

Product Stewardship Summary Ethylene Fuel Oil

The product stewardship summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of all health and safety information. Additional information is available through the applicable Safety Data Sheet (SDS) which should be consulted before use of any chemical. This product stewardship summary does not supplant or replace required regulatory and/or legal communication documents.

Chemical Identity:

Ethylene Fuel Oil is a liquid at room temperature. It is a combination of aromatic hydrocarbons consisting of various aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C17. Ethylene production via thermal steam cracking produces a wide variety of byproducts that are subsequently separated through distillation into various fractions. Ethylene Fuel Oil is produced and separated as a byproduct of the thermal steam cracking process in an ethylene production complex.

CAS Number: 68333-88-0 CAS name: Aromatic hydrocarbons, C9-17

Synonyms: Sweeny Heavy Oil; Sweeny Heavy Oil #6; Heavy oil #6 Fuel Oil

Product Uses:

Ethylene Fuel Oil is used in various applications for different processes, including as process heating fuel in fired heaters.

Physical/Chemical Properties:

Ethylene Fuel Oil is classified as flammable liquid category 3 under GHS (Global Harmonized System of Classification and Labelling of Chemicals) and combustible liquid under OSHA (Occupational Safety and Health Administration). Maintenance of special handling and storage procedures is required.

Health Information:

Based on available data for similar materials and the components, Ethylene Fuel Oil is classified in the following GHS (Global Harmonized System of Classification and Labeling of Chemicals) categories: skin and eye irritation, mutagenicity, carcinogenicity, reproductive toxicity, aspiration hazard, specific target organ toxicity (eyes, blood, auditory organs). Furthermore, Ethylene Fuel Oil CAS number is included in the category of "low benzene naphthas category" under US EPA HPV program (U.S. Environmental Protection Agency High Production Volume). Hazards of the category were characterized and summarized under the HPV program and more information can be found from the "sources of additional information" section.

Environmental Information:

Based on available data for similar materials and the components, Ethylene Fuel Oil is expected to be toxic to aquatic organisms but is not expected to bioaccumulate. Fugacity modeling demonstrated it partitions primarily into the air, with slight partitioning into water and soil, and minimal partitioning into sediment.

Exposure Potential:

Exposure to Ethylene Fuel Oil in occupational and non-occupational settings is expected to be very limited. Ethylene Fuel Oil is handled in closed systems and protective equipment is used. Worker exposure is kept to a minimum.



- Workplace use: this refers to potential exposure to Ethylene Fuel Oil to persons in a manufacturing facility or through various industrial applications. Manufacturing and transport involving Ethylene Fuel Oil are usually conducted in closed systems, so human exposure is expected to be very limited.
- <u>Consumer use</u>: there is no direct consumer use of Ethylene Fuel Oil. Non-occupational exposure to Ethylene Fuel Oil is expected to be limited to exposure following inadvertent release of the product.
- <u>Potential environmental release</u>: Ethylene Fuel Oil is stored and transported in closed systems. Exposure to the
 environment is expected to be very low. Chevron Phillips Chemical is committed to operating in an
 environmentally responsible manner and has adopted the American Chemistry Council's Responsible Care^e
 initiative.

Risk Management

Chevron Phillips Chemical is committed to Product Stewardship and doing business responsibly. We endeavor to provide sufficient information for the safe use and handling of all our products. We make product information available to all of our customers, distributors, carriers, and users of this product which contain detail about the properties of each product.

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question. It is the ultimate responsibility of the user to ensure suitability for use and determine if this information is applicable to the user's specific application. Chevron Phillips Chemical does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or any product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or any product itself.

Regulatory Information:

Regulations exist that govern the manufacture, sale, transportation, use, and disposal of Ethylene Fuel Oil product. These regulations may vary by city, state, country or geographic region. Additional relevant information may be found by consulting the applicable product Safety Data Sheet.

Sources of Additional Information:

- Safety Data Sheets (SDS) at https://www.cpchem.com/
- Organization for Economic Cooperation and Development (OECD) eChemPortal web-based search tool (use applicable CAS No): http://www.echemportal.org/
- European Chemicals Agency (ECHA) Information on Registered Substances: http://apps.echa.europa.eu/registered/registered-sub.aspx
- Chevron Phillips Chemical's olefins product website: https://www.cpchem.com/what-we-do/solutions/olefins/products

Conclusion:

Ethylene Fuel Oil is a flammable liquid. It may cause skin and eye irritation, genetic defects, cancer, reproductive toxicity, specific target organ toxicity, and aspiration toxicity. Appropriate personal protective equipment practices and labeling, storage, and transportation procedures shall be followed. Further, the relevant product Safety Data Sheets and applicable regulatory guidelines and requirements, as well as OSHA guidelines, should be consulted prior to the use or handling of Ethylene Fuel Oil.



Contact Information:

https://www.cpchem.com/