




LUDWIG  
SCHNEIDER



ACCUSAFE  
INSTRUCTIONS  
FOR USE



# ACCU-SAFE: 100 % PRECISION 0 % MERCURY

## ECO-FRIENDLY, HEALTH-FRIENDLY AND HIGH-PRECISION LABORATORY THERMOMETERS

With **ACCU-SAFE** thermometers from Ludwig Schneider you measure precisely and reliably **WITHOUT MERCURY** from the very start.

### THE ADVANTAGES FOR MANKIND & ENVIRONMENT:

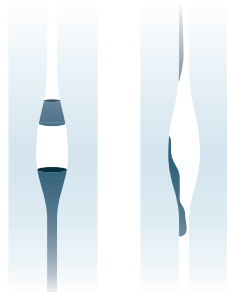
- + Eco-friendly
- + Non-toxic
- + Harmless
- + Simple cleaning  
(for example a spill after glass breakage)
- + Suitable for most laboratory thermometers



If our ACCU-SAFE products are handled improperly, it is possible that the indicator column is interrupted or that a colour film in the capillary occurs.

## SITUATION

- + Interruption of the indicator column
- + Blue colour film in the indicator column



**THIS IS NOT A PRODUCTION FAULT, BUT  
RATHER A PURELY PHYSICAL PHENOMENON!**

## CAUSES

- + Impacts during transportation
- + Incorrect or very long storage
- + Improper handling

**NOTE:**  
ACCU-SAFE thermometers should be stored upright.



### NOTE:

ACCU-SAFE thermometers should be handled free of impacts as far as possible.

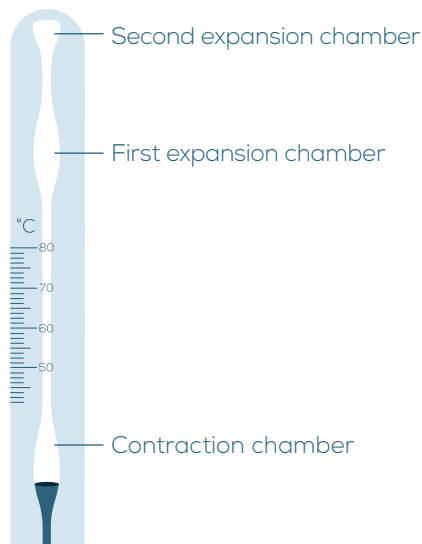



### NOTE:

The thermometer should not be used outside its measuring range.

You can eliminate the two phenomena described on the left relatively easily by yourself. Replacement is therefore not necessary.

## DEFINITION OF TERMS





## How to merge the interrupted indicator column when the liquid is located IN THE CONTRACTION CHAMBER

Here you  
can see the  
procedure  
as a film

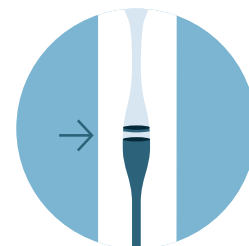


1. Heat up your thermometer at the bottom receptacle (for example with a lighter).
2. The indicator liquid must be pushed up carefully **to the middle of the first expansion chamber** in the process.




**NOTE:** Do not exceed this marking under any circumstances!

3. Now tap lightly on the thermometer with your finger at the height of the first expansion chamber.



4. The liquid should now have merged again.
5. Repeat the procedure if necessary.



## How to merge the interrupted indicator column when the liquid is located ABOVE THE FIRST EXPANSION CHAMBER

Here you can see the procedure as a film



1. Heat up your thermometer at the second expansion chamber (for example with a lighter).

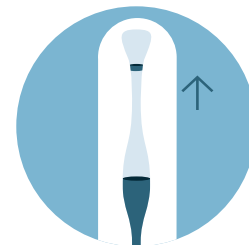


**CAUTION: DO NOT EXCEED 200 °C!**



**NOTE:** This pushes the liquid downwards (into the cooler area).

2. The indicator liquid must be pushed to about the beginning of the second expansion chamber in the process.



3. Now please heat the thermometer at the bottom receptacle so that the filling liquid is pushed up again.
4. The liquid should now have merged again.



**NOTE:** Residues of the liquid may not remain above the chamber.

5. Repeat the procedure if necessary.



**NOTE:** Let the column cool down slowly in the case of thermometers with very narrow capillary openings!



## How to eliminate a BLUE COLOUR FILM in the capillary

1. Heat up the capillaries at the point where the colour film is located (for example with a lighter).
- ! **CAUTION: DO NOT EXCEED 200 °C!**
2. Push the liquid column past the heated point.
3. Subsequently let the liquid column cool down slowly.
4. Repeat the procedure if necessary.

! **GENERAL NOTE:**  
Draw special attention to thermometers with zero point. Please ensure that the column **cools down slowly** to avoid separation of the liquid.

! **IMPORTANT:**  
The blue ACCU-SAFE liquid is **non-toxic and eco-friendly**. Should the thermometer break and emit the liquid, the liquid can **simply be wiped up with a moist cloth** and disposed of in the normal waste disposal.



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