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Product Stewardship Summary Refinery Fuel Gas

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:

Refinery Fuel Gas is a colorless gas at room temperature. It is a complex combination of light gases consisting of nitrogen, hydrogen, hydrocarbons (methane, ethylene, etc.), carbon monoxide and carbon dioxide. Refinery Fuel Gas is produced as a byproduct of the thermal steam cracking process used in an ethylene production complex. Another common source of Refinery Fuel Gas is the light end component stream separated from a refinery fluidized catalytic cracker (FCC) effluent gas stream.

CAS Number: 68308-27-0 CAS name: Fuel Gases, Refinery Synonyms: Refinery Fuel; Gas, Refinery Fuel

Product Uses:

Refinery Fuel Gas is primarily used as a fuel source in fired heaters, dryer regenerations and as purge gas for the plant flare systems.

Physical/Chemical Properties:

Refinery Fuel Gas is classified as a flammable and compressed gas. Maintenance of special handling and storage procedures is required.

Health Information:

Due to the presence of the carbon monoxide (a minor component), Refinery Fuel Gas is classified as a reproductive toxicity category 1A and specific target organ systemic toxicant (repeated exposure category 1, target organ: blood system) pursuant to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Environmental Information:

Based on available data for similar materials and the components, Refinery Fuel Gas is not expected to be harmful to aquatic organisms and is not expected to bioaccumulate. Refinery Fuel Gas is not expected to accumulate to present an environmental hazard.

Exposure Potential:

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

 <u>Workplace use</u>: this refers to potential exposure to Refinery Fuel Gas to persons in a manufacturing facility or through various industrial applications. Manufacturing and transport involving Refinery Fuel Gas are usually conducted in closed systems, so human exposure is expected to be very limited.

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- <u>Consumer use</u>: there is no direct consumer use of Refinery Fuel Gas. Non-occupational exposure to Refinery Fuel Gas is expected to be limited to exposure following inadvertent release of the product.
- <u>Potential environmental release</u>: Refinery Fuel Gas 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[®] 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. To that end, a Safety Data Sheet and a certificate of analysis accompany each shipment from our manufacturing plant.

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/or disposal of Refinery Fuel Gas. These regulations may vary by city, state, country or geographic region. Additional helpful information may be found by consulting the relevant product Safety Data Sheet and local and Federal regulations.

Sources of Additional Information:

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

Conclusion:

Refinery Fuel Gas is mainly used as a fuel source in fired heaters. Refinery Fuel Gas is a flammable and compressed gas. It is classified for reproductive toxicity and target organ toxicity due to the presence of carbon monoxide, a minor component. Appropriate personal protective equipment practices and labeling, storage and transportation procedures shall be followed. Further, the relevant product Material Safety Data Sheets and applicable regulatory guidelines and requirements, including, but not limited to, OSHA guidelines, should be consulted prior to the use or handling of Refinery Fuel Gas.



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Contact Information:

https://www.cpchem.com/