

Product Stewardship Summary Aromax® **Process Components**

This product stewardship summary is intended to give general information about Aromax[®] Process components. It is not intended to provide an in-depth discussion of all health and safety information. Additional information on the chemical is available through the applicable Safety Data Sheet which should be consulted before use of the chemical. The product stewardship summary does not supplant or replace required regulatory and/or legal communication documents.

Chemical Identity:

Aromax[®] Process components are a category of products licensed by Chevron Phillips Chemical Company and manufactured by third parties at Chevron Phillips Chemical's directions and upon CPChem's request. They are used in Aromax[®] Process plants. This category contains several members.

Category Member Name
Aromax [®] II Catalyst
Aromax [®] II Catalyst blanks
Aromax® Catalyst 2nd Run
Sulfur Control E
Sulfur Control F
Sulfur Control G
Spent Sulfur Control F

Category Justification:

These products are all components used in the Aromax[®] Process. All of these products are solid materials that contain only metal oxides or have active catalyst components that are supported on the metal oxides. In the Aromax[®] Process, category members that are listed above are loaded in a packed bed to either pretreat the feed or convert the feed to aromatics.

Product Uses:

Sulfur control beds are used upstream of the Aromax[®] Reactors to prevent sulfur compounds from poisoning the Aromax[®] II Catalyst. Aromax[®] II Catalyst converts naphtha to aromatics in the reactors. Over time, the catalyst deactivates under day-to-day plant operating conditions.

Physical/chemical properties:

These products are solid materials and are considered stable under normal ambient and anticipated storage and handing temperature and pressure conditions. If the products are stored and applied as directed, there is no decomposition.

Health Information:

Aromax[®] Process components are classified based on component data. Aromax[®] II Catalyst, Aromax[®] II catalyst blanks, and Aromax[®] catalyst 2nd Run may irritate skin and eyes. In addition, Aromax[®] catalyst 2nd Run may cause skin sensitization and cancer due to the presence of nickel. Sulfur Control F is not hazardous. Spent Sulfur Control F may cause skin and eye irritation and specific target organ toxicity. Sulfur Control E may cause skin sensitization, specific target organ toxicity, and cancer. Sulfur Control G may be corrosive to metal, skin, and eyes.

Environmental Information:

Aromax[®] II Catalyst, Aromax[®] II catalyst blanks, and Aromax[®] catalyst 2nd Run are not expected to be hazardous to the environment. Sulfur Control E and Spent Sulfur Control F may be harmful to aquatic organisms.

Exposure Potential:

- Workplace use: This refers to potential exposure to Aromax® Process components by persons in a manufacturing facility or through various industrial applications. Occupational exposure to Aromax® Process components is expected to be low because Aromax® Process components is typically manufactured, processed, stored, transported, and used in closed or vented systems with low potential of release.
- *Consumer use:* There is no known non-industrial consumer use of Aromax[®] Process components.
- <u>Potential environmental release</u>: There may be some potential for exposure to the environment from an accidental release of Aromax[®] Process components due to transportation by rail, tank car and ship, however, risk of exposure due to release is believed to be very low. Chevron Phillips Chemical Company LP 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 Company LP 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, and carriers of Aromax[®] Process components which contain detail about the properties of these products. To that end, a Safety Data Sheet and a certificate of analysis accompany each shipment from our manufacturing plant.

Before using these products, 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 products of the Aromax[®] Process components product category. 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.

Sources of Additional Information:

Organization for Economic Cooperation and Development (OECD) – eChemPortal web-based search tool (use applicable CAS No.):
http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

- Safety Data Sheet: http://www.cpchem.com/en-us/pages/msdssearch.aspx
- CP Chem Aromax® Technology licensing website: http://www.cpchem.com/en-us/rnt/licensing/aromaxtech/pages/aromaxtechnology.aspx

Conclusion:

Prior to use or handling products from Aromax[®] Process components category, make sure to consult the relevant product Safety Data Sheet and review applicable regulatory guidelines and requirements, including but not limited to OSHA guidelines.

Contact Information:

http://www.cpchem.com/

Date: September 19, 2016