



TotalEnergies

Refining & Chemicals

May 31, 2022

Safe Handling of Cray Valley Hydrocarbon Resins

Product Identification

This document covers hydrocarbon resins under the trade names Cleartack® and Wingtack®. These include resins in solid flake or pellet/pastille form, or liquid resins. Some products may be shipped hot as a molten liquid.

General

As with any chemical, the potential health and safety hazards associated with Cray Valley products should be understood to ensure that they are used safely. Review each product's Safety Data Sheet (SDS), which includes specific hazard and precautionary information, prior to working with these materials.

Should you require assistance in an emergency involving a Cray Valley product, please do the following. For Chemical Emergency ONLY (spill, leak, fire, exposure, or accident), call CHEMTREC at 800-424-9300. For ALL other inquiries about this product, call Cray Valley at 877-US1-CRAY (877-871-2729).

Health Hazards

These products are polymers. Due to their relatively high molecular weights, these resins are not expected to be ingestion, inhalation, or skin absorption hazards. They may cause slight eye and skin irritation. In addition, respiratory tract irritation may occur upon exposure to dust or vapors that may be generated during processing. Heated or molten resin may cause serious burns.

Cleartack® products contain low levels of residual alpha-methylstyrene, which has been determined by some regulatory agencies to be a suspected human carcinogen, based on animal tests. While there is no specific evidence that this chemical can cause cancer at the levels at which it is present in Cleartack®, it is recommended practice to minimize exposure. The SDS includes a cancer warning when appropriate under the regulations.

Other Hazards

Cray Valley hydrocarbon resins have low flammability. In the event of a fire, they may become inhalation hazards. Vapors and combustion products from burning materials may be smoky, extremely irritating, or toxic.

Fire fighters should wear self-contained breathing apparatus in addition to eye, face, and body protection. Extinguish fires with dry chemical, foam, carbon dioxide, or water fog or spray from a safe distance or protected location. Cool exposed containers with water fog or spray from a safe distance.

Solid hydrocarbon resins may become combustible dusts if sufficiently small particles are generated and suspended in air. Avoid raising dust clouds, which can create an explosion risk. Hydrocarbon resins are also static accumulators and can be a source of ignition. Eliminate and control ignition sources and use good housekeeping practices during



storage, transfer, and handling of these products. Properly ground process and handling equipment to dissipate static charges.

Handling

As with all industrial chemicals, it is important to prevent exposure by using protective equipment, safe work practices and engineering controls.

The following precautions should be observed for general handling practices:

- ensure a clean, well-ventilated work environment;
- avoid skin contact by wearing impervious gloves;
- wear eye protection such as safety glasses with side shields;
- wear other protective equipment as appropriate;
- review the SDS prior to working with a material.

If skin contact does occur, wash affected areas immediately with soap and water. Rinse thoroughly. If eye contact occurs, immediately flush the eye(s) with clean water for at least 15-20 minutes. Seek medical attention if adverse symptoms are observed.

Storage

All products should be stored indoors, out of direct sunlight, under controlled temperature conditions unless noted on the SDS. Products should be stored away from reactive materials such as oxidizers and acids and away from heat, sparks, open flame, and other ignition sources. Contamination with incompatible materials listed in the SDS must be avoided.

Some hydrocarbon resins remass (turn from free-flowing pellet or flake form into a solid mass) at elevated temperatures. Double-stacking pallets (pressure from above) can also contribute to remassing. Avoid such conditions to prevent remassing.

All products should be used according to the manufacturer's instructions, including adherence to shelf-life recommendations.

Transportation

Hydrocarbon resins are not controlled under transportation regulations at normal temperatures. When transported as molten material in bulk containers only, they are classified as elevated temperature liquids. See the SDS for more information about transportation.

Environmental Protection

Releases to the air are regulated by state and federal authorities. Spill and leak control measures are used in manufacturing including capture and treatment of any water which might be contaminated. Releases to the air could occur from leaks in processing equipment or during sampling, maintenance, cleaning, or transfer operations. Emissions to air and water can be minimized during manufacture and use. These products are not readily biodegradable in wastewater.



Consumer Use

Cray Valley does not directly sell any products for use by consumers, although they may be formulated into consumer products by customers of Cray Valley. The intended use conditions are in industrial workplaces where any potential exposure to workers and the environment are tightly controlled and confined through industrial hygiene protocols and processes, engineering of the manufacturing equipment, and the use of personal protective equipment. Industrial users of these products should ensure that the resulting formulations are safe for their intended uses.

Disposal

Persons handling empty product containers should wear protective equipment and handle containers in an area away from ignition sources because they may contain residual product.

Hydrocarbon resins are generally not RCRA hazardous wastes. However, it is the responsibility of the waste generator to determine if the product meets the criteria of a hazardous waste at the time of disposal (see 40 CFR 261). Disposal options for these products include landfilling solids at permitted sites, fuel blending or incinerating liquids. Disposal must comply with federal, state, and local regulations.

NOTICE: This information is furnished in good faith by TotalEnergies Petrochemicals & Refining USA, Inc. and provides general, non-specific information on the products reviewed, therefore TotalEnergies Petrochemicals & Refining USA, Inc., shall not be liable for any damages resulting from use of or reliance upon the information provided in this document. Nothing contained in this document shall be construed as a recommendation. TotalEnergies Petrochemicals & Refining USA, Inc. makes no representation or warranty of any kind, express or implied, as to the completeness, accuracy, quality, or fitness for a particular purpose, of the information contained herein, and such implied warranties are specifically excluded. No license of any patent owned by TotalEnergies Petrochemicals & Refining USA, Inc. or others is to be inferred.

'CRAY VALLEY' is a brand name only. The Business Unit name 'CRAY VALLEY' or the brand name 'CRAY VALLEY' may be used for promotion and/or sale of CRAY VALLEY products by TotalEnergies Petrochemicals & Refining USA Inc. ("TEPRI") or by Cray Valley SA, Cray Valley HSC Asia Limited, Cray Valley (Guangzhou) Chemical Co., Ltd, Cray Valley Italia S.r.l and Cray Valley Czech S.r.o. ("Cray Valley Legal Entities"). TEPRI and each of the Cray Valley Legal Entities are independent entities (each are individually referred to as "SELLER"). The information contained in this document is believed to be true and accurate on the date issued. Seller reserves the right to make any changes to the product according to technological progress or further developments. FINAL DETERMINATION OF SUITABILITY AND USE OF ANY PRODUCT FOR PROCESSING, USE, SALE, MARKETING, OR OTHER APPLICATION(S) IS THE SOLE RESPONSIBILITY OF THE BUYER/USER. IN NO EVENT WILL ANY SELLER ASSUME ANY LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN OR RELIANCE THERETO. SELLER MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, REGARDING THE PRODUCT OR THE INFORMATION CONTAINED IN THIS DOCUMENT, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, EVEN IF THAT PURPOSE IS KNOWN TO SELLER. SELLER MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF THE PRODUCT(S) FOR PROCESSING OR FOR BUYER'S/USER'S INTENDED USE, PROCESSING, APPLICATION, SALE, OR MARKETING. SELLER MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, OF ANY TECHNICAL SUPPORT, ANY PROPRIETARY INFORMATION PROVIDED, OR THE RESULTS THAT MIGHT BE OBTAINED FROM TECHNICAL SUPPORT. ALTERATION OF THIS DOCUMENT IS STRICTLY PROHIBITED. For further information please contact your local sales representative or visit <https://www.crayvalley.com/>.