INDUSTRIAL COATINGS
SIKA INTERNAL LININGS FOR TANKS, VESSELS AND PIPEWORKS
INTENSIVLY TESTED AND PROVED FOR MORE THAN 30 YEARS
CHEMICALS OF ANY KIND can inflict significant damage of steel or concrete. Adequate corrosion protection is therefore indispensable. Our tried and tested epoxy coating systems are the solution for diluted, non-oxidizing acids and concentrated alkaline solutions (even up to pH 14) and a wide variety of chemicals. Our additional system based on vinyl ester offers safe protection for highly concentrated acids and oxidizing substances.

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>MAIN APPLICATION AREAS</th>
</tr>
</thead>
</table>
| Sika® Permacor®-2807 HS A     | Steel tanks and bulk containers for the storage of flammable liquids such as kerosene, petrol, heating oil, diesel, bio‐diesel  
|                               | For the storage of chemicals, oils, concentrated sodium / potassium hydroxide solution and heavily polluted industrial waste water (pH 2 – 14)                                                                                                                                       
|                               | Large special waste water treatment plants (e. g. bio‐tower reactors)  
|                               | Heavily loaded sludge digester  
|                               | Biogas plants  
|                               | Coating of old and highly eroded and pitted steel tanks – without extra laminate reinforcement                                                                                                                                                                                                                     |
| Sika® Permacor®-138 A         | Small to medium-sized containers for the storage of flammable liquids such as kerosene, petrol, heating oil, diesel, bio‐diesel  
|                               | Fire extinguishing water and emergency tanks  
|                               | Solvent waste container                                                                                                                                                                                                                                                                                                                                  |
| SikaCor®-299 Airless          | Municipal waste water  
|                               | Industrial waste water (pH 5 – 10)  
|                               | Coating of containers for the storage of chemicals, salts, weak acid and alkali mixtures (pH 5 – 10)  
|                               | Silo coating for dry foods  
|                               | Also for the coating of steel sheet piles in chemically polluted waters                                                                                                                                                                                                                     |
| SikaCor® VEL                  | Sealing of vats and rooms made of steel reinforced concrete in refineries and chemical production plants, galvanizing and pickling shops  
|                               | Sealing reinforced concrete receiving vats and chambers, indoors or outdoors, or for steel tanks for the storage of aggressive liquids (e. g. concentrated acids, leaches and solvents)                                                                                           
|                               | Suitable as a coating system to be driven on directly by vehicles with pneumatic tyres or with tyres of solid rubber, Vulkollan or polyamide, e. g. in electroplating works, pickling plants, and in plants where oxidising materials are manufactured, treated or used |
**DRINKING WATER**

**POTABLE WATER IS OUR MOST PRECIOUS FOODSTUFF.** It is often obtained from groundwater wells or pumped over long distances from sources and lakes through pipes to our cities. In all of these transport and storage processes, the highest priority is to keep the potable water pure. Our coatings on steel or concrete substrates offer you the certainty of being able to meet these demands.

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>MAIN APPLICATION AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sika® Permacor®-136 TW</td>
<td>- Corrosion protection of surfaces such as steel, stainless steel and aluminium, and for the protection of mineral surfaces made of concrete and cement plaster in direct contact with media&lt;br&gt;- Tanks, silos, containers, pipes (nominal diameter &gt; 300 mm) and equipment used in water supply schemes as well as in the food and beverage industry</td>
</tr>
<tr>
<td></td>
<td><strong>Sika Cor®-146 DW</strong>&lt;br&gt;2-pack epoxy resin coating for steel and concrete with 100% volume solids, fast curing</td>
</tr>
<tr>
<td></td>
<td>- Corrosion protection of surfaces such as steel, stainless steel and aluminium, and for the protection of mineral surfaces made of concrete and cement plaster in direct contact with media&lt;br&gt;- Tanks, silos, containers, pipes (nominal diameter &gt; 300 mm) and equipment used in water supply schemes as well as in the food and beverage industry&lt;br&gt;- Fast curing and can be walked on at an early stage</td>
</tr>
<tr>
<td>Sika® Permacor®-2807 HS</td>
<td>- Corrosion protection of surfaces such as steel, stainless steel and aluminium, and for the protection of mineral surfaces made of concrete and cement plaster in direct contact with media&lt;br&gt;- Big volume tanks, pipes (nominal diameter &gt; 300 mm) and equipment used in water supply schemes as well as in the food and beverage industry</td>
</tr>
<tr>
<td>Icosit TS-687</td>
<td>- Heavy-duty protection of hydraulic steel structures, buried pipes and tanks, fittings and filter tanks in water treatment, water supply schemes, chemical industry filter vessels and fittings</td>
</tr>
</tbody>
</table>
**WASTE WATER**

**WASTE WATER OF DIFFERENT ORIGINS AND COMPOSITIONS** damages the surfaces of concrete and steel. The evaluation of the long-term durability of coating materials is based here on years of practical experience and the correct estimate of the aggressiveness of the storage media.

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>MAIN APPLICATION AREAS</th>
</tr>
</thead>
</table>
| **Sika® Permacor®-3326 EG H** | - Water with high salinity and waste water in the pH range of 3 – 12  
- Sludge digesters, biogas plants  
- Cooling water pipes  
- Fire extinguishing water tanks  
- Concrete tanks and manholes, pumping stations, etc.  
- Depending on requirements these can also be manufactured as a crack-bridging laminated coating structure |
| **SikaCor®-277**              | - Concrete, cement mortar and steel  
- Chemically aggressive media e. g. in sewage systems as wall coating.                                                                                  |
| **Sika® Poxitar® F**          | - Concrete and steel, as internal and external coating for buried and submerged structures, e. g. sewage systems, chemical industry etc.  
- Suitable where application onto damp concrete is inevitable                                                                                     |
**TANK AND CONTAINER INTERNAL LININGS**

**THE MOST DIVERSE FILLING** materials can be found in tanks and containers – flammable liquids, aggressive chemicals, waste water from industrial applications and communes and also materials from the food and potable water sector – which all have a major influence on the service life of the container due to their direct contact with the inside. Many storage media result in corrosion if they act continuously on the tank wall; in the worst case there is a danger of pitting corrosion and disaster.

**INTERNAL TANK LININGS**

In order to be able to meet the expected mechanical, thermal and chemical requirements, internal tank linings are almost indispensable. Our decades of experience in this field and our wide range of products give you the certainty of getting the right system solution for (almost) any requirements.

**PROPER PREPARATION IS THE BEGINNING**

The right product alone is not everything, though. Even when preparing the drafts for the construction of a container, experienced planners follow the rules of coating-compatible design and avoid “corners and edges”. The components are thus designed from the outset such that no corrosion-susceptible and difficult-to-coat areas are created. As a result, the subsequent coating work is less time-consuming and easier to calculate. Consequently, proper application of the coating materials is more than decisive, both externally and even more so with regard to the interior coating. Utmost care when preparing the surface – as a prerequisite for very good adhesion to the inside of the tank – and applying the coating materials ensures the success and a long-lasting corrosion protection.

Our product data sheets and processing guidelines provide you with important information and outline the boundary conditions for professional processing.

**SITE-SPECIFIC HIGH REGULATIONS**

The filling materials are often water-polluting substances and, in the interest of our habitat, must not be released uncontrolled into the environment. Therefore strict requirements have to be met wherever such substances play a role. For containers and pipes in fixed installations, this means that general building authority approvals are needed for their interior coating.

In Germany, for example, these approvals are issued by the German Institute of Building Technology (DIBt) according to the ‘approval principles for coating materials for the production of interior coatings of steel tanks for the storage of water-polluting liquids’.

**HOWEVER, TANKS AND CONTAINERS ALSO HAVE TO BE PROTECTED ON THE OUTSIDE**

Without durable and functional corrosion protection, many containers and pipes already look quite old after a few years in the outdoor area too, depending on the location. But it’s not just the appearance that deteriorates; the strength of the structure can also start to suffer. In the worst-case the only choice left is that between abandoning the structure or totally renovating it.

For many years this area has been governed by ISO 12944 ‘Corrosion protection of steel structures by protective paint systems’. Sika coating materials cover the full spectrum of corrosivity categories that are defined there. In our brochure ‘Corrosion Protection for Steel Structures’ we show you our coating suggestions according to ISO 12944 and its important parameters – e.g. classification according to the durability.
As a subsidiary of the globally operative Sika AG, Baar/Switzerland Sika Deutschland GmbH is one of the leading suppliers of building chemical product systems as well as sealants and adhesives for industrial manufacturing.