**EPA HAS NOT RECEIVED UPDATED CONTACT INFORMATION FOR THIS PRODUCT: 10/01/12**

TECHNICAL PRODUCT BULLETIN #D-3
USEPA, OEM REGULATION AND POLICY DEVELOPMENT DIVISION
ORIGINAL LISTING DATE: FEBRUARY 23, 1988
REVISED LISTING DATE: JANUARY 26, 1996
"MARE CLEAN 200"
(formerly MARE CLEAN 505)

I. NAME, BRAND, OR TRADEMARK
MARE CLEAN 200
Type of Product: Dispersant (Solvent-Based)

II. NAME, ADDRESS, AND TELEPHONE NUMBER OF MANUFACTURER/CONTACT
Taiho Industries Co., Ltd.
21-44, 2-chome, Takanawa
Minatoku, Tokyo, Japan
Phone: (81) 33-445-8111
Fax: (81) 33-443-6333
(Mr. Yukuo Abe)

III. NAME, ADDRESS, AND TELEPHONE NUMBER OF PRIMARY DISTRIBUTORS
Klinview Corporation
8001 Irvine Center Drive, Suite 450
Irvine, CA 92618
Phone: (949) 753-0821
Fax: (949) 753-0812
(Mr. T. Tanaka)

IV. SPECIAL HANDLING AND WORKER PRECAUTIONS FOR STORAGE AND FIELD APPLICATION
1. Flammability: The flash point is 212 @ 20°F
2. Ventilation: Is required. Use in closed room is not recommended.
3. Skin and eye contact; protective clothing; treatment in case of contact: Use protective goggles to avoid eye contact. In case of eye contact, wash immediately with plenty of water and consult with physician.
4.a. Maximum storage temperature: 122°F
4.b. Minimum storage temperature: 21°F
4.c. Optimum storage temperature range: 32°F to 86°F
4.d. Temperatures of phase separations and chemical changes: Phase separation does not relate to temperatures. Chemical changes may occur at temperatures above 194°F.

V. SHELF LIFE
The shelf life of MARE CLEAN 200 is 10 years when stored indoors. (Container will deteriorate before contents.)

VI. RECOMMENDED APPLICATION PROCEDURE

1. Application Method: Sprinkle the dispersant on the oil spill, then 5-10 minutes later stir the surface intensively. For convenience, MARE CLEAN 200 may be diluted with water if desired.
2. Concentration/Application Rate: Use 53-66 gallons of MARE CLEAN 200 per ton of oil
3. Conditions for Use: The performance of MARE CLEAN 200 is not affected by water salinity. At temperatures below 40°F or in case of heavy crude oil spill, MARE CLEAN 200 should be used without dilution. MARE CLEAN 200 is an effective dispersant for any liquid hydrocarbon.

VII. TOXICITY AND EFFECTIVENESS

1. Toxicity:

| Material Tested | Species | LC50 (ppm) |
|---|---|---|
| MARE CLEAN 200 | Menidia beryllina | 1996.00 96-hr |
| | Mysidopsis bahia | 938.00 48-hr |
| No. 2 Fuel Oil | Menidia beryllina | 10.72 96-hr |
| | Mysidopsis bahia | 16.12 48-hr |
| MARE CLEAN 200 and | Menidia beryllina | 42.00 96-hr |
| No. 2 Fuel Oil (1:10) | Mysidopsis bahia | 9.84 48-hr |
| Reference Toxicant (SDS) | Menidia beryllina | 7.07 96-hr |
| | Mysidopsis bahia | 9.82 48-hr |

NOTE: This toxicity data was derived using the concentrated product. See Section VI of this bulletin for information regarding the manufacturer's recommendations for concentrations and application rates for field use.

b. Effectiveness:

SWIRLING FLASK DISPERSANT EFFECTIVENESS TEST WITH SOUTH LOUISIANA (S/L) AND PRUDHOE BAY (P/B) CRUDE OILS

| Oil | Effectiveness (%) |
|---|---|
| Prudhoe Bay Crude | 63.97 |
| South Louisiana Crude | 84.14 |
| Average of Prudhoe Bay and South Louisiana Crudes | 74.06 |

VIII. MICROBIOLOGICAL ANALYSIS

NA

IX. PHYSICAL PROPERTIES

1. Flash Point: 212 @ 20°F
2. Pour Point: 14 @ 10°F
3. Viscosity: 2.4 @ 5 cSt at 104°F
4. Specific Gravity: 0.95 @ 0.03 at 77°F
5. pH: 7.7 @ 1.0 (10% solution)
6. Surface Active Agents: A mixture of sorbitan fatty acid esters, polysorbates, and polyoxyethylene fatty acid esters.
7. Solvents: Paraffinic hydrocarbons (CAS 74664-93-0)
8. Additives: None

9. Solubility: NA

X. ANALYSIS FOR HEAVY METALS, CYANIDE, AND CHLORINATED HYDROCARBONS

| Compound | Concentration (ppm) |
|---|---|
| Arsenic | <0.50 |
| Cadmium | <0.100 |
| Chromium | <0.500 |
| Copper | <0.250 |
| Lead | <2.50 |
| Mercury | <0.0200 |
| Nickel | <0.250 |
| Zinc | 0.611 |
| Cyanide | <0.01 |
| Chlorinated Hydrocarbons | <0.10 |