

Questions and Answers: Glycidyl Methacrylate (GMA)

What is Glycidyl Methacrylate (GMA)?

The Toledo hazardous materials incident involves glycidyl methacrylate (GMA). GMA is a clear, colorless liquid with a strong, sharp, fruity odor. It is used in manufacturing certain plastics, paints, and coatings.

What does exposure to a chemical mean?

Chemicals are found in common materials around us including paints, fuels, cleaning solutions, and others.

Exposure occurs when a chemical enters the body through:

- breathing,
- eating or drinking, or
- contact with skin or eyes

Whether an exposure event causes harm depends on the chemical, the amount, the duration and frequency of contact, how it enters the body, and the person's health.

What symptoms may occur from GMA exposure?

Breathing GMA vapor may cause:

- coughing,
- throat burning,
- headaches, or
- shortness of breath

Skin or eye contact may cause severe irritation or chemical burns. GMA may also cause allergic skin reactions and sensitization, meaning a later exposure could trigger an allergic response.

Does GMA cause cancer?

Research suggests that GMA may damage genetic material in cells, which raises concerns about its potential to cause cancer. However, there is limited information about whether GMA causes cancer in humans. Additional research is needed to understand how exposure to GMA may affect human health.

Further information can be found via this link: [National Institutes of Health](#).

Who may be more sensitive to chemical exposure?

Children, pregnant people, and individuals with underlying health conditions may be more sensitive to chemical exposure. People with asthma, COPD, or other lung conditions may experience more irritation or worsening respiratory symptoms. Keep prescribed rescue medications readily available.

I live in a mobile home, is there anything I need to do?

If possible, temporarily remove a panel or two at the base of your home to ventilate with fresh air.

What should pregnant or breastfeeding residents know?

Pregnancy may affect sensitivity to some exposures and it is recommended that symptoms or exposure concerns be discussed with a healthcare provider.



How can I protect my pets?

- Discard any pet food that may have been left in bowls or open containers.
- Empty and thoroughly wash food and water bowls using dish soap and warm water.
- Replace outdoor drinking water with fresh, clean water.
- Watch pets for coughing, unusual behavior, eye irritation, skin redness, or difficulty breathing.
- Contact a veterinarian if your pet develops symptoms.

What do I need to clean?

Cleaning is an important first step to make sure chemicals are removed from surfaces in your home, work, and vehicle. Using household cleaners that contain soap or detergent will remove many contaminants from surfaces.

It's recommended that any surface that could have been exposed to chemicals be wiped down including:

- those used for the preparation or eating of food
- any children's or infant's toys, including outdoor playsets and play equipment
- anything touched frequently, such as light switches, remotes, etc.
- vehicle doors

○ use a wet paper towel to wipe down the door handle before using

After cleaning, always wash your hands thoroughly with soap and water.

For hard surfaces, such as counters, certain toys, light switches, desks, floors:

Clean surfaces with soap and water or with cleaning products appropriate for use on the surface.

For soft surfaces such as carpet, rugs, and drapes:

- Clean the surface with cleaning products appropriate for use on these surfaces.
- Launder items (if possible) according to the manufacturer's instructions. Use the warmest appropriate water setting and dry items completely.
- Vacuum surfaces (such as carpets and rugs) and dispose of the dirt safely.
- Out of an abundance of caution, while vacuuming, you may air out your home, vacuum small amounts at a time, and/or take frequent breaks by walking outdoors.

For laundry items, such as clothing, towels, cloth toys, and linens:

- Launder using detergent and recommended water temperature.
- Dry items completely.
- Clean clothes hampers or laundry baskets according to guidance for surfaces.

What about food?

Discard exposed food:

- Throw away uncovered fresh fruits and vegetables left outside or on countertops.
- Discard open or uncovered food that may have been exposed during the incident.

Check sealed food:

- Commercially sealed cans and glass jars may be retained if they are intact and officials have not advised otherwise.
- Wash or wipe the outside of containers before opening.
- Food inside a refrigerator or freezer that remained fully closed may be protected from airborne exposure. Check for power outages and food temperature safety before consuming.
- When in doubt about possible chemical exposure, throw away the food.

What about home gardens?

GMA is not an approved additive for food consumption. It is recommended that potentially exposed, uncovered fresh fruits and vegetables be disposed of and not consumed.

Is the drinking water safe?

Yes. All treatment for tap water takes place inside and is distributed through pressurized water lines. There have been no indications that point to contaminated surface water. For example, there is no evidence of a fish kill, such as stressed or dying fish or aquatic wildlife. We also know the chemical is a gas, not soluble in water, and no sheen is visible on the water. In addition, we have not observed deceased or stressed land-based wildlife.

The water source for the City of Toledo comes from deep within Lake Erie, more than 12 miles away from this incident. All water that moves through a public water system goes through a complex treatment process before distribution. The City of Toledo also confirms on its website that the drinking water is safe.

Can I mow my grass?

Yes, it is safe to mow lawns.

For additional information:

- [City of Toledo website](#)
- [US EPA's Public Data Viewer](#)
- [Toledo-Lucas County Health Department](#)