

**ENVIRONMENTAL  
FRIENDLY  
INJECTION  
PRODUCTS**



# SAFETY IS OUR PRIORITY

## WITH SAFETY WE:

- > Foster a safe, healthy and inspiring work environment for our employees and partners
- > Support the safety and environmental expectations of our customers and stake holders



# ZERO HARM SHARE



## Health

Ensure physical and mental well-being of everyone and maintain a healthy work-life balance.



## Safety

A safe and inspiring working environment for everyone.



## Quality

Our strength comes from knowing our customer's work environment, from our products' technical and economic efficiency, and from strong focus on safety, work hygiene and ergonomics.



## Environment

Developing our product and offering in a sustainable way. Working with customer to improve their productivity whilst minimizing waste and environmental impact.

# INJECTION PRODUCTS ENVIRONMENTAL CAMPAIGN

## NORMET ENVIRONMENTALLY FRIENDLY INJECTION PRODUCTS

- > Phthalate-free
- > TDI-free
- > Acrylamide-free
- > Unregulated transport (no DG)
- > Impact on groundwater / drinking water
- > ISO certification 14001 - International standard for an Effective Environmental Management system (EMS)
- > ISO certification 9001
- > CE-marking
- > REACH compliant / ready



# INJECTION PRODUCTS PHTHALATE-FREE

## What are Phthalates?

Phthalates are man-made chemical “plasticizers”, meaning they’re used to soften plastics and make them more flexible and durable. Another prime use of phthalates is to help dissolve ingredients into a solution.

Some types of phthalates have been labeled as “endocrine disruptors.” These impact the natural hormones that help our bodies grow and reproduce, leading to a slew of nasty side effects, including lower fertility and higher risk of some cancers. Phthalates have also been suspected to cause developmental issues, obesity, and even asthma.

It’s important to note that there are some regulations on phthalate use, particularly regarding products for young children. In addition to the health impacts of phthalates, these chemicals also pose risks to the environment. If chemical plasticizers can break down and enter your body, it’s not that far off to assume they could harm the bodies of other animals and marine life that encounter it.

## NORMET Phthalate-free

The new formulation of our 1&2-Component PUs are designed to be phthalate-free. Advantages as follows:

- > Completely phthalate-free formulations, so no phthalates will be washed out when injected into groundwater or drinking water
- > When people encounter contact with material, they will not come in contact with any phthalates (even when PPE is used contact can not be completely avoided)
- > Using Normet polyurethanes will avoid that any phthalates will enter the environment and harm current or upcoming generations



# INJECTION PRODUCTS

## MDI BASED AND TDI-FREE

### NORMET TDI-free

Exposure to TDI (Tolulene diisocyanates) and related compounds is well known to result in skin and lung sensitization among workers and has been documented to cause asthma and lung damage.

Whilst the majority of polyurethane products containing TDI, and related compounds, undergo "curing" (hardening) to form less hazardous prepolymers, there is still exposure risks for applicators to the residual TDI in the liquid form.

TDI is banned in some European countries already because of the well-known health issues and maybe banned in other regions in the future.



# INJECTION PRODUCTS

## ACRYLAMIDE-FREE

### NORMET Acrylamide-free

All Normet Acrylate grades are Acrylamide-free!

Acrylamide and Cancer: Tunnel Leak in Sweden Prompted Studies

<https://academic.oup.com/jnci/article/94/12/876/2519770>

Some studies have linked high levels of acrylamide to cancer in animals and neurological damage in humans. Despite uncertainties over acrylamide's actual health effects at the levels found in food, there is heightened public awareness about this compound.

Scientists have known for years that acrylamide can cause nerve damage in humans, including muscle weakness and impaired muscle coordination, particularly from industrial exposure to large levels of the chemical. Now, new laboratory studies suggest that chronic dietary exposure to the chemical is capable of damaging nerve cells in the brain and could potentially play a role in the development of neurodegenerative disease, including Alzheimer's.



# INJECTION PRODUCTS

## UNREGULATED TRANSPORT (NO DG)

### NORMET Unregulated Transport (no DG)

#### DEFINITION NON-DG TRANSPORT:

Transport in which a substance or material is not classed as dangerous goods.

#### DEFINITION DG TRANSPORT:

The purpose of the Transportation of Dangerous Goods is to promote safety in handling, offering for transport and transporting of dangerous goods.

Dangerous goods are divided into 9 classes according to the type of hazard they present. Some of these are divided into divisions due to the nature and characteristic of the substances. In addition to the class and division, some dangerous goods are also assigned in packing groups. These groups reflect the level of hazard that dangerous goods represent. All parties have different responsibilities but as summary it is more complicated,



# INJECTION PRODUCTS

## IMPACT ON GROUNDWATER/ DRINKING WATER

### NORMET Impact on groundwater/drinking water

As our material come in touch with groundwater and/or even drinking water it is important to proof that the materials have no dangerous impact on the water and has a suitable quality and standard.

Products must comply with the requirements regarding odor & flavor of water, growth of aquatic microorganisms, extraction of metals and other criteria that can influence the water quality.



# INJECTION PRODUCTS

## CE-MARKING

### NORMET CE-Marking

The letters 'CE' appear on many products traded on the extended single market in the European Economic Area (EEA). They signify that products sold in the EEA have been assessed to meet high safety, health, and environmental protection requirements.

By affixing the CE marking to a product, a manufacturer declares that the product meets all the legal requirements for CE marking and can be sold throughout the EEA. This also applies to products made in other countries that are sold in the EEA or to CE marked products sold out of the EEA.

There are two main benefits CE marking brings to businesses and consumers within the EEA or elsewhere:

- > Businesses know that products bearing the CE marking can be traded in the EEA without restrictions
- > Consumers enjoy the same level of health, safety, and environmental protection throughout the entire EEA or elsewhere



# INJECTION PRODUCTS

## REACH COMPLIANT / READY

### NORMET REACH Compliant / Ready

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) is a European Union regulation dating from 18 December 2006. REACH addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.

REACH Certificate of Compliance is a document certifying that a product is compliant with the EU REACH regulation (EC) No 1907/2006. It can be a testing report or statement issued by a third-party testing organization. It could also be a self-declaration.

To comply with the regulation, companies must identify and manage the risks linked to the substances they manufacture and market in the EU. They have to demonstrate to ECHA (European Chemicals Agency) how the substance can be safely used, and they must communicate the risk management measures to the users.



# INJECTION PRODUCTS

## ISO CERTIFICATION 14001

### NORMET ISO Certification 14001

International standard for an **Effective Environmental Management system (EMS)**.

It helps organizations improve their environmental performance through more efficient use of resources and reduction of waste, reduce of carbon dioxide emissions, gaining a competitive advantage and the trust of stakeholders.

The application of ISO 14001 is not a legal obligation and like all standards set by ISO, adopting it is voluntary. The basic principle of ISO norms is the search for continuous improvement, in successive cycles, according to the four-step process:

- > Plan
- > Do
- > Study / Check
- > Act



# INJECTION PRODUCTS

## ISO CERTIFICATION 9001

### NORMET ISO Certification 9001

ISO 9001 is defined as the international standard that specifies requirements for a quality management system (QMS). Organizations use the standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements.

ISO 9001:2015 standard is based on the following seven principles of quality management

- > Customer Focus
- > Leadership
- > Engagement of People
- > Process Approach
- > Improvement
- > Evidence-based Decision Making
- > Relationship Management

