

# Product information

## Solarliquid L gebrauchsfertig

**Eco-friendly, ready to use long-term anti-freeze with corrosion inhibitors for thermal solar systems (Flat and vacuum tube collectors)**

### Product data:

Look:	violet-colored liquid	
Base:	1,2-Propanediol ; Mono Propylene Glykol	
Flashpoint (°C):	> 100	(ASTM-D 51758)
Boiling point (°C):	> 103	(ASTM-D 1120)
Density (20°C)	1,035 - 1,045 g/cm <sup>3</sup>	(DIN 51757)
Refractive index nD20:	1,442 - 1,447	
Frost protection:	to -28°C	
Thermal conductivity (20°C):	ca. 0,40 W/m*K	
pH-value specification (20°C):	ca. 8,0	(ASTM-D 1287)
Viscosity (20°C)	ca. 5,8 mm <sup>2</sup> /s	

### Product features:

**SOLARLIQUID L gebrauchsfertig** is an odorless liquid on the basis of mono propylene glycol, which is used in thermal solar systems as a coolant or heat transfer fluid. The special corrosion inhibitors protect the commonly used metals and plastic materials- including copper and aluminium- from corrosion, film formation and deposition. This ensures the efficiency of the plant and equipment. Sealing materials are not corroded by Solarliquid L gebrauchsfertig.

### **SOLARLIQUID L gebrauchsfertig**

- is only partially miscible with antifreeze fluids based on propylene glycol.
- Is free of nitrit, secondary amine, phosphate and borate.

### **General information:**

It is important to ensure that the circulation pump is adapted for use with antifreeze liquid.

The system should be flushed with water after compression test and all connections checked for leaks.

The system should be filled immediately after compression test with Solarliquid L gebrauchsfertig . No air fill!

Galvanized plant parts should be eliminated, e.g. zinc is inconsistent to glycols.

According to our operation experience, Solarliquid L gebrauchsfertig can be stored for several years.

If case of losses do not refill with water. For refill use Solarliquid L gebrauchsfertig only.

### **Corrosion and erosion rates in g/m<sup>2</sup> (nach ASTM D 1384):**

Aluminium:	- 0,2
Soft Solder:	1,0
Brass:	1,0
Copper:	0,8
Steele:	0,1
Cast Iron:	- 0,4

### **Applications:**

The optimum temperature for use is between -30°C and 170°C. At continuous temperatures above 170°C we recommend to install large enough reservoir to allow the heat transfer fluid flowing from the collectors.

At temperatures above 200°C a slow chemical change of the heat transfer fluid takes place, which can jeopardize the reliability of the system.

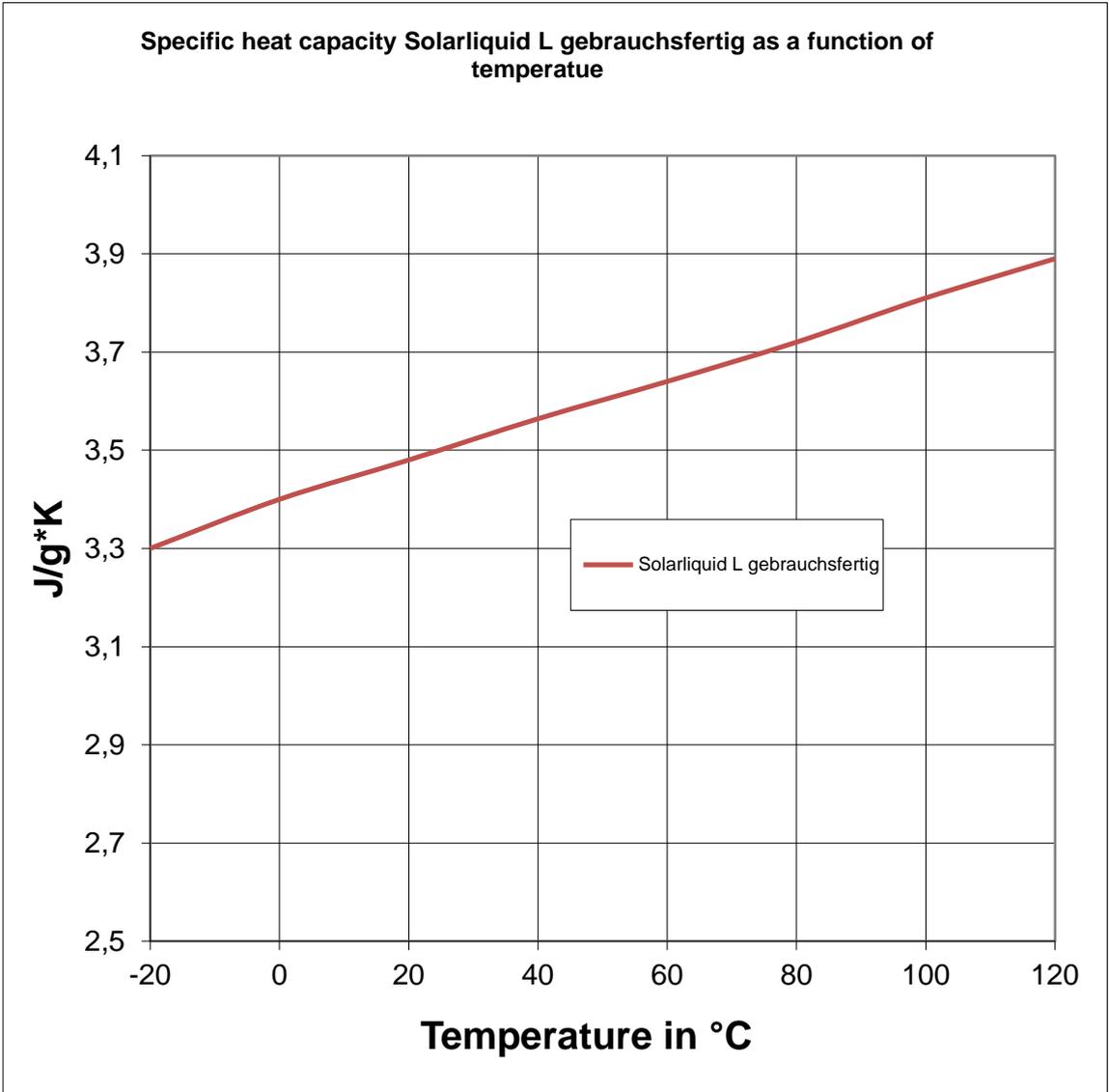
### **Test method of corrosion properties:**

The corrosion properties of our solar fluid are checked by the pH-value. The pH should be >7,5. The pH can be checked by pH-paper. At a lower value, the solar fluid should be replaced.

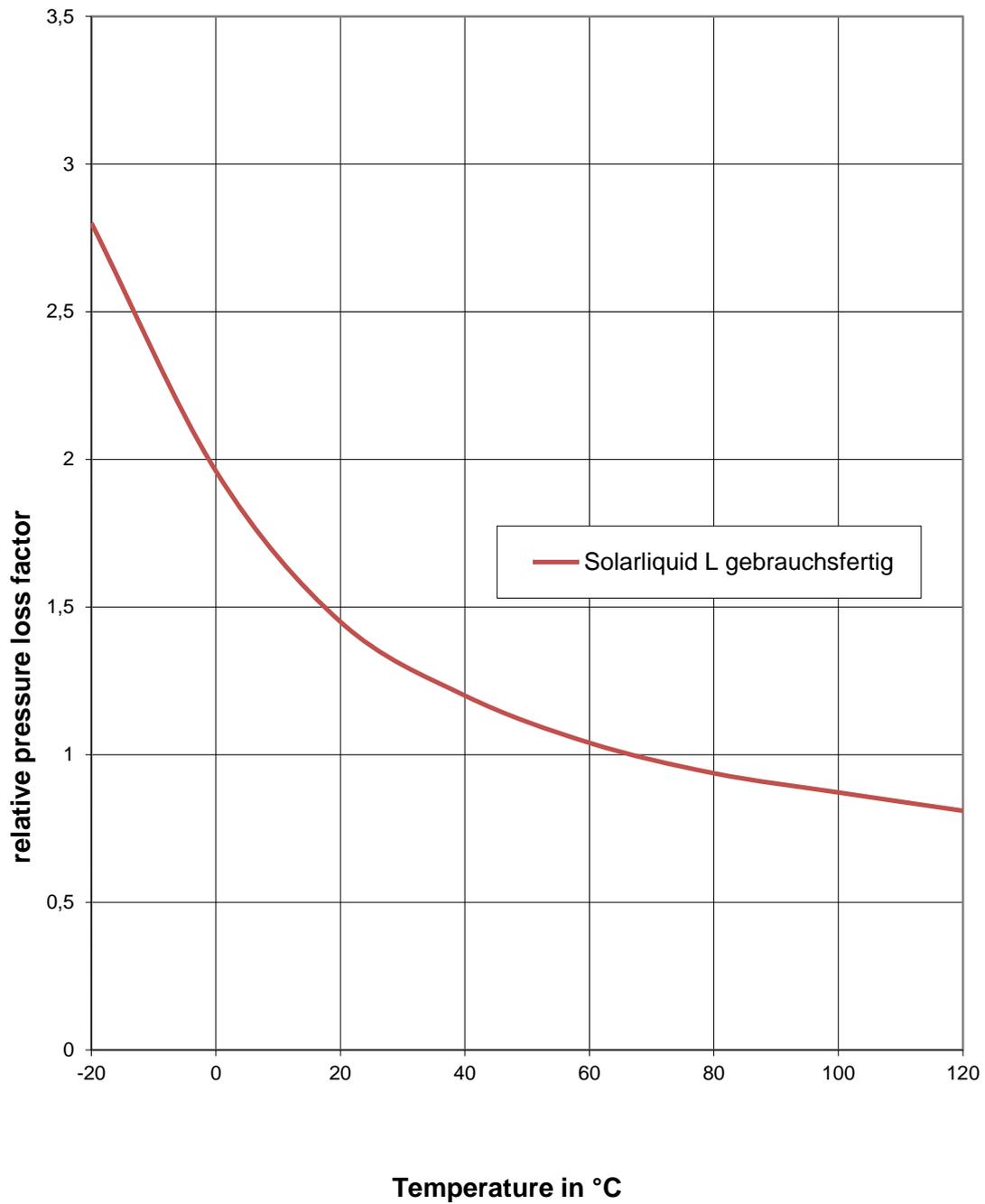
Solarliquid L Konzentrat and Solarliquid L gebrauchsfertig are not hazardous according to Regulation EG 1272/2008 (see safety data sheet).

The product information contained in the safety data sheet and application-related information are based on our technical experience. The specifications/ figures are not firm commitments of certain properties. Produkt application for any particular purpose requires prior examination.

This product information does not release the customer from the obligation to incoming inspection in accordance with HGB 377/378.



**Relative pressure of Solarliquid L gebrauchsfertig in the temperature-dependence**



### Kinematic viscosity Solarliquid L gebrauchsfertig

