

Technical Data Sheet

ASODUR-CTR

2-component, solvent-free, moisture tolerant, non-carcinogenic, pitch-free epoxy protective coating for concrete, steel and masonry

Product Description:

ASODUR-CTR is a 2-component, epoxy resin-based, solvent-free, moisture-tolerant, non-carcinogenic, environmentally friendly alternative to traditional hazardous coal tar-epoxy coating. Once cured, ASODUR-CTR will provide a chemical resistant, flexible, glossy & smooth film able to protect concrete and steel substrates against aggressive media without supporting the growth of bacteria & fungi. ASODUR-CTR is available in any RAL shade upon request.

Primary Uses:

ASODUR-CTR is typically used in:

- Sewage water plants.
- Lining of steel and concrete tanks.
- Offshore and marine environments.
- Waterproofing of foundations and basements.
- Manhole and pipe linings.
- Reservoirs and water treatment plants.
- Walls and floor protective coatings.
- Sea water tanks and channels.

Advantages:

- Easily applied by brush, roller or airless spray.
- Low VOC, odourless, environmentally friendly.
- Non-carcinogenic and non-hazardous.
- Seamless and impermeable.
- Excellent corrosion resistance.
- Excellent resistance to water and salt water (sea water).
- Does not support bacterial growth.
- Excellent adhesion to old and/or new concrete & masonry substrates even if damp.
- High chemical resistance to most common chemical reagents.
- Good flexibility.
- Good impact resistance.

Standards:

ASODUR-CTR is formulated to comply with EN 1504: "Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 2: Surface protection systems for concrete".

Typical Properties:

Appearance: Grey liquid
 Specific gravity: 1.40 ± 0.05 at 20 °C
 Solids content: 100 % by weight
 Application temperature: 0 – 45 °C
 Minimum time between coats: 8 hours at 25 °C
 Pot-life: 70 mins at 25 °C
 Full cure: 7 days at 25 °C
 Bond strength: 4 N/mm²
 Water Absorption (%): 0.15 %
 Chemical Resistance: ASODUR-CTR has been tested for chemical resistance to a comprehensive range of industrial & domestic chemicals. After constant immersion for 90 days at 35 °C in accordance with ASTM D-2240 (Shore D hardness), the results are:

Acids

Hydrochloric 50 %	Excellent
Sulfuric 50 %	Excellent
Nitric 25 %	Good
Acetic 10 %	Excellent
Lactic 10 %	Excellent
Citric 10 %	Excellent

Alkalis

Sodium hydroxide 50 %	Excellent
Sodium Carbonate 50 %	Excellent
Ammonia 10 %	Excellent
Potassium Hydroxide 50 %	Excellent
Sodium Hypochlorite 15 %	Excellent

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Solvents & Oils

Ethanol	Excellent
Ethyl Glycol	Excellent
White spirit	Excellent
Petrol & Diesel Oil	Excellent
Coconut oil	Excellent
Cotton Seed Oil	Excellent
Soya Bean Oil	Excellent
Silicates	Excellent
Soya Bean Oil	Excellent
Vegetable Oil	Excellent
Detergent	Excellent
Fat	Excellent
Milk	Excellent
Pine Oil	Excellent
Linseed Oil	Excellent
Water	Excellent

Discolouration may occur when ASODUR-CTR is exposed to the above mentioned reagents.

For other/specific chemical reagents, please ask for technical support.

Consumption:

The following table may be used as a guideline based on a theoretically smooth, flat, well primed surface:

Wet film thickness (µm)	Dry film thickness (µm)	Consumption kg/m ²
175	175	0.25
200	200	0.29
300	300	0.435

Actual consumption is influenced by surface condition, ambient temperature and application method. Always allow for realistic wastage. Trial areas to determine exact consumption at a specified thickness is always recommended.

Application Guide

Surface Preparation:

All surfaces must be sound, clean and free from dust, grease & oils, curing agents, mould release agents and other contaminations adversely affecting bond with the substrate.

Steel or metal surfaces should be free from rust or scale in accordance with SA 2&½ (white metal finish). All adhesion preventing contaminants should be fully removed prior to application of ASODUR-CTR or INDUFLOOR-IB1280 where necessary (please refer to "Priming").

Priming:

Primer is not necessary if the substrate is well prepared. Always conduct a test area & check the adhesion prior to commencing with the works. If there is a need to prime the surface, use INDUFLOOR-IB1280 (refer to relevant data sheet)

Mixing:

Stir Component A well before mixing. Pour the entire contents of Component B into the Component A container and mix well until a uniform consistent colour is achieved.

Application:

Apply the mixed materials of ASODUR-CTR onto the well prepared substrate using a suitable brush or roller. Airless spray method may be used for large areas. Apply the second coat at least 8 hours at 25 °C after application of the first coat. It is recommended to use two contrasting colours for two coat applications.

Packaging:

ASODUR-CTR is supplied in 6 kg packs.

Storage & Shelf-life:

Both components have a shelf life of 12 months, when original, unopened containers are stored in a dry, well ventilated warehouse away from moisture, direct sunlight, extreme temperatures (keep above 6 °C & below 35 °C) on pallets, elevated from the floor.

ASODUR-CTR

Cleaning:

Clean tools, equipment after work immediately with INDU-B Cleaner.

Health and Safety:

- ASODUR-CTR is non-toxic, non-hazardous during handling, storage, use and transportation.
- Do not dispose of components A & B or any unhardened material into water sources or onto soil. Expired or out of pot-life material should be disposed of in accordance with local environmental regulations.
- Splashes on skin can be washed with soap and clean water.
- For more details about safety requirements, please refer to valid MSDS!