

# INEOS Styrolution



## Environmental Emergency Community Notification

### INEOS Styrolution Overview

[INEOS Styrolution](#) is the leading global styrenics supplier with a focus on styrene monomer, polystyrene, ABS standard and styrenic specialties. The company provides styrenics products for many everyday applications across a broad range of industries, including: automotive, electronics, household, construction, healthcare, packaging and toys/sports/leisure. INEOS Styrolution employs approximately 3,100 people and operates 16 production sites in nine countries. INEOS Styrolution is a member of the INEOS group.

### Sarnia Production Site

The INEOS Styrolution Sarnia Site is a styrene monomer production facility. Styrene monomer is a basic building block for the production of dispersions, foams, and polymers. It is used in diverse applications ranging from food containers and packing materials to cars, vehicles, computers, and appliances. Our product is shipped via rail or truck to polymer facilities in the Northeast and Midwest United States. The site's workforce is comprised of approximately 78 full time employees and 15+ contracted trades. The Sarnia Site plays a critical role in the local benzene supply chain, as it accepts benzene produced as a byproduct from the local refining and chemical facilities and utilizes it in the production of styrene.

### Safety Commitment

The Sarnia Site is committed to ensuring safe and reliable operations while protecting the health and safety of our employees and neighbouring communities, as well as the integrity of their living environments.



### INEOS Styrolution at a glance



### Responsible Care RC14001

The Sarnia Site has achieved Responsible Care RC14001 Certification. By implementing Responsible Care, we have committed to the guiding principles, relevant practices, and expectations. We are ensuring that we operate safely, securely, sustainably – all while driving continual improvement.



## Community Involvement

As part of our commitment to protecting and enhancing the well-being of our surrounding community, the Sarnia Site has taken proactive steps to become a proud and active community partner. In recent years, many initiatives have been launched in an effort to improve the quality of life in the area in which we operate and to educate and build positive relationships with our community members.

The focus of our community involvement initiatives is on providing a combination of financial donations and active volunteerism in support of educational, health & wellness, and environmental activities/organizations.

Some of our community partners include: Western Capstone Engineering Design Competition, Lambton County Science Fair, The Canadian Mental Health Association Lambton-Kent, Youth Wellness Hubs Ontario Sarnia-Lambton, The United Way of Sarnia-Lambton, The Inn of the Good Shepherd, Pathways Health Centre for Children, and The Shine Foundation Canada.



## INEOS Community Fund

The INEOS Community Fund was established in March of 2020 to enable INEOS sites across the world to support charitable organizations doing vital work in their local communities. In December of 2023, the Sarnia Site was awarded £25,000, or \$42,352 CAD, to donate to Ohana Landing, a transitional housing project for homeless local youth. These funds supported the expansion of an education room for learning sessions and life skill workshops.

## Facts About Polystyrene

The styrene monomer made at the Sarnia Site is a basic building block that is used for the production of polystyrene, a styrenic polymer that is very well suited for recycling due to its unique chemical properties.

This truly amazing material is one of the most **recyclable plastics**. It can be recycled through both conventional and advanced recycling processes. Its unique make-up allows for it to be recycled back to its original building block material, styrene monomer and to be repurposed and reused, again and again.<sup>1</sup>

**POLYSTYRENE IS RECYCLABLE.**



of the E2 Regulations.

<sup>1</sup>See: [INEOS Styrolution: Breakthrough in chemical recycling of polystyrene](#)



From life-saving medical applications, energy efficient insulation in construction and appliances, electronics, and foodservice, products made from polystyrene are an essential part of our lives. In fact, we all use polystyrene every single day. You are likely to find its thermal, moisture protection within the lining of your refrigerator. As a popular choice for food packaging, its insulating properties extend the shelf life of food, keeping it fresher and safer, while preventing food waste<sup>2</sup>. Wherever you find electrical devices in your home or office environment, it's very likely you'll find them containing versatile and durable polystyrene, just to name a few.

<sup>2</sup>See: [Plastics Make it Possible, Plastic Packing and the war on Food Waste.](#)

## Environmental Emergency Community Notification

24-hr emergency number: 226-784-3040

Through the Environmental Emergency (E2) Regulations, the Federal Government requires the preparation and implementation of environmental emergency plans to manage hazardous substances at commercial and industrial facilities. As per 4(2)(k) of the E2 Regulations, INEOS Styrolution has communicated environmental emergency scenarios to members of the public who may be affected if a scenario were to occur. The following table lists the E2 regulated chemicals that are present onsite and their respective hazard category as per Column 5 of Schedule 1

## Maximum and Alternate worst-case impacts

INEOS Styrolution utilized an independent third party to conduct modelling of the maximum worst-case release scenario and an alternative scenario of site E2 regulated chemicals with the farthest-reaching offsite impact. As defined by the E2 Regulations, the maximum worst-case scenario involves the largest quantity release of the substance on-site and does account for site safety systems, mitigations and safeguards to prevent such release; hence, the worst case scenario does not have to be reasonable.

E2 Hazard Category	E2 Risk Definition	E2 Regulated Chemicals	Impact Distance (m)
Combustible Hazard (C)	Combustible material can be ignited and sustain burning in ambient conditions	Benzene	STY I WC: 39
			STY I AWC: 250
			STY II WC: 166
			STY II AWC: 294
		Ethylbenzene	STY I WC: 136
			STY I AWC: 65
Explosive Hazard (E)	Explosive chemicals are capable of damaging the surroundings	Styrene	STY II WC: 222
			STY II AWC: 299
			STY I WC: 19.0
			STY I AWC: 18.8
Inhalation Hazard (I)	Chemicals that if becoming airborne are toxic and can enter the body through the respiratory system causing harm	Benzene	STY II WC: 16.7
			STY II AWC: 122.5
			STY I WC: 85
			STY I AWC: 961
		Ethylbenzene	STY II WC: 387
			STY II AWC: 1840.8
			STY I WC: 56
			STY I AWC: 65
		Styrene	STY II WC: 108
			STY II AWC: 992.6
			STY I WC: 792.9
			STY I AWC: 849.4
			STY II WC: 778
			STY II AWC: 664.6

STY I: Styrene I  
 STY II: Styrene II  
 WC: Worst Case Scenario  
 AWC: Alternative Worst Case Scenario  
 SDS are available upon request.

Note: If a substance is associated with multiple hazard characteristics that could impact the environment and / or human life and health, the site modeled scenarios for various hazard classifications. Modelling of explosive scenarios for styrene resulted in no impact distances beyond site boundaries.

## What does INEOS Styrolution do to keep me safe?

INEOS Styrolution uses a variety of procedures and equipment to prevent accidental releases including the following:

- Designs that meet or exceed industry standards.
- Storage vessels are diked to contain a spill.
- Safety controls including warning alarms, leak detectors, fire suppression systems are installed to provide multiple lines of defense.
- Regular equipment inspection, testing and maintenance ensure proper and safe operation.
- Written procedures for operation & maintenance of facilities and highly trained Operators & Maintenance workers.
- Full investigation is required for any releases that occur to prevent them from occurring again.
- Audits (inspections) are performed to ensure correct procedures are followed.
- INEOS Styrolution has trained personnel and equipment to respond immediate to an incident. Detailed emergency response plans are in place and practiced regularly. Third party response has firefighting foam for fire suppression if necessary.
- INEOS Styrolution utilizes a third party to assist with responding to onsite incidents.

BASES brings the resources of municipal and industrial responders together in any incident.

## How will I be notified?

All industries, including INEOS Styrolution, are connected to the Sarnia Police Communications Centre (911) by a dedicated Chemical Valley Emergency Coordinating Organization (BASES) radio link. If an incident may affect the community, you may be notified through:

- Community sirens
- News flashes on local radio stations
- My Community Notification Network (MyCNN) cell phone, telephone, email, and/or text message notifications
- Loudspeaker announcements or other direct warnings by authorities – police or fire fighters

## Shelter in Place

INEOS Styrolution is a proud member of BASES and takes the safety of the community very seriously. If there is an incident resulting in a chemical release on site, the community will receive a notification and a shelter in place may be ordered. The following are the steps to take if a shelter in place order is given:

- Close and lock all windows and exterior doors (locking doors and windows may help them seal better)
- Turn off all heating and air conditioning systems that draw air from the outside (keep the outside air out, and the inside air in)
- Use duct or other wide tape to seal cracks around doors and any other vents into the room
- Close fireplace dampers, if applicable
- Get your emergency supplies kit, make sure the radio is working and keep it on to obtain information and instructions
- Go to an interior room that is above ground level (preferably, one without windows)
- Listen to instructions given over the radio – CHOK 1070 AM/ 103.9 FM. Monitor your radio until you are told all is safe, or you are advised to evacuate.
- Do not forget to bring pets indoors too

For more information on the Shelter in Place procedure and BASES, please visit the following link below.

[Community Awareness \(CA\) - BASES Website \(lambtonbases.ca\)](http://lambtonbases.ca)

In the event of an emergency, the BASES  
hotline phone number is:

**226-778-4611**