

# DESCRIPTION

**"ER-OSD ECO"** is the third generation product formulated as a dilution of Type II & Type III products. ER-OSD ECO is developed to separate, disperse and clear accidental oil spills over the sea surface and other oil spilled places. It has low toxicity and high dispersing effect. It is an environmental friendly product containing no petrochemical solvents.

Product Name	: ER-OSD ECO (OIL SPILL DISPERSANT)
Document No	: SP-KS-030
Chemical Name	: Chemical Mixture
Usage Area	: Oil spills over the sea surfaces and other surfaces

#### **ORGANIC PROPERTIES**

Appearance		
Physical Status (20°C)	: Liquid	
Color	: Yellow	
Odor	: Characteristic ether like odor	
PHYSICAL PROPERTIES		
Ph	: 7	
Molecular Weight	:-	
Flash Point	: 90 °C	
Density	: 1,00-1,05 gram / cm <sup>3</sup>	
Solubility in Water	: Completely.	

### **APPLICATION, FEATURES&BENEFITS**

- $\checkmark$  Low toxicity to marine life.
- ✓ Fast and effective usage
- ✓ Usage areas are oil spills at sea, on seashores, in harbors, on around offshore structures, on deck, on ships side, etc.
- $\checkmark$  Easy to clean for oil spills at sea when loading or discharging cargo or bunkers.
- ✓ Disperses mineral oils, crude oils, residual fuel oils, diesel fuel oil, kerosene, white spirit and lubricant oils.
- $\checkmark$  Rapidly converts hydrocarbon to fine emulsions.
- $\checkmark$  Cost effective and economical.
- ✓ Non flammable



- ✓ Doesn't contain petrochemical solvents
- ✓ Completely biodegradable

# **STORAGE INFORMATION**

Store at moderate temperatures, Packing: 25-30-200 L. sealed plastic drums. Storage Period: 3 years.

### DIRECTIONS FOR USE/APPLICATIONS & DOSAGE RATES

**Oil Spills At Sea:** The quantity that will be sprayed on to the sea depends on spilled oil quantity, type of spilled oil and the weather conditions. One liter of ER-OSD ECO will disperse between  $15-20 \text{ m}^2$  of oil depending on the thickness and age of oil being treated.

If there are floating oil at the sea surface, before using ER-OSD ECO use oil booms. You can also pump or skim off as much as possible. After removing most of the oil, use ER-OSD ECO undiluted.

The best results are taken when ER-OSD ECO is sprayed over the oil spill.

#### **Small Spills at Sea:**

ER-OSD ECO can be applied over the spilled oil at sea by hand spray, work boats with mounted spray booms or fire hoses with injectors. After applying ER-OSD ECO with one of the above devices, wait for 10-15 minutes, waiting will help for the oil to absorb ER-OSD ECO. Then mix it with a very effective mixture method. If the sea is calm, try to mix the water by spraying high pressured water with a fire hose or other mixing apparatus.

#### **Big Spills at Sea:**

Spray it over the oil spill at sea by spray boom or hoses with injectors. For large areas, you can use spraying equipment connected to the sides of a motor launch or a helicopter. After the application, wait for oil to absorb ER-OSD ECO. Then mix it with a very effective mixture method, this will help ER-OSD ECO to create emulsification between, spilled oil and sea water.

**Oil Spills on Deck and Beach:** Poor or spray ER-OSD ECO over the spilled oil. Mix it with an appropriate mixer like mop, brush, sponge or any other stirring device. Add water and continue mixing until ER-OSD ECO is absorbed by oil. Clean the surface with water by using a high pressure water jet. Repetition of the cleaning process may be necessary if there is still spilled oil on the surface.