

LOCTITE[®] PC 4402

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PRODUCT DESCRIPTION

LOCTITE[®] PC 4402 accelerator for LOCTITE[®] PC 4400 provides the following product characteristics:

Technology	Accelerator
Appearance	Clear
Viscosity	Liquid
Application Temperature	4 to 32°C (39 to 90 °F)
In service temperature	-25 to 80°C (-13 to 176 °F)
Short exposure (up to 1h)	100°C (212 °F)
Specific Benefits	<ul style="list-style-type: none"> Accelerate dry/tack and cure times for LOCTITE[®] PC 4400 for low relative humidity conditions

LOCTITE[®] PC 4402 is a proprietary additive designed to accelerate the dust and tack-free times of LOCTITE[®] PC 4400 for low relative humidity or cold temperature conditions coating applications. Accelerator LOCTITE[®] PC 4402 mixed into LOCTITE[®] PC 4400 provides the following benefits: Faster dry/tack and cure times for LOCTITE[®] PC 4400 (tack time as low as 20 minutes), easy incorporation into LOCTITE[®] PC 4400 prior to coating application.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Solids content, % by weight 10
 VOC, % 0

Mix % by volume

LOCTITE [®] PC 4400 (Liter)	LOCTITE [®] PC 4402 1% Mix (Liter)	LOCTITE [®] PC 4402 2% Mix (Liter)
1	0.01	0.02
3.8	0.038	0.076
Tack Free Time (Minutes)	30	20

Accurate mixing of LOCTITE[®] PC 4402 into LOCTITE[®] PC 4400 is based on the volume of LOCTITE[®] PC 4400. Accelerator LOCTITE[®] PC 4402 can be added from 1 to 2 %.

Flash Off

Flash off time between coats: Allow 2 to 5 minutes between wet coats to allow for solvent evaporation.

Drying Times

Drying time will depend on mixing dosage, relative humidity and temperature.

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions For Use:

NOTE: Due to the accelerated tack/dry time with the addition of the accelerator LOCTITE[®] PC 4402 to LOCTITE[®] PC 4400, it is highly recommended to employ two applicators during a coating project. Recoats by one applicator will be much more challenging to accomplish successfully.

NOTE: Mixing of the LOCTITE[®] PC 4402 to LOCTITE[®] PC 4400 must only be done just before the coating application.

Application:

- Using an appropriate size scaled paint prep mixing cup, add LOCTITE[®] PC 4400 taking note of the volume.
- To this volume, mix a minimum 1% to a maximum of 2% of Accelerator LOCTITE[®] PC 4400 (refer to Table 1).
- Recap the Accelerator LOCTITE[®] PC 4400 container immediately after dispensing to avoid solvent evaporation.
- Stir mixture by hand for ~60 seconds.
- For larger volumes, please use a compressed air powered mixer. DO NOT use an electric powered mixer.
- The mixture is now ready for application.

Spray Application:

- Apply using HVLP, Conventional or Airless spray equipment, this is the preferred method for better appearance.
- Use dedicated spray lines and equipment for the best results.
- Follow the recommended initial parameters and adjust a needed.

Air Spray Equipment

Spray gun: HVLP or LVLP
 Fluid tip: 1.3-1.5 mm (0.05-0.09 in)
 Fan pattern: full
 Fluid control: 2 1/2 turns out
 Spray pattern: 50% overlap
 Pressure at gun: 0.2 MPa (25 – 30 psi)

Airless Spray Equipment

Tip Size: 519 or 619 spray tip
 Pump: 30:1 or 40:1
 Pump Pressure: 5.5 MPa (800 psi)

- Number of spray coats: apply 2-3 wet coats with 5-10 minutes between wet coats to allow for solvent evaporation.
- Avoid additional coats after 20 minutes as flow and leveling will be negatively affected.
- Recommended WFT (wet film thickness): 25-50 µm (1-2 mil) per each wet coat.
- Recommended DFT (dry film thickness): 25-50 µm (1.5 -2.5 mil) depending on surface properties desired.

Wipe on Application:

- The mixture of LOCTITE® PC 4402 / LOCTITE® PC 4400 can be also applied using a "wipe-on" technique using a microfiber cloth or sponge.
- Pre apply LOCTITE® PC 4402 / LOCTITE® PC 4400 to the microfiber cloth, make sure there is enough product to self-level, this may take practice to get right.
- Apply the product starting from the edges, follow same linear pattern to wipe the panel.
- If streaks appear, apply more product to the microfiber cloth as many times as necessary.
- Coat the surface completely, if you get a "run" just wipe on and keep going.
- Apply 1 to 2 wet coats with 5 to 10 minutes between wet coats to allow for solvent evaporation.

Cleaning:

- Clean spray equipment immediately using paint thinner, MEK or acetone.
- Never clean spray equipment with water or alcohol.
- Wipe on - Let the applicator (microfiber cloth) fully cure to the air before disposing it.
- The mixture of LOCTITE® PC 4402 / LOCTITE® PC 4400 is a moisture sensitive system. It is important to close containers immediately after use to avoid moisture contamination.

Avoiding Orange Peel

Orange peel can be avoided by modifying the spray application technique. We recommend applying LOCTITE® PC 4402 / LOCTITE® PC 4400 using an HVLP gun with a 1.4 mm spray tip. Apply one full wet coat, then allow 2-5 min for solvent evaporation, then apply the next full wet coat, then allow 2-5 min, then apply the final full wet coat. The applicator is able to reduce orange peel by ensuring that enough (not too much) LOCTITE® PC 4402 / LOCTITE® PC 4400 is applied to provide excellent flow and leveling. Orange peel will occur if is applied too dry or by allowing too much time between wet coats. If orange peel exists after cured, we recommend the following polishing parameters:

- Equipment: Orbital sander and orbital polishing equipment.
- Orbital Sand: Use 800 grit paper, then 1000, then 1500, then 2000, then 2500 grit paper.

- Compound: Use heavy cut compound with wool pad @ 1,200 to 1,400 RPM.
- Polishing: Use SRC (scratch resistant clears) polishing paste with wool @ 1,200 to 1,400 RPM. Refer to TEROSON® product line.
- Final High Gloss Polish: Use light to medium cut polishing paste with wool pad @ 1,200 to 1,400 RPM. Refer to TEROSON® product line.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: below 8 to 21 °C. Storage greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Product Specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact Henkel representative for related approval or certificate of this product.

Data Ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23 °C / 50% RH = 23+2 °C / 50+5% RH.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you

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