# MATERIAL SAFETY DATA SHEET

## The Coastal Corporation

astal Oil New York, Inc.
astal Oil New England, Inc.
astal Fuels Marketing, Inc.
astal Mobile Refining Company
astal Derby Refining Company
astal Eagle Point Oil Company
astal Mart, Inc.
astal Refining & Marketing, Inc.
Coastal States Crude Gathering Co.
Coastal States Trading, Inc.
Coastal Unilube, Inc.
Coscol Marine Corporation
Coscol Petroleum Corporation
Pacific Refining Company
Western Fuel Oil Company
Coastal Fuel Terminals, Inc.

Address: 9 Greenway Plaza
Houston, TX 77046

Info Phone: (713) 877-1400
Emergency Phone: (713) 877-1400

## PRODUCT IDENTIFICATION

Date Revised: 02-07-90

rade Name: Fuel Oil No. 2

ynonyms: No. 2 Heating Oil, Fuel Chief 2
hemical Name and/or Family Description: A complex mixture of paraffinic, olefinic, naphthenic and aromatic hydrocarbons. A distillate of low sulfur content.
OT Hazard Class: Combustible liquid; NA 1993.

## COMPOSITION

| Product | CAS Number | Wt% | Occupational Exposure Limits* PEL | TLV | Other | Units |
|---|---|---|---|---|---|---|
| Fuel Oil #2 | 68476-30-2 | 100 | 5 | 5 | 10 STEL | mg/m³** |

* = 8-Hr. TWA unless otherwise specified.
** = As oil mist.
STEL = Short Term Exposure Limit; 15 minutes.

## PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point @ 760 mmHg: 340-700°F
Vapor Pressure mmHg @ 20C: 1.6
Solubility in H2O %: Insoluble
Specific Gravity 60/60F: 0.87
% Volatile by Volume @ 20C: N.A.
Viscosity (method,temp): 2.0-3.6 @40C cSt
Appearance: Clear to light amber liquid.

Melting Point: -20°F
Vapor Density (Air=1): 8
pH: N.A.
Evaporation Rate (Butyl Acetate=1): 0.01

Odor: Mild petroleum odor

N.A. = Not Available

## FIRE AND EXPLOSION DATA

Flash Point: 145°F (COC)
Flammable Limits in Air % by Vol. Lower: 0..52 Upper: 7.5
Autoignition Temperature: 495 °F
Extinguishing Media: Dry chemical, carbon dioxide, foam, and water spray.

Special Fire Fighting Procedure: Use a water spray to cool fire-exposed containers. Use a smothering technique for extinguishing fire of this combustible liquid. Do not use a forced water stream directly on oil fires as this will scatter the fire. Firefighters should wear self-contained breathing apparatus and full protective clothing.

Unusual Fire or Explosion Hazard: Flowing oil can be ignited by self-generated static electricity; Check for combustible vapors prior to and during welding and torch cutting on tanks and vessels.

## REACTIVITY DATA

Stability: Stable
Hazardous Polymerization: Will not occur
Conditions to Avoid/Incompatability: Strong oxidizing agents, heat, spark, flame and build-up of static electricity.

Hazardous Decomposition Products: CO, $CO_2$, $SO_2$, reactive hydrocarbons.

## HEALTH HAZARD DATA

Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No

Occupational Exposure Limits: See Composition section

Effects of Overexposure

Acute:

Eyes: Slight to moderate eye irritation.

Skin: Moderately to extremely irritating; causing redness, drying to burns or blistering of skin.

Inhalation: Irritating to mucous membranes and respiratory tract. Will produce symptoms of intoxication such as headache, dizziness nausea, vomiting and loss of coordination.

Ingestion: Stomach irritation, gastritis, mild excitation, loss of conciousness, convulsions, cyanosis, congestion and capillary hemorrhaging of the lung and internal organs. Aspiration hazard if vomiting occurs.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

Additional Medical and Toxicological Information: May aggravate pre-existing dermatitis. Middle distillates have caused skin cancer and kidney damage in laboratory animals. The National Institute for Occupational Safety and Health (NIOSH), based on findings of carcinogenic and tumorigenic responses of mice and rats exposed to whole diesel exhaust, recommends that whole diesel exhaust be regarded as a "potential occupational carcinogen".

## EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush thoroughly with water for at least 15 minutes. Get medical attention.

Skin Contact: Cool the exposed area immediately. Remove contaminated clothing. Immediately wash affected areas with soap and water.

Inhalation: Remove to fresh air. Apply artificial respiration if not breathing. Get medical attention.

Ingestion: Do not induce vomiting. If spontaneous vomiting occurs, hold the victim's head lower than hips to prevent aspiration.

## SPECIAL PROTECTION INFORMATION

Eye Protection: Remove contact lenses and wear chemical safety glasses or goggles where contact with liquid or mist may occur.

Skin Protection: Wear impervious gloves when contact with skin may occur.

Inhalation: Use approved respiratory protective equipment for cleaning large spills or entry into large tanks, vessels or other confined spaces.

Ventilation: Provide adequate ventilation (1) to keep mist or vapors below occupational exposure limits, (2) to prevent the formation of explosive atmospheres and (3) to prevent oxygen deficient atmospheres, especially in confined spaces.

## SPILL OR LEAK AND DISPOSAL PROCEDURES

Spill Procedures: Remove sources of heat or ignition including internal combustion engines and power tools. Clean-up spill, but do not flush to sewer or surface water. Ventilate area and avoid breathing vapors or mists.

ıste Disposal: Dispose through a licensed waste disposal company. Follow federal, state and local regulations.

## SPECIAL PRECAUTIONS AND COMMENTS

Storage Requirements: Store in tightly closed containers in a dry cool place, away from sources of heat or ignition and incompatible substances. Ground and bond all transfer and storage equipment to prevent static sparks and equip with self closing valves, pressure vacuum bungs and flame arrestors. Empty containers may contain residue (liquid/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death.

## SARA TITLE III INFORMATION

### Section 311/312 Hazard Categorization

| Acute | Chronic | Fire | Pressure | Reactive |
|---|---|---|---|---|
| X | X | X | | |

### SARA Hazardous Substances

| Ingredient | CAS No. | %, wt | Sec 313 | Sec 302 | RQ, lb | TPQ, lb |
|---|---|---|---|---|---|---|

None Identified

Key: Sec 313 = Toxic Chemicals, Section 313
Sec 302 = Extremely Hazardous Substances (EHS), Section 302
RQ = Reportable Quantity of EHS
TPQ = Threshold Planning Quantity of EHS

## CALIFORNIA PROPOSITION 65 WARNING

Chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm may be found in crude oil and petroleum products. Although it is possible to sufficiently refine a crude oil or its end products to remove the potential for cancer, we are advising that one or more of the listed chemicals may be present in some detectable quantities. Read and follow directions and use care when handling crude oil and petroleum products.

Industrial Hygiene Review: Delno D. Malzahn, CIH
Date Prepared: 10/07/85