



# Chemizorb<sup>®</sup>

Absorbents for spilled liquids



Mishaps and accidents happen. With Chemizorb<sup>®</sup>, however, you can remove spilled aggressive or other unpleasant liquids quickly and safely.

Chemizorb<sup>®</sup> consists of porous mineral or synthetic copolymers that are chemically inert and, depending on the type, are capable of taking up 100 to 400 percent of their own weight in liquid material.

Merck now offers you specific absorbent materials for each problem:

- the »allrounders«, Chemizorb<sup>®</sup> powder and granules,
- the »specialists«, Chemizorb<sup>®</sup> Alkalis, Acid, Hydrofluoric Acid, and also
- the »all-in-one« Chemizorb<sup>®</sup> Mercury set.

## Handling

All Chemizorb® products are handled in much the same way:

- Spilled liquids are covered with a sufficient amount of absorbent and, wherever necessary, mixed using a spatula, spoon, or small shovel.
- Wait until the neutralization and absorption processes are complete.
- After the absorbent has been collected, the contaminated surface is cleaned thoroughly with plenty of water.

A specific set of instructions for use is given on the label of each respective product package.

## Disposal

The contaminated material – Chemizorb® and absorbed chemicals – is collected in a polyethylene bag and forwarded for disposal in accordance with the company regulations and national guidelines for the hazardous products in question.



## The »allrounders«

### Chemizorb® powder

Chemizorb® powder is insoluble in water and in all other media that are liquid at room temperature. The powder is characterized by an extremely high absorbance capacity. Due to its large surface area, it is capable of absorbing two to four times its own weight in aqueous solutions and one to two times its weight in organic solvents and viscous oils.



### Chemizorb® powder

Product designation	Quantity	Packaging	Order No.
Chemizorb® powder	500 g	Bottle	1.02051.0500
	25 kg	Carton	1.02051.9025

### Chemizorb® granules

Chemizorb® granules are insoluble in water and in all other media that are liquid at room temperature. The granules possess a slightly lower absorbance capacity than the powder: due to its rough granular form, it can absorb only up to 100 percent of its own weight; on the other hand, however, it is much easier to dose. The granule form is used in all those places where it is not suitable to use the powder form, for example in draughty rooms or outside. Just like the powder, the granules are suited for absorbing alkalis, acids, or also heating-bath liquids.



### Chemizorb® granules

Product designation	Quantity	Packaging	Order No.
Chemizorb® granules	1 kg	Bottle	1.01568.1000
	5 kg	Bucket	1.01568.5000
	20 kg	Paper sack	1.01568.9020
	20 kg	PE drum	1.01568.9021



## The »specialists«

The absorbents for alkalis, acids, and hydrofluoric acid contain, in addition to the carrier material itself, also water-soluble neutralizers and pH indicators. The admixed pH indicators make it possible to keep track of the process of neutralization of the spilled acid or alkalis. It should be borne in mind that the neutralization reaction may involve the generation of heat and gas.

### Chemizorb® Alkalis

Chemizorb® Alkalis is a powder mixture that consists of a mineral copolymer as the absorbent, an acidic salt as the neutralizer, and a pH indicator.

Upon contact with the alkalis the absorbent first turns blue in colour.

After neutralization is complete, the blue colour becomes paler.

About 100 to 120 g of Chemizorb® OH<sup>-</sup> is required to absorb and neutralize 100 ml of alkalis.

#### Chemizorb® OH<sup>-</sup>

Product designation	Quantity	Packaging	Order No.
Chemizorb® OH <sup>-</sup>	1 kg	Bottle	1.01596.1000



### Chemizorb® Acid

Chemizorb® Acid is a granulate mixture that consists of a mineral copolymer as the absorbent, an alkaline neutralizer, and a pH indicator.

The neutralization process results in the release of CO<sub>2</sub>. When the acid has been neutralized, the colour of the indicator changes from red to orange/yellow.

About 350 to 400 g of Chemizorb® H<sup>+</sup> is required to absorb and neutralize 100 ml of acid.

#### Chemizorb® H<sup>+</sup>

Product designation	Quantity	Packaging	Order No.
Chemizorb® H <sup>+</sup>	2 kg	Bottle	1.01595.2000
	10 kg	Bucket	1.01595.9010



### Chemizorb® Hydrofluoric Acid

Chemizorb® Hydrofluoric Acid is a powder mixture consisting of a synthetic copolymer as the absorbent, calcium salt as a neutralizer and precipitant, and a pH indicator.

The neutralization process results in the release of CO<sub>2</sub>. When the hydrofluoric acid has been neutralized, the colour of the indicator changes from red to orange/yellow.

About 150 g of Chemizorb® HF is required to absorb and neutralize 100 ml of hydrofluoric acid.

### Chemizorb® HF

Product designation	Quantity	Packaging	Order No.
Chemizorb® HF	1 kg	Bottle	1.01591.1000



## The »all-in-one« set for mercury

### Chemizorb® Mercury

Chemizorb® Mercury is an all-inclusive set of reagents and auxiliaries for the safe and complete removal of drops of mercury and of traces of elementary mercury. The reagents included in the set are sufficient for the safe and simple decontamination of an area of roughly one square meter.

#### Mode of use

- Any droplets of mercury are first suctioned off using the pipette.
- The contents of the pipette are then emptied into the mercury bottle.
- Any remaining mercury is then strewed with a layer of reagent 1.
- The covered area is then sprayed with reagent 2.
- After a reaction time of 15 to 30 minutes the mercury-containing absorbent is removed from the surface and put into a small tub using a small shovel and a spatula.
- Any remaining material can subsequently be simply cleaned away with a wipe.
- Afterwards all tools and working materials are stored safely in the large can.
- The mercury-containing waste material must be disposed of as special waste in accordance with the official regulations.

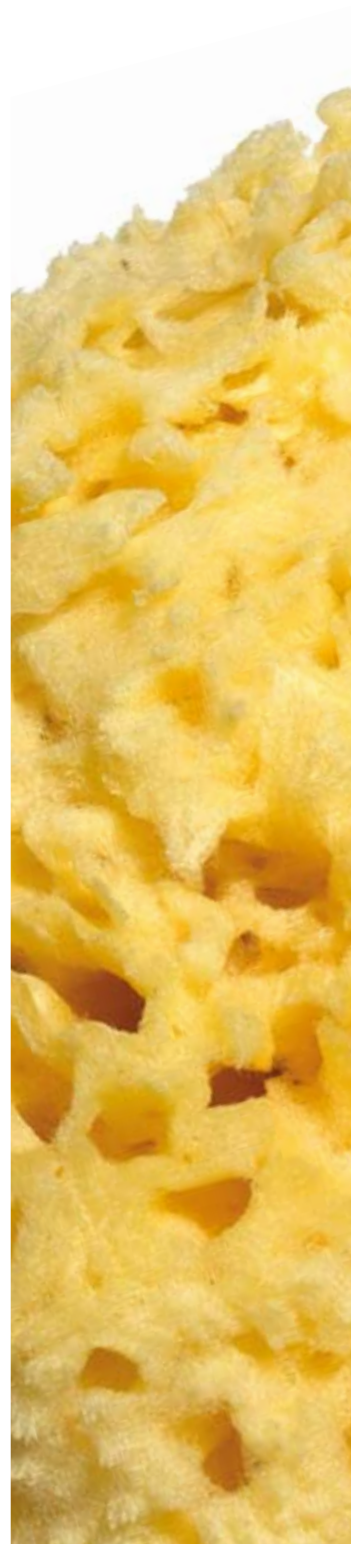
### Chemizorb® Hg

Product designation	Contents	Order No.
Chemizorb® Hg	1 set consisting of 500 g of reagent 1, 100 ml of reagent 2, one small tub, one large disposal can, protective gloves, ...	1.12576.0001
Chemizorb® Hg reagent refill pack	500 g reagent 1, 100 ml reagent 2	1.01569.0001



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