



Product Stewardship Summary Other Specialty Chemicals

This 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

Other Specialty Chemicals is a category of products that currently includes the following four products:

- PA-18
- DEHA (N,N-diethylhydroxylamine), 85%
- DEHA (N,N-diethylhydroxylamine), 98%
- E-Series® Catalyst

Product Uses

Other Specialty Chemicals products are commercially available to service industry customers and are generally used as cosmetic additives, release agents/coatings, and in imaging/photography, water treatment, and catalyst for ethylene cracker operations.

Physical/Chemical Properties

Polyanhydride resin: The PA-18 product is a white to yellow powder. Care should be taken to avoid dust generation as they may form combustible dust concentrations in air. These products should be kept in tightly closed containers, and stored in a cool and well-ventilated environment away from ignitable sources.

DEHA: Both products are colorless to light yellow liquids with an amine odor and are classified as combustible liquids. Avoid heat, flames or sparks and contact with oxygen and strong oxidizing agents. Hazardous decomposition products may be formed (carbon oxides).

E-Series® Catalyst: This product is a white to off-white solid pellet and is composed of metal oxides that are insoluble in water. Although not expected to form an explosive mixture in air care should be taken to avoid dust generation.

All four products in the Group are considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Health Information

Polyanhydride resin: The PA-18 product is expected to exhibit low acute and chronic toxicity effects via the oral, inhalation and dermal routes. This product is not expected to be a skin or eye irritant. However, direct contact with dust or powder in the eye may cause irritation by mechanical abrasion. If accidentally ingested, these products are not anticipated to cause an aspiration hazard. Currently there are no available data on these products regarding carcinogenicity, reproductive or developmental toxicity.

DEHA: Both products are expected to exhibit acute toxicity. Subchronic exposure via inhalation may result in target organ toxicity to the liver and thymus. These products may cause skin irritation, but are not expected to be eye irritants. Exposure by Inhalation may cause respiratory irritation. Repeated exposure may cause degreasing of the skin. If accidentally ingested, these products are not anticipated to cause an aspiration hazard. Currently there are no available data on these products regarding carcinogenicity and reproductive toxicity. Available data indicate that these products are not expected to cause developmental toxicity.

E-Series® Catalyst: This product is expected to exhibit low acute and chronic toxicity effects via the oral, inhalation and dermal routes. This product is not expected to be a skin or eye irritant. However, direct contact with dust or powder in the eye may cause irritation by mechanical abrasion. It is not expected to be a skin sensitizer. If accidentally ingested, this product is not anticipated to cause an aspiration hazard. Currently there are no available data on this product regarding carcinogenicity, reproductive or developmental toxicity. Available data on a similar substance indicate that this product is not expected to cause developmental toxicity.

Environmental Information

Polyanhydride resin: The environmental hazard potential of PA-18 is expected to be low (i.e., it is not expected to cause harm to aquatic life). This product has a low potential to biodegrade if released to the environment.

DEHA: The environmental hazard of both products is expected to be toxic to aquatic life with long lasting effects. These products have a low potential to biodegrade if released to the environment and not expected to bioaccumulate.

E-Series® Catalyst: The environmental hazard potential of this product is expected to be low (i.e., it is not expected to cause harm to aquatic life). Biodegradation is also not applicable since this product is inorganic.

Care should be taken to avoid releases of Other Specialty Chemicals to sewage drainage systems and water bodies. Spillage should be quickly collected and properly disposed of to minimize harm to the environment.

Exposure Potential

The most likely routes of exposure to Other Specialty Chemicals are skin and eye contact, and potentially via dermal and inhalation. The best way to prevent exposure is to work in well-ventilated areas, wear appropriate personal protective equipment (PPE), and follow good personal hygiene practices.

Workplace Use:

Potentially exposed populations include: (1) quality assurance workers who sample and analyze the products to ensure that they meet specifications; (2) workers involved in distribution and storage of these products; and (3) commercial consumers in occupational settings that use these products in intended applications. The most likely routes of exposure to these products in an occupational setting are eye and dermal contact, and potentially inhalation exposure. However, the likelihood of exposure to workers is expected to be low because these products are packaged in enclosed, controlled environments (i.e. drumming), transported in well-sealed containers, and because workers in the manufacturing and/or quality lab settings are properly trained to handle such products and wear appropriate personal protective equipment (PPE). Further, these products are sold to industrial customers that are familiar with their intended applications, safe-handling, storage, and disposal requirements. Packaging and loading, quality assurance, and transportation workers should always adhere to safe-handling practices, wear appropriate PPE and practice applicable exposure prevention measures (i.e. engineering controls). Customers should also use appropriate PPE during handling and have risk mitigation measures in place to address potential physical hazards or accidental releases.

Consumer Use:

Potential exposure or impact to the general public is not anticipated for these products, as they are sold by Chevron Phillips Chemical Company to sophisticated industry users and not to the general population.

Potential Environmental Release:

There may be some potential for significant exposure to the environment from accidental releases during transportation of drums/bags, truck trailers, or container ships; however, the frequency of distribution incidents involving accidental release of these products has been low, and reported volumes spilled have been minimal. Chevron Phillips Chemical Company is committed to operating in an environmentally responsible manner and participates in the American Chemistry Council's Responsible Care[®] program.

Risk Management

Chevron Phillips Chemical Company 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 these products 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 or warehouse.

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 Company 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 these products. These regulations may vary by city, state, country or geographic region. Additional relevant information may be found by consulting the applicable SDS.

Sources of Additional Information

Safety Data Sheets (SDS) at <http://www.cpchem.com>:

European Chemical Agency (ECHA) Dissemination portal with information on chemical substances registered under REACH

- <http://echa.europa.eu/information-on-chemicals>

Conclusion

Some of the Other Specialty Chemicals are classified as hazardous chemicals. Efforts should be taken to minimize exposure to these products by adhering to safe-handling procedures, designated applications and uses, appropriate personal-protective equipment practices, and appropriate labeling, storage, and transportation procedures and requirements. The relevant SDS and applicable regulatory guidelines and requirements, including but not limited to Occupational Health and Safety Administration (OSHA) guidelines, should be consulted prior to the use or handling of these products.

Contact Information:

<http://www.cpchem.com/>