



## Frequently Asked Questions DTSC Draft Initial Priority Products

### **What products are on the proposed initial Priority Products list?**

- Children's foam padded sleeping products containing Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)
- Spray Polyurethane Foam (SPF) Systems containing unreacted diisocyanates
- Paint and Varnish Strippers, and Surface Cleaners containing Methylene Chloride

### **How were the Priority Products selected?**

- Potential exposure to the Candidate Chemical in the product
- Potential for exposure to contribute to or cause significant or widespread adverse impacts

### **What are the problems posed by the Priority Products?**

#### **Children's foam-padded sleeping products containing TDCPP**

- Known to the State of California to cause cancer
- Accumulates in the human body
- Can cause other chronic health effects such as endocrine disruption and dermatitis
- Reproductive toxin that may impact fertility by influencing hormone levels and semen quality
- Documented to exhibit genotoxicity and developmental toxicity

#### **Who is at risk:**

- Children, daycare workers, and fish and wildlife

#### **Spray Polyurethane Foam (SPF) systems containing diisocyanates**

- Known to cause severe asthma in humans
- Cause allergic and immune reactions
- Skin, eye and respiratory irritants
- Sensitizers; repeated exposure can cause more severe responses (e.g., difficulty breathing)
- One of these, toluene diisocyanate, is suspected to cause cancer.

#### **Who is at risk**

- Independent contractors and workers
- Do-It-Yourselfers (DIYers)
- Occupants of buildings with SPF insulation or roof
- Children

#### **Paint stripper containing Methylene Chloride**

- Documented fatalities of people in California who used these products
- Transformed in the body into carbon monoxide, which can cause unconsciousness and death



- Causes cancer in humans
- Short-term exposure causes headaches, dizziness, eye, nose, and throat irritation, chest pain, and difficulty breathing
- Long-term exposure increases the risk of liver, kidney, cardiovascular, and blood cell damage
- Direct skin contact causes intense burning and redness of the skin as well as eye irritation

#### Who is at risk

- Do-It-Yourselfers (DIYers)
- Workers
- Pregnant women and their fetuses
- Infants
- People at risk of heart attack

#### **Will manufacturers have to eliminate the Candidate Chemical from their product immediately?**

No. From start to finish, finalizing the initial Priority Products list could take up to two years. The proposed initial Priority Products list will be finalized via adoption of regulations for each Priority Product. Prior to initiating formal rulemaking, the Department of Toxic Substances Control (DTSC) will hold public workshops on the proposed Priority Products. This rulemaking process may take up to one year. Requirements for manufacturers to notify DTSC and begin the Alternatives Analysis process do not start until the Priority Product regulations are finalized.

#### **What is included in the rulemaking process?**

- Public notice and comment
- External scientific peer review
- CEQA compliance
- Economic Impact Analysis
- Review by the Environmental Policy Council
- Public hearing

#### **Shouldn't these products be removed from the market immediately?**

DTSC will need more information and further analysis in order to determine if a product should be restricted or banned for sale in California, or if a regulatory response is appropriate. Manufacturers are being asked to determine if a safer alternative is available and viable. **The method manufacturers will use to evaluate their options is called an Alternatives Analysis.** Manufacturers will complete their Alternatives Analysis and select a preferred alternative. DTSC will then decide if a regulatory response is required.

#### **What are the possible regulatory responses to the Alternatives Analysis?**

DTSC may require a range of regulatory responses depending upon the results of the Alternatives Analysis. These include: requiring manufacturers to provide additional information to DTSC or consumers; incorporating additional safety measures into the design of their



product; conducting further research; requiring end-of-life product stewardship; or restricting/prohibiting the product's sale in California. Manufacturers may always accelerate the process and make design changes to their products before DTSC requires them to do so.

### **What should I do if I have one of these products?**

If you currently own a product and are concerned, you may want to consider using an alternative product without the chemical in it. If you use the product and want to minimize exposure, follow the manufacturer's directions. If you are shopping for one of these products, look for a product without the chemical of concern in it. Consumers who want to avoid exposure to the chemical in the product may want to ask the manufacturer or retailer what is in their product.

### **What are the benefits of this regulation?**

Consumers will be able to choose safer products. Forward-thinking businesses will capitalize on consumer demand for safer products through development of safer, effective products. Businesses will innovate and increase their market share, while expanding consumers' choices for safer products. Where safer alternatives are not available, appropriate regulatory responses will ensure lower exposures of humans and wildlife to toxic chemicals.

### **Are these products regulated by other entities?**

Yes, some of these chemicals and products are regulated by other entities in specific ways or for specific uses. However, the DTSC Safer Consumer Products regulation is broad – addressing the product/chemical impacts throughout the entire lifecycle from manufacture to disposal. Products that contain a hazardous chemical can have adverse impacts throughout its life cycle: on people, sensitive populations, and the environment. Some regulatory programs may address one or more of these impacts but *not all of the impacts*. DTSC's Safer Consumer Products regulations addresses impacts from a product *throughout its entire life cycle*. DTSC's regulations do not duplicate or conflict with existing state or federal regulations.

### **Doesn't Proposition 65 already address chemicals in products?**

Proposition 65, the Drinking Water and Toxic Enforcement Act of 1986, requires notification of the exposures to certain chemicals in a product. It doesn't require elimination or substitution of a chemical. Proposition 65 was intended by its authors to protect California citizens and the state's drinking water sources from chemicals known to cause cancer, birth defects or other reproductive harm, and to inform citizens about exposures to such chemicals. Proposition 65 requires the Governor to publish, at least annually, a list of chemicals known to the state to cause cancer or reproductive toxicity. The purpose of Proposition 65 is to notify consumers that they are being exposed to chemicals on the list that are known to cause cancer and/or reproductive toxicity. If a product carries a Proposition 65 warning, it means the product contains chemicals on the list. Consumers can decide on their own if they want to purchase or use the product. A Proposition 65 warning does not necessarily mean a product is in violation



of any product-safety standards or requirements. For additional information about the warning, contact the product manufacturer.

**Isn't this just more government regulations in an already heavily regulated state?**

These regulations are different from any other framework. The California regulations require manufacturers to answer the question – “Is it necessary to use this toxic chemical?” These regulations do not necessarily ban a chemical, but require manufacturers to evaluate the potential adverse impacts of the chemical throughout the product’s life cycle and evaluate how they can develop safer alternatives.

**How can we provide input to the initial Proposed Priority Products list?**

You can provide input on the Initial Proposed Priority Products by participating in public workshops to be held in May and June 2014 throughout California. You can also send your ideas directly to DTSC by accessing our website at <http://www.dtsc.ca.gov/SCP>. For input on other potential Priority Product categories that DTSC might consider for the future, DTSC will hold a separate workshop this summer to discuss developing a Priority Product Work Plan. The Priority Product Work Plan will identify product categories the Department will evaluate to identify product-chemical combinations over the following three years.

**Do overseas manufacturers have to comply with the Safer Consumer Product requirements?**

The requirements apply to consumer products sold or offered for sale in California. If an overseas manufacturer does not comply, then the responsibility falls on the importers of the product. If importers do not comply, the responsibility falls on the retailer.

**Frequently Asked Questions Regarding Paint Strippers containing Methylene Chloride**

**What is the Priority Product?**

Any product sold or offered for sale in California for use as a paint or varnish remover, paint stripper and/or surface cleaner that contains methylene chloride.

**Why was this product chosen?**

Methylene Chloride (MeCl) is a carcinogen and neurotoxin and poses a risk to workers and “do-it-yourselfers.” It is widely used in solvents and has proven fatal in well-documented cases. Between 2000 and 2011, at least 14 people have died from exposure to methylene chloride. It is an acute inhalation hazard, and prolonged skin contact can result in irritation or burns. A number of methylene chloride-free paint strippers are available.

**How big is the potential problem from this product?**



Paint stripper with methylene chloride is a common product sold at many stores. In 2006, the California Air Resources Board estimated that 9.68 tons of methylene chloride from paint strippers was released each day in California. In 2011 there were 337 exposures to this product reported to the National Poison Data System. Available data suggests that concentration of methylene chloride in paint strippers is generally high.

### **Is this product regulated elsewhere?**

Some regulatory programs may address one or more of these impacts but not all of the health and environmental impacts. DTSC's Safer Consumer Products Program addresses impacts from a product *throughout its entire life cycle*.

Different entities regulate different methylene chloride hazards or exposures in different applications. The federal Occupational Safety and Health Administration (OSHA) has set standards for occupational use of methylene chloride. OSHA's health standard includes limits on methylene chloride exposure and requires employers to communicate hazards, designate areas where methylene chloride concentrations may be high, and in some cases, require that respirators be used. (See [https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=standards&p\\_id=10094](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10094).)

The European Union has banned the sale of paint strippers containing more than 0.1 percent methylene chloride by weight. This concentration is significantly lower than products currently sold in California. As of 2011, businesses using this chemical in paint stripping operations must notify the U.S. Environmental Protection Agency and certify that they have implemented appropriate best-management practices to minimize emissions. In addition, the California South Coast Air Quality Management District has Volatile Organic Compound (VOC) emission regulations that may apply to methylene chloride paint strippers, but they are not specific to methylene chloride and do not restrict sales to consumers.

### **Are there possible safer alternatives?**

A number of alternatives exist. Paint strippers containing benzyl alcohol may be an alternative for some applications. Benzyl alcohol has fewer acute hazards and is not a known carcinogen. Exposure to benzyl alcohol may pose some respiratory risk, but avoids the acute hazards and exposure to a known carcinogen. Another alternative currently in use, n-methyl pyrrolidone (NMP), is a known reproductive toxicant and can irritate skin and eyes. NMP is on DTSC's list of Candidate Chemicals and its use poses greater potential risks than some existing alternatives.

Many manufacturers produce paint strippers containing methylene chloride. The California Department of Public Health (CDPH) provides a partial list of paint strippers with Methylene Chloride. To access the list and other helpful information on methylene chloride and paint strippers, see:

<http://www.cdph.ca.gov/programs/ohb/Pages/methylenechloride.aspx>

<http://www.cdph.ca.gov/programs/hesis/Documents/MethyleneChlorideAlert.pdf>

<http://www.cdph.ca.gov/programs/hesis/Documents/MethyleneChlorideAlertSpanish.pdf>



### **What other products contain this chemical?**

Methylene chloride is used in various industrial processes in many different industries including paint stripping, pharmaceutical manufacturing, paint remover manufacturing, and metal cleaning and degreasing.

### **What are the symptoms of exposure?**

The following symptoms may occur immediately or shortly after exposure to levels of methylene chloride at or above relatively low concentrations in air:

- Increased levels of carbon monoxide in the blood which may cause fatigue, shortness of breath or chest pain;
- Drowsiness, headache, a feeling of being "drunk;" and
- Eye, skin, and lung irritation.

Longer term effects of methylene chloride exposure:

**Cancer:** Laboratory animals have developed cancer after long-term exposures to methylene chloride. The U.S. Environmental Protection Agency considers methylene chloride to be a "probable" human carcinogen.

**Organ Systems:** Since methylene chloride changes to carbon monoxide in the body, it can damage the heart and nervous system.

### **How do I reduce exposure risk if I continue to use the product?**

According to CDPH, avoiding use in enclosed spaces is advised. Exhaust ventilation and fresh air exchange are essential, in addition to the use of a respirator and polyvinyl alcohol (PVA) gloves for chemical resistance. For further information, see CDPH's web page (<http://www.cdph.ca.gov/programs/ohb/Pages/methylenechloride.aspx>) and consult manufacturers for directions.

### **Should I dispose of the product? How can I properly dispose of it?**

Methylene chloride should not be disposed of in the municipal solid waste stream. Consult your municipal solid waste authority or your local Household Hazardous Waste program for guidance on disposal. Links to local Household Hazardous Waste programs may be found here <http://ccelearn.csus.edu/mercurylamp/content/resources5.htm>.

## **Frequently Asked Questions Regarding Spray Polyurethane Foam (SPF) Systems Containing Unreacted Diisocyanates**

### **What is the Priority Product?**

Any unreacted SPF Systems (including drums, kits, and cans of spray polyurethane foam materials) for insulation, filling, sealing, roofing, or other uses that contain select diisocyanates.



### **Why was this product chosen?**

Diisocyanates are known asthmagens, capable of causing asthma or triggering severe asthma attacks in sensitive populations. They are also skin and respiratory irritants, and sensitizers. Toluene diisocyanates are reasonably anticipated to cause human cancer. Fatal exposures to diisocyanates have been documented.

### **Who is potentially at risk from using this product?**

The vast majority of workers who use SPF systems for insulation, roofing and sealing are potentially at risk. Do-It-Yourselfers (DIYers) who use this product for insulation or as a sealant are likely unaware of the risks of these products and may potentially be exposed to diisocyanates, along with their families.

### **What are the major routes of exposure?**

The major routes of exposure are inhalation of the vapor and aerosols and skin contact during handling and clean up.

### **Are there alternatives?**

These products can be used for a variety of purposes, and alternatives are available. For home insulation, alternatives include blown-in fiberglass, cellulose, polystyrene, and fiberglass batts. For sealing cracks, there are other possible alternatives such as caulk.

### **What other names is the chemical known by?**

Diisocyanates, sometimes called isocyanates, are a class of low-molecular-weight aromatic and aliphatic compounds. The most common diisocyanates in SPF systems include methylene bisphenyl isocyanates (MDI) and hexamethylene diisocyanates (HDI). Some SPF systems on the market today are hybrid systems (i.e., SPF materials containing polyurethane-based coatings, sealants, or adhesives) and are likely to contain toluene diisocyanates (TDI).

### **What other government entity regulates this product?**

Products with diisocyanates can have adverse impacts throughout their life cycle: on people, sensitive populations and the environment. Various regulatory programs address one or more of these impacts – air or water impacts or occupational exposures, for example - but *not all of the impacts or exposures*. DTSC's Safer Consumer Products Program addresses impacts from a product *throughout its entire life cycle*. For diisocyanates, the Division of Occupational Safety and Health or Cal/ OSHA requires engineering controls and has established air exposure limits.

### **What are the symptoms of exposure?**

The symptoms include persistent or recurring eye irritation, nasal congestion, dry or sore throat, cold-like symptoms, cough, shortness of breath, wheezing, or chest tightness.

### **How do I reduce exposure risk if I continue to use the product?**



You can reduce exposure through proper exhaust and ventilation and restricting areas with diisocyanates to only essential workers. Workers should wear protective clothing with full-face respirators.

**Should I dispose of the product? How can I properly dispose of it?**

Consult with your local Household Hazardous Waste facility or solid waste management company.

**Children's Foam Padded Sleeping Products with TDCPP**

**What is the Priority Product?**

Select children's foam padded sleeping products containing TDCPP:

- Nap mats with polyurethane foam
- Juvenile product pads in soft-sided portable cribs
- Infant travel bed foam
- Portable infant sleeper foam
- Playard foam
- Play pen foam
- Bassinet foam
- Nap cots with foam pads
- Car bed foam pads
- Foam sleep positioners

**Why was this Priority Product selected?**

Children are of special concern because of their developmental sensitivity. They spend many hours in close contact with these sleeping products, and breathe in dust generated containing TDCPP. TDCPP is known to the State of California to cause cancer and can cause chronic health effects. There is no regulatory requirement to include a flame retardant in children's foam padded sleeping products, nap mats, and other children's sleep products that contain foam. TDCPP has been detected in the surface waters and sediment of California water bodies.

**What are the risks?**

TDCPP, also known as chlorinated Tris, is known to the State of California to cause cancer. It potentially causes chronic health effects and collects in tissue. TDCPP in polyurethane foam is not chemically bonded to the foam, so it can escape from foam in children's sleeping products into indoor environments and dust. It is a commonly used flame retardant, and studies show children's exposure to TDCPP from treated furniture is five times the acceptable daily intake. According to studies conducted in rats, TDCPP is associated with increased tumor rates in kidneys and testes, some of which were cancerous.





### **How do I reduce exposure risk if I continue to use the product?**

- Consider sleeping products that use cotton, polyester or wool instead of polyurethane foam
- Avoid foam products that contain this flame retardant.
- Children and teachers should wash their hands often.
- Vacuum or mop nap areas often, preferably using a HEPA vacuum cleaner.
- Contact manufacturers to ask whether flame retardants were added.

### **How can I properly dispose of the product?**

A children's foam padded sleeping product can be thrown in the trash.

### **Are there safer substitutes?**

Yes, there are safer substitutes. Some manufacturers are offering children's sleep products without chemical flame retardants. Check with the manufacturer to find out if the product is free of chemical flame retardants. Some of the products are filled with polyester fiberfill, cotton and wool instead of foam.

### **How can I tell if my children's foam padded sleeping product contains TDCPP?**

Children's foam padded sleeping products with TDCPP in California are required to carry a Proposition 65 label. However, a number of organizations have filed Proposition 65 complaints against manufacturers of foam padded products with TDCPP for failing to attach a label. If you are not sure whether your child's foam padded sleeping product contains TDCPP, you may want to contact the manufacturer and ask if chemical flame retardants were added to the polyurethane foam in the children's sleeping product. The only other way to tell if a children's foam padded sleeping product contains TDCPP is through chemical analysis.

### **Do all children's foam padded sleeping products contain TDCPP?**

No. Not all children's foam padded sleeping products contain TDCPP. The foam may contain a different chemical flame retardant or no flame retardant at all.

### **Does the recent change in flame retardant regulations affect this product or chemical?**

There are no federal or California regulatory requirements for the inclusion of chemical flame retardants *in the children's foam padded sleeping products identified as Priority Products*. The federal Consumer Product Safety Commission regulates hard-sided crib mattresses with flame retardants, and the Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (BEARHFTI) regulates upholstered furniture. This product category does not include furniture.

### **Is this chemical found in other products?**

Any product that contains flexible polyurethane foam could potentially contain TDCPP. Such products include: furniture, electronics, automotive interiors, toys, strollers, children's car seats, etc.

