



www.thor.com

The Thor Group



- Multinational speciality chemical manufacturers and suppliers
- Private company founded in 1959
- Three business units
- Group annual turnover:
 €400 million
- Number of employees: 1350



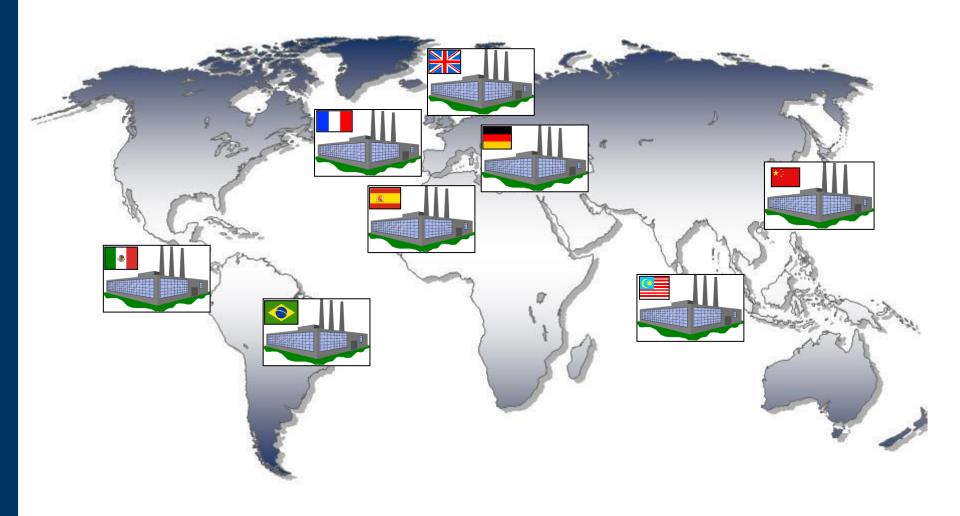
Sales and Technical Service Facilities





Production Sites





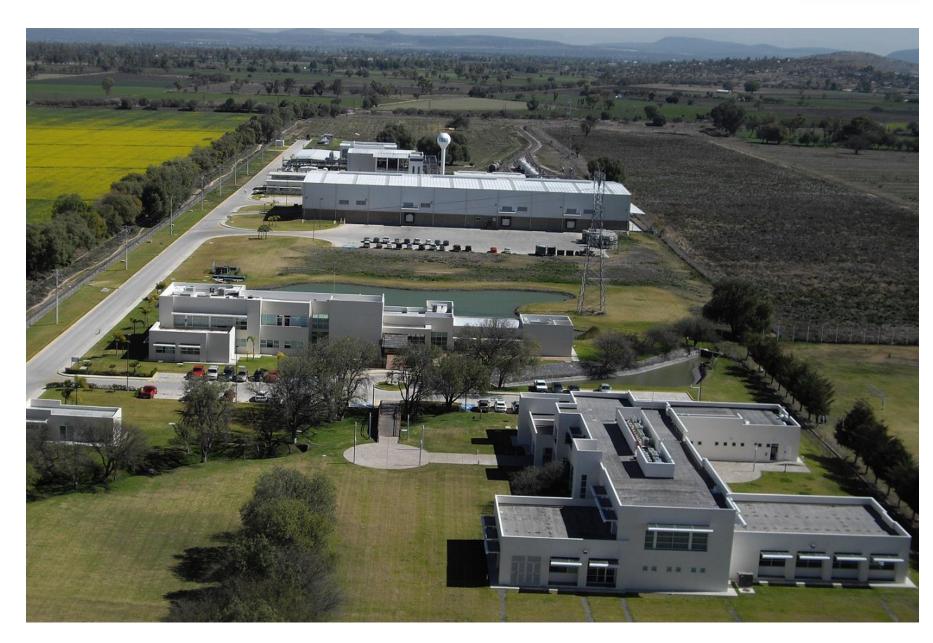
Germany, Speyer





Mexico, Querétaro





China, Zhenjiang





Operational 2015

Business Units



Industrial Biocides
ACTICIDE®

Flame Retardants
 AFLAMMIT®

Personal Care
 Microcare®



ACTICIDE® Industrial Biocides





Leading manufacturer of biocides used to protect a wide range of products from spoilage by bacteria, fungi and algae

- Paints & plasters
- Detergents
- Polymer emulsions
- Construction chemicals
- Water treatment
- Metalworking fluids
- Pulp & paper
- Plastics

ACTICIDE® Industrial Biocides



Major Actives

Chloromethylisothiazolinone

Methylisothiazolinone

$$\begin{array}{c}
O\\
N-C_8H_{17}-n
\end{array}$$

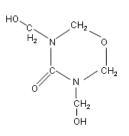
Octylisothiazolinone

$$\begin{array}{c|c} & O \\ \hline \\ CI & S \end{array} N-C_8H_{17}-n$$

Dichlorooctylisothiazolinone

Benzisothiazolinone

3-lodo-2-propynylbutylcarbamate



Formaldehyde donors



Silver

$$C_2H_5 \underset{H}{\bigvee} \begin{matrix} CH_3 \\ CH_3 \end{matrix}$$

Terbutryn

$$\begin{bmatrix} \mathsf{CH}_3 \\ \mathsf{H}_3\mathsf{C-}(\mathsf{CH}_2)\mathsf{n-N-C-} \\ \mathsf{CH}_3 \\ \mathsf{H}_2 \end{bmatrix} + \mathsf{CI}^-$$

Benzalkoniumchloride

Zinc pyrithione

Didecyl-dimethylammoniumchloride

ACTICIDE® Industrial Biocides





Performance Profile

- Research & Development
- Microbiology
- Analyses
- Plant Hygiene
- Thor IVT
- Regulatory Support & Quality Management

AFLAMMIT® Flame Retardants



Textile Applications

- Focus on environmentally preferred phosphorus based products
- Durable, semi-durable and non-durable finishes
- Application by impregnation, backcoating and reactive crosslinking techniques
- Specialist technical support

Domestic Applications

Nightwear Soft Furnishings Upholstery



Industrial Applications

Office, hotel, hospital furniture Aircraft, automobile interiors (fabrics & leather)
Work wear

AFLAMMIT® Flame Retardants



Plastic & Paint Applications

- Speciality FRs based on phosphorus and nitrogen chemistry
- Extensive toolbox for non-halogenated formulations
- Thermoplastics, thermosets and elastomers
- Fire Protection Systems



- Building/Construction
- Electric/Electronic
- Transportation

Microcare® Personal Care





Extensive range of products designed to meet the exacting standards demanded by this industry

- Microcare® Preservatives specially formulated for both leave on and rinse off formulations
- Microcare® Quats for hair conditioning
- Microcare® Silicone range of skin and hair ingredients

Microcare® Personal Care













- Dedicated Thor Personal Care facility at Compiègne, France
- Innovative ingredient solutions
- Enhanced safety assessments
- Global regulatory support
- Microbiological, analytical and formulatory testing capabilities
- Specialist application development laboratory
- THOR · IVT *in vitro* toxicology

Services



Regulatory Support

- Product registrations worldwide
- Generation of toxicological data
- Labelling and packaging regulations

Quality & Environmental Management Systems

- ISO 9001
- ISO 14001
- Laboratory Quality Accreditation







Corporate Social Responsibility





- The highest priority is placed on the health and safety of employees, customers and surrounding communities
- Thor is committed to developing products and processes with minimum environmental impact
- We employ comprehensive safety and environmental management systems





Thank you for your attention!