

## DESCRIPTION

MARICHEM OIL SPILL DISPERSANT is the 3<sup>rd</sup> generation dispersant, approved as Type II and Type III from the Greek General Chemical State Laboratory, as per the latest European Union regulations. It can be used concentrated or diluted to a ratio of 1:10 depending on the contamination level. It is an efficient and environmental friendly product containing no hydrocarbons. It has been specifically designed for oil dispersion at sea, at shore and in port, either on–or–off board.

## ADVANTAGES AND CHARACTERISTICS

- Non toxic to marine life.
- Converts oil spills to hydrophilic droplets that are easily biodegradable.
- Minimizes environmental damage.
- Does not contribute further to pollution.
- Cost effective and economical.
- Easy to handle and apply.
- Applicable to mineral oils, crude oils, fuel oils, kerosene, white spirit and lubricant oils.
- MARICHEM OIL SPILL DISPERSANT 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

MARICHEM OIL SPILL DISPERSANT is a low viscosity liquid product containing surface—active wetting agents combined with a biodegradable oil—soluble, non—ionic emulsifying agent.

Appearance/Color	: Yellow liquid
Specific Gravity	: 1.00–1.04 gr/cm <sup>3</sup> at 20°C
Odor	: Characteristic ether -
	like odor
Flash Point	: 90°C
pH value	: 7.0 - 8.0

## PACKAGING

Order Number : 832076 (30 ltrs)/832176 (210 ltrs) Container : Plastic jerrican / Plastic drum

# MARICHEM OIL SPILL DISPERSANT

## APPLICATION AND USE

#### A. Dosing Procedure

#### At Sea

The quantity of **MARICHEM OIL SPILL DISPERSANT** to be used depends on three main factors: the quantity of oil spilled, the type of oil spilled and the weather conditions (prevailing and forthcoming). However, experience and expertise have proved that an adequate volume of **MARICHEM OIL SPILL DISPERSANT** to be used is 1litre per 15–20m<sup>2</sup> (1 gallon per 75–100 square yards) as tested on a spillage of Kuwait crude oil.

#### At Shore

The quantity of **MARICHEM OIL SPILL DISPERSANT** demanded in this case, depends on the size of contamination in the affected area. Repetition of the cleaning process may be necessary, until oil–spill elimination is complete.

## **On Ship**

Follow the Procedure as per Paragraph At Shore.

## **B. Cleaning Procedure**

## At Sea

1. Determine the oil-spillage size and kind.

2. Prepare the tools necessary to apply the product, undiluted, as specified, using the MARICHEM OIL CLEAN KIT equipment.

**3.** Spray the required quantity of the product, with the appropriate spraying equipment, over the oil spill.

4. Wait for a few minutes until oil spill has emulsified.

**5.** In the case of a persistent/stubborn oil spill, repeat cleaning process until oil spill elimination is complete.

#### At Shore

1. Follow steps 1, 2, 3 as described in part At Sea.

**2.** Let it soak for few minutes and remove from the treated area.

**3.** Rinse thoroughly by applying high pressure water source and collect residual using **MARICHEM OIL SPILL KIT**.

Repeat cleaning of contaminated area if necessary.





#### On Ship:

#### 1. Follow steps 1, 2, 3 as described in part At Sea.

**2.** After spraying and/or pouring, mix thoroughly using a brush, mop, sponge or any other stirring device feasible to move with rapid and irregular action.

**3.** Pour water over the treated surface and mix vigorously.

**4.** Rinse thoroughly by applying high – pressure water source.

5. Repeat cleaning if necessary.

#### ► IMPORTANT NOTICE

The crew that will perform the oil spill dispersion must take all the precautionary measurements required before the beginning of the process.

#### ► IMPORTANT INFORMATION

**Toxicity** According to the **European Union (EU)** laws, the **MARICHEM OIL SPILL DISPERSANT** is in the class of chemical dispersants that fulfill the limits of non–toxicity for a chemical dispersant substance. The lethal concentration 50 (LC 50) for aquatic microorganisms has been tested and found to be equal to 0.03%, after 24 hours of exposure. This value is within the acceptable limits of non–toxicity from **EU** directives.

#### ► ADDITIONAL INFORMATION

MARICHEM MARIGASES Worldwide Services has won the 2004 Seatrade Dubai International Maritime Award in the category Countering Marine Pollution and Atmospheric Pollution for the technical excellence of MARICHEM OIL SPILL DISPERSANT.

## **! 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 several minutes. Seek immediate medical attention.
Skin Contact	Avoid Skin contact. Otherwise, remove contaminated clothes. Rinse and wash thoroughly with water and soap.
Inhalation	Avoid inhalation of vapors. Otherwise, seek fresh air source at once. Seek medical attention.
If swallowed	Avoid ingestion. Otherwise, rinse mouth. Seek immediate medical attention.
GENERAL INSTRUCTIONS	Avoid spillage, splashing and mishandling. Precautionary measures for body protection are strongly recommended before use.

## 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.