

No. 551082



## METAL BRIGHT

METAL BRIGHT is an excellent Rust off and Tank Cleaner for removing: Oxides, Chlorides, Nitrates, Amides, Amines and other salts.

- Especially useful for cleaning the white powders appearing after loading Vegetable and Fatty Acid oil additives as per ANNEX II Cargoes (tank cleaning guides).
- Removes lime deposits that can occur after hot seawater washing. It can be used on aluminium and copper without any problems.
- Metal brightener: cleans & brightens aluminium and copper.
- Forms protective coating on treated surfaces.
- Biodegradable, non-flammable
- Rust off and converter to phosphating film.
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For product characteristics and for the nature of special risks and safety advice consult our Material Safety Data Sheet.

This information is not to be taken as a warranty or representation for which we assume legal responsibility, nor as a permission, inducement or recommendation to practice any patented invention without a license. The information is offered solely for your consideration, investigation and verification.

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## APPLICATIONS

Suitable to remove oxides, chlorides, nitrates, amides, amines and other salts, neutral and alkaline contaminations like calcium chloride, calcium nitrate, ammonium nitrate, alkenylamide, alkenylamideoleylamine, calcium carbonate, etc. Also very suitable to remove lime deposits after hot seawater washes.

Above residues are most common after loading many cargoes included in ANNEX II - IMO Guide lines for tank cleaning.

## DIRECTIONS FOR USE

Metal surface rust meet phosphoric acid solution contact, chemical reaction, and in the metal surface have a stable insoluble inorganic compound film of a surface chemical treatment method, so the formation of the film is called phosphating film.

### TANK CLEANING

1. Mix solutions of Metal bright either in tank bottom or void space.
2. Dilution rate with water between 4 % and 10 %, depending upon light or heavy contamination. Recent experience has shown that a 8 % - 8.5 % solution secures successful cleaning.
3. Do not use the entire quantity of Metal bright in one solution for all tanks to be cleaned.
4. Save a few drums (2 - 3) to "boost" the solution for cleaning the last 20 % - 25 % of the tanks to be cleaned.
5. The solution may be used at ambient temperature, however, it is suggested that an increase of the cleaning temperature to maximum 80 °C will enhance the cleaning ability and shorten the cleaning time.
6. Proceed to recycle the cleaning solution through the tankwashing system for a period of two hours minimum per machine drop. Usually a cleaning time of 4 hours per tank will prove sufficient.
7. At completion of chemical application begin washing down with water, using maximum pressure available.
8. Inspect tank surfaces and if there remain some stains, spot clean with undiluted Rust Remover directly on the stained area. Allow a reaction time of 30 minutes and then rinse with fresh water.

### GENERAL CLEANING

Can be used on aluminium and copper without any problems. Excellent product to be used for removing light rust from iron and steel surfaces. It also cleans and brightens aluminum and copper, rust stains on painted surfaces, porcelain, terrazzo, ceramic tiles, wood etc. It is also used as a protective pretreatment for iron and steel prior to painting.

**NOTE:** *METAL BRIGHT* is not recommended for use on zinc or galvanized surfaces.