Plastic jerrican |



MARICHEM®

APPLICATION AND USE

A. Dosing Procedure

Stainless Steel Treatment: For this application, **PASSIVATION LIQUID** must be used undiluted in quantities proportional to cover the surface areas or installations under treatment. Note that 1 litre of the product may cover approximately an area of 12 sq. meters

Aluminum Cleaning: Here, **PASSIVATION LIQUID** may be diluted to a 1:1 proportion with water. The quantity of diluted solution required, corresponds to the area to be covered, the degree of contamination, the available down time and the desired degree of cleaning.

B. Procedure

Stainless Steel Treatment

PASSIVATION LIQUID may be applied by conventional means or by the circulation method.

Conventional methods such as a brush, hard sponge and or a thick mop can be used when stainless steel parts and/or components are to be treated. Application should be carried out for approximately 15 minutes. Afterwards, rinse thoroughly with distilled water and leave to dry.

Circulation is a method commonly used for pipeline systems and tanks. Here the system under consideration must be filled with **PASSIVATION LIQUID**, which must be circulated for approximately 2 hours. Then, the system must be drained and rinsed thoroughly with distilled water. Afterwards, leave the system to dry. Note that before discarding the liquid, it should be neutralized with slaked lime.

Aluminum Cleaning

For the cleaning of aluminum surfaces, pipe systems and parts, any of the cleaning methods for stainless steel, as described above, can be used. The cleaning time is approximately for 2 hours. Afterwards, rinse thoroughly with water. Note that, neutralization with slaked lime before draining is also applicable in circulation cleaning processes.

▶ IMPORTANT INFORMATION

PASSIVATION LIQUID is considered highly corrosive. Operators must consult the Safety and Handling instructions table before use.

! SAFETY AND HANDLING

| | |
|-----------------------------|---|
| HANDLING | Handle with care. Store in a dry, cool and well ventilated environment. |
| SAFETY | IMMEDIATE ACTIONS |
| Eye Contact | Avoid Eye contact. Otherwise, flush with plenty of water for a few minutes. Seek medical attention. |
| Skin Contact | Avoid Skin contact. Otherwise, wash contaminated area thoroughly with water. Seek medical attention. |
| Inhalation | Do not breathe gas/vapour. In case of insufficient ventilation, wear suitable respiratory equipment. Otherwise, seek fresh air source at once and ask for medical attention immediately. |
| If Swallowed | Avoid ingestion. Otherwise, consume a considerable quantity of water. Do not induce vomiting. Seek medical attention. |
| GENERAL INSTRUCTIONS | Avoid spillage, splashing and mishandling. Wear suitable protective clothing, gloves and eye/face protection before using the product. |

 **Read the Material Safety Data Sheet before using this product.**

For detailed information on safety and health, please refer to Material Safety Data Sheet and/or Product Label.

MARICHEM MARIGASES Worldwide Services or any subsidiary or associated companies warranties of merchantability and competence, if any, along with any expressed warranties concerning this merchandise, shall not be actionable or pertinent or effective if the good is used contrarily or differently to the directions herein and in no other way due to impending hazards from inappropriate use of the good explained herein. Merchandise might vary insubstantially depending on country of origin. The information provided concerning merchandise is exclusively presented to the customer.