

# Handbook TPE repair kit "comfort"







Hazard and safety information

Content of the TPE repair kit "comfort"



Selbst-benötigtes Material

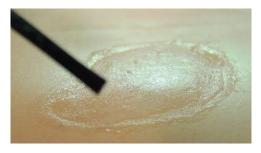


Application examples for different types of repairs and TPE paste mixtures





**Smoothing & finishing process** 





Cleaning by recycling TPE material

# **Stretching tests**



#### **Hazard and safety information regarding the solvents:**



- Highly flammable liquid and vapor.
- Keep away from heat / sparks / open flame / hot surfaces.
- Do not smoke.
- Use explosion-proof electrical equipment / ventilation systems / lighting.
- Do not breathe vapor.
- May cause drowsiness or dizziness.
- Do not get in eyes, on skin or clothing.
- Causes serious eye irritation.
- · Repeated exposure may cause skin dryness or cracking.
- Keep out of the reach of children.
- May be fatal if swallowed and enters airways.

# The following clothing is therefore required in the sense of the dangers and safety instructions:

- Protective clothing
- Protective gloves
- Safety goggles

#### **Structure:**

- I. General information about the TPE repair kit "comfort"
- II. Content of the TPE repair kit "comfort"
- III. Self required material
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  - Punctual mini-holes
  - Small open air bubble
  - Large open air bubble
  - Outbreak
  - Breakthrough to the metal skeleton
- V. Smoothing & finishing process
  - Smoothing with solvent "Smoother"
  - Matting with solvent "Finisher"
  - Saturating & Refreshment of the repair with white oil
- VI. Cleaning by recycling TPE material
- VII. Final remarks for a successful TPE love doll surgery

#### I. General information about the TPE repair kit "comfort":

The TPE repair kit is designed to flexibly repair any form of abrasions, fractions, holes, open air bubbles and breakouts where TPE material is no longer present.

This is done with a TPE paste, which has a medium consistency in the delivery state. With the added solvent "Preparer" and the comminuted TPE material, a thin, thick TPE paste and even thick TPE jelly can be produced to ensure all repair requirements.

The TPE paste and the solvent "Preparer" represent a 2-component application.

# The TPE paste is not a TPE adhesive! The solvent "Preparer" is not a TPE adhesive!

In conjunction with the attached TPE test piece, the amount of TPE paste, solvent and shredded TPE material is designed to actively work with the TPE repair kit to better understand the behavior of TPE material, so the repair of your TPE love doll will be successfull.

#### - Limited use of the TPE repair kit under material tension / high stressed area:

The TPE repair kit can be used in the area around the elbows and knees. A prerequisite for a repair on the outside is that the TPE material is located above the joints by stretching the limbs in the relaxed state. Repairs on the inside of the elbow and knee joints require angled limbs here to relax the TPE material.

At locations where the material tension of the TPE material can not be prevented, the TPE paste as well as the solvent "Preparer" nevertheless have the property of dissolving the TPE material as strongly as TPE adhesive ("TPE glue"), whereby a small opening can suddenly become a larger hole. This relates in particular to the skin fold of the thighs to the intimate area, as well as to the outer intimate area itself.

An application in areas with tensioned TPE material, which can not be relaxed, is not recommended.

#### - Currently available Jinshan TPE skin color:

- White (light and slightly yellowish)
- Natural (slightly rosy)
- Tanned (bronzed)

The skin color dark brown (e.g. WM Doll 168 "Nava") is not yet available.

#### II. Content of the TPE repair kit "comfort":



- 15 ml / 0.5 oz TPE paste in medium consistency in air-tight brown bottle
- 10 ml / 0.33 oz solvent "Preparer"" in air-tight bottle with brush
- 10 ml / 0.33 oz solvent "Smoother" in air-tight bottle with brush
- 10 ml / 0.33 oz solvent "Finisher" in air-tight bottle with brush
- 10 ml / 0.33 oz white oil in air-tight bottle with brush
- 5 g shredded TPE material in solvent-resistant small can
- Solvent resistant small can for mixing the TPE paste in different consistency
- Toothpicks for mixing the TPE paste
- 5 ml syringe for low viscosity TPE paste
- Blunt 8 cm cannula, diameter 2 mm, for low viscosity TPE paste
- 20 ml syringe for medium and thick liquid TPE paste
- 10 cm infusion hose for medium and thick liquid TPE paste
- TPE piece as test material

#### - TPE paste:



Please note! The TPE paste is not a TPE adhesive!

It is rather a flexible filling paste of dissolved TPE material in a certain skin color, matching the injured TPE love doll.

In order to accomplish the fusion of TPE paste with the TPE material of the love doll, the solvent "Preparer" must be applied first.

Otherwise, no permanent adhesion takes place.

Without solvent "Preparer", the TPE paste can be removed from the TPE material after curing.

The TPE paste can be removed with tweezers and with strong peeling. Therewith a misapplication can not happen.

Even an unintended drop of the TPE paste somewhere off the repair site does not pose any danger - opposed to serious damages which can be caused by the manufacturer's TPE glue.

In the closed brown bottle, the TPE paste is air-tight sealed and protected from dehydration.

A possibly thickened TPE paste can be liquefied with 3-4 drops of solvent "Preparer" at any time.

#### - Solvent "Preparer":



**Please note!** The solvent is not a TPE adhesive!

The substance does neither contain solvents based on xylene or toluene, nor the manufacturer's TPE glue or not sufficently pure, cheap solvents from the hardware store.

The substance is a specially prepared and soft solvent of high quality and pure chemicals.

Due to the gentle dissolution property of TPE material, the solvent "Preparer" has the following application possibilities:

- Used as thinner for the TPE paste to produce a thin-liquid and sprayable TPE paste
- Used as primer for preparation by gently roughening and softening of the TPE material for subsequent application of the TPE paste

#### - Solvent "Smoother":



The solvent acts very soft to TPE material and comes with a very low dissolving ability.

Because of that reason the solvent is used for smoothing the repair made with TPE paste or even a repair made with TPE glue.

Gently wipe with the brush circular and lenghtwise to smoothen the repaired surface very easy.

#### - Solvent "Finisher":



The solvent is extremly volatile and is used after the smoothing.

It does the original TPE matting effect which is necessary to make the repair optically invisible next to the original TPE surface.

The solvent acts like a "breath".

#### - Oil:



It is a very expensive and very thin white oil (pure mineral oil) with a very low viscosity of 15 mPas. (miliPascalseconds)

The white oil is necessary for refreshing the repair with pure mineral oil.

In addition it is producing a very high saturation effect within the repaired TPE material making the TPE very elastic and tensile.

It is not allowed to refill the white oil in a pump spray bottle!

Breathed in particles of white oil inside the lung cannot be expectorated!

#### - Shredded TPE material:



With the shredded TPE material and the TPE paste from the brown bottle, thick-liquid TPE paste and thick TPE jelly can be produced.

If additional TPE paste is required, you can easily make more TPE paste with any consistency.

Just add some solvent "Preparer" to the shredded TPE material.

#### - Mixing vessel and toothpicks:



The solvent-resistant mixing vessel is used to prepare the required consistencies of the TPE paste.

It is recommended to use a toothpick to pick some TPE paste from the brown bottle.

Adding more solvent "Preparer" results in a thinly-liquid TPE paste.

Adding more shredded TPE material results in thick-liquid (viscous, syroupy) TPE paste or a thick TPE jelly.

#### - 5ml syringe and blunt cannula:



With the 5 ml syringe and the blunt cannula, thin-liquid TPE paste can be pulled out of the mixing vessel and applied as a thin layer at the injury to repair, as well as injected into less accessible areas.

Single drops of low-viscosity TPE paste can be blotted with the blunt cannula itself.

#### - 20ml syringe und 10cm infusion tube:



Medium-viscous TPE paste can be taken directly from the brown bottle.

Thick-liquid TPE paste is accordingly mixed in the mixing vessel.

The diameter of the tube and the volumetric force of the syringe allows a focused application and injection of the medium-viscous respectively thick-liquid TPE paste into injured areas like openings and outbreaks.

In this case, it is not necessary to fill the whole syringe. Just suck in some TPE paste into the infusion tube directly.

#### - TPE piece as test material (example TPe tanned material):



In order to learn how to use the TPE repair kit and to ensure the success of a repair, a TPE piece is included in the set.

The sample material matches the skin color of the respective TPE Repair Kit.



Before performing a repair, it is highly recommended to use this test material to practice the application of the solvents and the application of TPE paste.

For this purpose, all example repairs shown in this manual can be tried out.

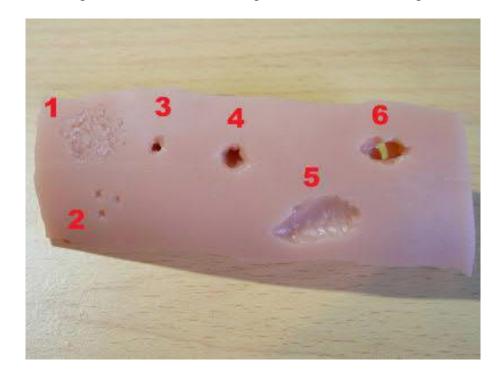
## III. Self required material:



- Tweezers
- Sharp little fingernail scissors
- Paper towel / kitchen paper

## IV. Application examples for different types of repairs and TPE paste mixtures:

In the figure the individual damages are shown on a large TPE material piece.



- 1. Frail / abrasion
- 2. Punctual mini-holes
- 3. Small open air bubble
- 4. Large open air bubble
- 5. Outbreak
- 6. Breakthrough to the metal skeleton

After all repairs are done, all repairs are smoothened with the solvent "Smoother", matted with solvent "Finisher" and refreshed with white oil.

At the end the TPE material piece is shown in the stretched state to show the successful repair under material stress.

As a general preparation, the repair points are always washed and cleaned with soap and water.



For each preparation of a repair, the solvent "Preparer" is applied thinly so that the TPE surface is easily roughened and softened to ensure the fusion with the TPE paste.

In the following, this is explicitly described once and will be assumed in the future for all repairs.

#### - Preparation of an area for repair with the solvent "Preparer":

The area to be repaired is repetitively coated with a little solvent until the surface is uniformly roughened and slightly softened.

Within a hole, this has to be done all around.





Please note! Knowledge of this preparation procedure is from now on taken for grantes for all repairs. In the subsequent sections, it will be referred as "Preparation with solvent".

### 1.) Repair of fraying / abrasion:



Protruding TPE pieces are carefully and slowly raised with the tweezers.

These protruding TPE pieces are then cut off with the small sharp fingernail scissors.

For this repair we use a small amount of thinly-liquid TPE paste.

Use the 5 ml syringe with the blunt cannula, remove some drops of solvent and add it into the mixing vessel.





Use a toothpick to extract some medium-viscous TPE paste from the container, place it in the mixing vessel and blend it into a thin-liquid TPE paste.

Use the 5 ml syringe with cannula and draw up the thin-liquid TPE paste.





The fraying is now prepared with the solvent "Preparer" (as already shown).

Now carefully apply the thin TPE paste.

The thin liquid TPE paste can be additionally slightly pushed with the blunt cannula tip.

Also, if necessary, small air bubbles can be crushed with the cannula tip.

Let it cure for two hours.





After the curing time, the TPE paste has been slightly lowered.

This is due to the fusion and evaporation of the solvent.

#### 2. Repair of punctual mini-holes:

For this repair we use thin-liquid TPE paste. The mixing has already been shown.

The mini-holes are now prepared with the solvent "Preparer" (as already shown).

To dispense drops with thin liquid TPE paste, only use the blunt cannula. The syringe is not necessary.

By dipping the blunt cannula into the thin liquid TPE paste, exactly one drop is taken, which can then be simply dabbed.



Let it cure for one hour.

#### 3. Repair of a small open air bubble:



For this repair we use thin-liquid TPE paste.

The mixing and draw up with the 5ml syringe with blunt cannula has already been shown.

The air bubble is now prepared with the solvent "Preparer" (as already shown).

Now we very slowly inject the thinly-liquid TPE paste into the air bubble.

In case an air bubble pops up during filling, just pierce it with a toothpick.

Allow to cure for two hours.

During this time, a small volume loss is caused by evaporation of the solvent.



Compensate it with a simply drop of thinly liquid TPE paste on top.

By dipping the blunt cannula into the thin liquid TPE paste, exactly one drop is taken, which then can be simply dabbed.

Allow to cure for another 30 minutes.

#### 4. Repair of a large open air bubble:

Für die Reparatur verwenden wir die TPE-Paste mit mittlerer Konsistenz direkt aus dem Braunglas-Behälter.

Hierzu verwenden wir die 20ml Spritze mit dem aufgeschobenen Infusion-Schlauch und ziehen die TPE-Paste nur soweit auf, das sie nur im Infusions-Schlauch vorhanden ist.



The air bubble is now prepared with the solvent "Preparer" (as already shown).



We now slowly inject the TPE paste into the air bubble.

At the end of this repair, there will be a little curvature with the TPE paste above the air bubble.

Because there is some volume loss by evaporation of the solvent, this little curvature will even out with the surrounding TPE surface by itself.

Allow to cure for two hours.



#### 5. Repair of an outbreak / eruption:

For this repair we use the TPE paste with medium-viscous consistency directly from the brown bottle.

For this purpose, we use the 20 ml syringe with the infusion hose.

The outbreak is now prepared with the solvent "Preparer" (as already shown).

Then we slowly inject the TPE paste into the outbreak / eruption.



At the end of this repair, a curvature with TPE paste will form above the outbreak / eruption.

Because there is some volume loss by evaporation of the solvent, this curvature will even out with the surrounding surface by itself.



Allow to cure for three hours.

#### 6. Repair of a breakthrough to the metal skeleton:

In order to close the breakthrough, we must first insert a plug with TPE material at the bottom of the breakthrough.

For this purpose we use thick TPE jelly.

First, we use the toothpick to extract some medium TPE paste from the container and place it in the mixing vessel.

Then we add some shredded TPE material with the tweezers.

The TPE paste and the shredded TPE material is now blended into a thick TPE jelly.



The breakthrough is now prepared with the solvent "Preparer" (as already shown).

Using the tweezers, the TPE jelly is pushed into the breakthrough.

You can pull the breakthrough slightly apart with your fingers.





Carry out further repairs as described in the section in

"4. Repair of a large open air bubble".

At the end of this repair, there will form a curvature with the TPE paste above the eruption.

Because there is some volume loss by evaporation of the solvent, the curvature will even out with the surrounding surface.

Because we inserted a TPE plug and covered it with TPE paste, allow to cure for four hours.

#### V. Smoothing & finishing process:

Using the example of our repaired TPE material, we will now practice the smoothing procedure.



#### - Smoothing with solvent "Smoother":

The smoothing with the solvent is finishing touch.

Keep only a low amount of solvent at the brush.

Too much solvent does an unnecessary dissolving in the dept

Too much solvent does an unnecessary dissolving in the depth of the TPE material. If that happened, please pause until the solvent has evaporated.

The strongest smoothing effect is given exactly at the point you are "wiping dry"!

Do only one gentle wipe for a very short time and stop afterwards!

Resulting in filling up areas with diluted TPE paste, we have ridges on the surface.



Now we are smoothing these areas with the solvent "Smoother".

Move the brush circular on top of the survey.



Continue with the brush movement until the solvent volatilised.

Exactly at that moment you have the strongest smoothing effect.



For smoothing larger areas filled with TPE paste we have to smoothen the edges of the filling in addition.

Wipe with the brush lenghtwise over the edges to make them plain.



Even in case of smoothing larger areas please do not encrease the amount of solvent at the brush.

Also here, do the movement with the brush until the solvent volatilised.

Exactly at that moment you have the strongest smoothing effect.





The smoothing, and making a repaired area plain to the TPE surface, is the most important aspect of the whole repair.

It depends on you, if the whole repair becomes optically invisible.

Again, smoothing is finishing touch. It needs time, patience and a steady hand.

A lot of solvent is not helpful.

Repititions with less solvent is necessary for perfect results.

## - Matting with solvent "Finisher":

The matting of the repair is our first finishing process.

Simply apply the extremly volatile solvent "Finisher" on top of the repair and wipe it dry.

For showing you the effect of the solvent "Finisher" it is only applied on the left side of the repair.



Compare the left side matted with the solvent "Finisher". You can see the matting effect next to the normal TPE surface.



#### - Saturating & Refreshment of the repair with white oil:

This is our second finishing process.

Because of the amount of used solvents during the whole repair we have to make sure to saturate the TPE material with mineral oil.

Apply only a bit of the white oil with the brush and slather it in.

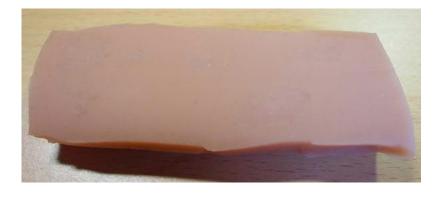
The white oil is pure mineral oil with a very high saturation and refreshing effect.



After the white oil is soaked off from the TPE material, wash the surface with soft soap and water. Afterwards do the powdering with your preferred powder.

As a result, the repairs have now almost completely disappeared. When you feel with your finger, the repairs can no longer be felt.





For comparison: initial state



# - Stretching tests:

Here you can see the repaired TPE material piece in the stretched state.



And you can see the repaired TPE material piece in the angled state, e.g. similar to the strain on a bent elbow or knee.



## VI. Cleaning by recycling TPE material:



Residue of the TPE paste, which are located in the syringes, can be simply peeled off with the tweezers after drying.



Dried residues of the TPE paste from the mixing vessel can be removed on the same way.



The cannula and the infusion tube can be puffed out with an air jet of the syringes after drying.

Recycled material can be shredded again and placed in the small can with the other shredded TPE material.

Residue of TPE paste in the infusion tube and the cannula are rinsed with water and soap.

#### VII. Final remarks for a successful TPE love doll surgery:

Repairing TPE dolls requires time, leisure and patience.

Overly hasty and inaccurate repairs do not succeed.

The success of a repair with the TPE repair kit "comfort" depends first of all on mixing the TPE paste according to the requirements.

Please note that a small drop of low-viscosity TPE paste can simply be placed with the blunt cannula without using the syringe.

You should use the syringe only in cases where more TPE paste is required.

The success of making the repair invisible afterwards lies in properly dealing with the solvent "Smoother".

The proportion between the amount of soft solvent used in connection with the required brush movement is crucial.

At this point we reiterate the recommendation to use the attached TPE piece to implement these steps as exercises beforehand.

The amount of TPE paste, solvent and shredded TPE material are designed to actively operate with the TPE repair kit "comfort" to learn the behavior of TPE material so that subsequent repair of the actual TPE love doll can be successfully done.