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## **FREQUENTLY ASKED QUESTIONS ABOUT DICYCLOPENTADIENE (DCPD)**

### **What is dicyclopentadiene?**

Dicyclopentadiene (DCPD) is a manufactured chemical that is produced by heating crude oil. It is a colorless, flammable solid or liquid, with a disagreeable camphor-like odor.

### **Where is dicyclopentadiene used?**

DCPD is used as a chemical intermediate for production of certain pesticides and resins. It is also used in the production of paints, varnishes, and in flame retardants for plastics.

### **What happens to dicyclopentadiene when it enters the environment?**

The majority of DCPD enters the environment (air, water, and soil) from releases during its production, use, transport, or disposal. In air, DCPD breaks down quickly into simpler, less toxic chemicals. However, it is stable for a long time in soil and water.

### **How might I be exposed to dicyclopentadiene?**

Most people are not exposed to DCPD regularly. However, people who work in, or live near, factories that produce or use DCPD may be exposed to it in air, water, and soil.

### **What are the health effects associated with dicyclopentadiene exposure?**

DCPD may cause health effects when it is breathed or swallowed or when it touches the skin. The health effects associated with short-term exposure to DCPD at 1 to 5 parts per million (ppm) include eye, skin, and throat irritation. Some people can smell DCPD when levels reach 0.003ppm. However, no ill effects are expected to occur at this level. A single, short-term exposure is not likely to produce health effects. Long-term, repeated exposure may cause kidney, lung, and nervous system damage.

### **How likely is dicyclopentadiene to cause cancer, birth defects, or reproductive effects?**

It is not known whether DCPD causes cancer, reproductive, or birth defects in people. Studies have not reported effects on reproduction, birth defects, or cancer when animals were exposed to DCPD.

**Is there a need to clean surfaces in homes after an accidental release of dicyclopentadiene?**

No. Exposure of the home surfaces to DCPD dust or vapors following an accidental release is expected to be very low. Cleaning of home surfaces is not warranted unless the dust particles of DCPD are visible on the surfaces of household contents.

**Should my family and I be tested if exposed to accidental release of DCPD into the air?**

No. A single, short-term exposure from which a person recovers quickly is not likely to cause delayed or long-term effects.

**If I had itching in my eyes and throat, coughing, and/or vomiting, should I be seen by my doctor?**

People who have experienced serious symptoms, such as severe or persistent coughing, skin or eye irritation, should see their doctor.

**What tests can be done if a person is exposed to dicyclopentadiene?**

There are no specific blood and urine tests that can show whether a person has been exposed to DCPD.

**Can symptoms caused by dicyclopentadiene be treated?**

The effects of DCPD exposure can be symptomatically treated, and most exposed persons get well.

**Does dicyclopentadiene pose a risk to pets, fish, birds, and livestock?**

Dicyclopentadiene is moderately toxic to aquatic organisms, such as fish. DCPD is not harmful to pets, birds, or livestock in small concentrations.

**What can I do to reduce exposure to dicyclopentadiene after an accidental release?**

You can take the following steps to reduce possible exposure to DCPD after an accidental release:

- Shut all the outside doors and windows in the home
- Turn off all heating, cooling and ventilation systems
- Close fireplace dampers
- Direct a fan inside the house toward any outdoor opening to keep contaminated outside air from entering
- If you are outdoors during an accidental release, avoid eye and skin contact with the DCPD vapor. If DCPD gets into your eyes or on your skin, wash eyes and skin immediately with large amounts of water.

**What are the standards or guidelines for dicyclopentadiene to protect human health?**

Currently there is no federal standard, but the American Conference of Governmental Industrial Hygienists (ACGIH) has adopted a threshold limit value (TLV) of 5 ppm in the workplace air. The TLV is the time-weighted average for a normal 8- hour work day and a 40-hour work week to which nearly all workers may be repeatedly exposed, day after day, without adverse effects. The Wisconsin Department of Health has recommended a level of 0.1ppm for indoor air.

**Where can my physician or I get more information?**

If you need further information regarding the health effects of dicyclopentadiene, please contact the Virginia Department of Health, Division of Environmental Epidemiology, 109 Governor Street, 4th Floor, Richmond, VA 23219, or call (804) 864-8182.

**Prepared by:** Ram K. Tripathi, Ph.D.  
Toxicologist  
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**Revised:** Virginia Department of Health  
Division of Environmental Epidemiology  
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