



## STATEMENT *Chemical Resistance*

Our SPITA ResQ-tapes and all the derived private label products have a good resistance to many chemicals, fluids and oil products.

**Dilute Acids, Alkalis and Aquods Salt Solutions:** whether hot or cold have a negligible effect on silicones.

**Concentrated Acids and Alkalis:** silicones are attacked by concentrated acids and alkalis, especially oxidizing acids such as sulfuric acid.

**Polar Liquids:** short chain alcohols and acetone cause very little swelling and can be used in appropriate applications.

**Nonpolar Liquids:** linear or cyclic hydrocarbons, aliphatic or aromatic mineral oils, gasoline etc. cause severe swelling. They can only be used to a very limited extent.

The table below lists effect of various chemicals on SPITA ResQ-tape when fully immersed for 336 hrs. at room temperature and 49° C.

<i>Immersion Liquid</i>	<i>Exposure Time</i>	<i>Room Temp.</i>	<i>49° C</i>
Acetic Acid 5%	336 hrs.	No Effect	No Effect
Acetic Acid 10%	336 hrs.	No Effect	No Effect
Acetic Acid 20%	336 hrs.	No Effect	No Effect
Acetic Acid Concentrated	336 hrs.	No Effect	Slight Cracking
Acetone	336 hrs.	Slight Discoloration	Slight Discoloration
Ammonium Hydroxide 10%	336 hrs.	No Effect	No Effect
Ammonium Hydroxide Concentrated	336 hrs.	Very Slight Discoloration	Very Slight Discoloration
Aviation Fuel	336 hrs.	Slight discoloration, severe swelling	Not Tested
Benzene	336 hrs.	Slight discoloration, severe swelling	Not Tested
Boric Acid	336 hrs.	No Effect	No Effect
20% Calcium Chloride in H <sub>2</sub> O	336 hrs.	No Effect	No Effect
Carbon Tetrachloride	336 hrs.	No Effect	No Effect
Diesel Fuel	336 hrs.	Slight discoloration, severe swelling	Not Tested
Distilled Water	336 hrs.	No Effect	No Effect
Ethylene Glycol	336 hrs.	No Effect	No Effect
Fatty Acids (Linseed Oil)	336 hrs.	Slight Discoloration, slight swelling	Slight Discoloration, slight swelling



<b>Immersion Liquid</b>	<b>Exposure Time</b>	<b>Room Temp.</b>	<b>49° C</b>
Formic Acid 5%	336 hrs.	No Effect	No Effect
Formic Acid 10%	336 hrs.	No Effect	No Effect
Gasoline	336 hrs.	Slight discoloration, severe swelling	Not Tested
Glycerin	336 hrs.	Discoloration	Not Tested
Hydraulic Fluid	336 hrs.	Slight discoloration, slight swelling	Not Tested
Hydrochloric Acid 5%	336 hrs.	No Effect	No Effect
Hydrochloric Acid 10%	336 hrs.	No Effect	No Effect
Hydrochloric Acid 20%	336 hrs.	Discoloration and slight surface cracking	Discoloration and slight surface cracking
Hydrochloric Acid Concentrated	336 hrs.	Discoloration and moderate surface cracking	Discoloration and moderate surface cracking
Hydrogen Peroxide 10%	336 hrs.	No Effect	No Effect
Kerosene	336 hrs.	Slight discoloration, moderate swelling	Not Tested
Methyl Alcohol	336 hrs.	No Effect	No Effect
Methyl Ethyl Ketone	336 hrs.	Slight discoloration, severe swelling	Not Tested
Methyl Isobutyl Ketone	336 hrs.	Slight discoloration, severe swelling	Not Tested
Mineral Spirits	336 hrs.	Slight discoloration, moderate swelling	Not Tested
Motor Oil	336 hrs.	Slight Discoloration	Slight Discoloration, softening
Nitric Acid 5%	336 hrs.	No Effect	No Effect
Nitric Acid 10%	336 hrs.	Slight discoloration, slightly increased pliability	Slight discoloration, slightly increased pliability
Phosphoric Acid 50%	336 hrs.	No Effect	No Effect
Potash Lye 20%	336 hrs.	No Effect	Slight distention, surface appearance altered slightly
Soda solution 20%	336 hrs.	No Effect	Slight distention, surface appearance altered slightly
20% Sodium Chloride in H <sub>2</sub> O	336 hrs.	No Effect	No Effect
Sodium Hydroxide 50%	336 hrs.	Surface appearance altered, extreme pliability	Surface appearance altered, increased pliability
Sodium Hypochlorite 1%	336 hrs.	No Effect	No Effect
Sulfuric Acid 5%	336 hrs.	No Effect	No Effect
Sulfuric Acid 10%	336 hrs.	Slight discoloration and cracking	Slight discoloration and cracking



<i>Immersion Liquid</i>	<i>Exposure Time</i>	<i>Room Temp.</i>	<i>49° C</i>
Sulfuric Acid 25%	336 hrs.	Discoloration and moderate surface cracking	Discoloration and moderate surface cracking
Sulfuric Acid 50%	336 hrs.	Discoloration and severe cracking	Discoloration and severe cracking
Toluene	336 hrs.	Slight discoloration, moderate swelling	Not Tested
Tri-chloric-ethane	336 hrs.	Slight discoloration, moderate swelling	Not Tested
Xylene	336 hrs.	Slightly increased pliability	Slightly glutinous

**Important note:**

The information presented in this document is in accordance with our knowledge to date, but do not absolve the user from checking all supplies immediately on receipt, especially where other companies raw materials are also being used.

The raw material and SPITA ResQ-tape are made under strict quality control and samples are tested at least once per year by UL, SGS or TÜV/TNO. As proof of quality, we are proud to have the UL (Underwriters Laboratory) logo on our product.

The European regulation REACH EC 1907/2006 (Registration, Evaluation, Authorization and restriction of Chemicals) came into force on June, 1<sup>st</sup> 2007.

REACH aims to improve health and environmental protection, while maintaining the competitiveness and enhancing the innovative capabilities of the EU-industry.

We, SPITA Smart Products B.V., manufacturer of SPITA ResQ-tape, hereby state that our product complies with the RoHS and REACH regulations.

We, SPITA Smart Products B.V., represented by Managing Director Mr Goosen Riphagen, state that all our self-fusing silicone products are made of the highest quality and that all published specifications are true and that all tests are conducted according to International Standards by official licensed International Organizations. These standards are included in all our Technical Papers and datasheets.

Harderwijk, March 1<sup>st</sup>, 2020



Goosen Riphagen  
Managing director