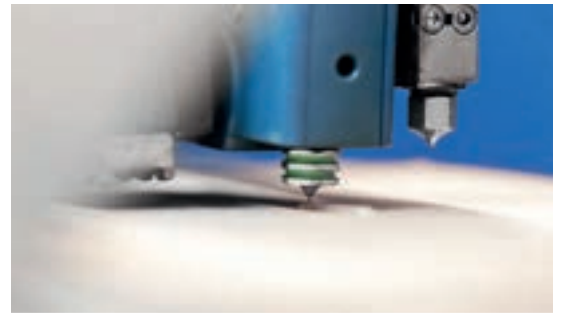


**TECHNOMELT®**



**MAKE CLEANING SAFER**



**TECHNOMELT**

Your Machine Cleaning Guide & Hotmelt Cleaner Range



# Do you know the advantages of regular and thorough machine cleaning?



Regular cleaning of the hotmelt system can **extend the longevity of the equipment**, and reduce the need for new spare parts.

Proper and regular cleaning of machine parts such as guide rails, rollers, compression plates will **minimize production downtime**. Adhesive, that has built up over long period of time, requires more time and effort to be removed – extending production interruptions.

Clean machines and safe cleaning products are cornerstones for **product safety**.

Regular maintenance of the hotmelt system and the external machine parts leads to an adhesive application that is cleaner and more precise, and thus **improves packaging quality**.



## TECHNOMELT Cleaners

# How to minimize health and safety risks during machine cleaning

» Choose cleaners with the lowest possible number of classified health and safety hazards. Some cleaners might be harmful for human health, especially if exposed regularly over a longer period of time. You will recognize the hazard level of any cleaner by the number and type of CLP (Classification, Labeling and Packaging) pictograms.



» Always check the information in the CLP section of the label or MSDS (Material Safety Data Sheet). In addition to the hazard classification, section 2 of the MSDS will inform you about precautionary measures you can apply to minimize health and environmental risks when using and disposing the cleaner and any material used for the cleaning.

<b>Hazard pictogram:</b>	
<b>Signal word:</b>	Danger
<b>Hazard statement:</b>	H226 Flammable liquid and vapor. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H304 May be fatal if swallowed and enters airways. H410 Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement:</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapours. P280 Wear protective gloves/eye protection. P273 Avoid release to the environment.
<b>Precautionary statement: Response</b>	P301 +P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor. P370+P378 In case of fire: Use CO <sub>2</sub> , dry chemical, or foam for extinction. P331 Do NOT induce vomiting.

» In addition to your site's PPE (Personal Protective Equipment), we recommend the wearing of gloves, protective goggles, and long sleeves while using cleaners and working with hotmelt adhesives.



» Follow the steps relating to the necessary machine settings and tools to use during cleaning as described in the next pages of this guide.

TECHNOMELT Cleaners

# Cleaning of machine surfaces, steel rollers and other cold machine parts



## HOW TO CLEAN Your machine surfaces

**ATTENTION:** Always follow your site's handling and storage precautionary measures. Test on plastic or sensitive surfaces before use.

Soak dirty machine parts in the cleaner at ambient temperature or:

- 1) Spray / brush onto parts of machines which are usually contaminated with hotmelt (attention: avoid applying on perspex guards).
- 2) Best results are obtained if you leave the TECHNOMELT Cleaner to penetrate before wiping off.

OUR CLEANER RECOMMENDATION

## TECHNOMELT Cleaner Pure

Ideal for regular cleaning of machine surfaces. Removes any contamination effectively and easily. Major safety advantages in comparison to CLP classification for standard cleaners available on the market. Solvent-free.

Appearance	Liquid
Working temperature	Room temperature
Available packaging	12 x 1 liter spray bottles 4 x 5 liter canister
Hazard pictogram	

TECHNOMELT Cleaner Pure does not contain substances that are contained in regular cleaners on the market and are responsible for classification as:



NO SERIOUS HEALTH HAZARD



NO HAZARDOUS TO THE ENVIRONMENT



NO FLAMMABLE

**TECHNOMELT Cleaner Pure**

# Our response to customers' call for higher health and safety standards

**NEW**



TECHNOMELT Cleaners

# Cleaning of melters, hoses, spray heads



## HOW TO CLEAN YOUR HOTMELT SYSTEM EVA/mPO

**ATTENTION:** In addition to your site’s safety rules always wear the following PPE as part of this cleaning procedure: long sleeves, glasses and heat resistance gloves.

- 1) Reduce the pump pressure to zero on the melting unit.
- 2) Empty the tank by opening the drain/bypass valve and slowly increase the pump pressure to a maximum of 2 bar (29 psi). Once emptied, close the drain/bypass valve and reduce the system pressure to zero again.
- 3) Manually remove any contaminants: carbonized material, paper fibers, gels etc. from the inside of the tank with a spatula and soft cloth. Clean thoroughly. Do not use any metal tools as they may damage the tank coating.
- 4) Add the TECHNOMELT Cleaner Q 1924 up to 80% of the tank capacity and allow it to melt at 170 °C.
- 5) Disconnect the hoses from the guns. Then, by slightly increasing the pump pressure, purge the hoses of adhesive until the TECHNOMELT Cleaner Q 1924 starts to come through.
- 6) Once the purged material is clear of any visible contaminants, decrease the pump pressure to zero and reduce the temperature settings of the melter, hoses, and guns to between 120 °C and 140 °C. This will increase the thickness of the cleaner.
- 7) Connect the hoses back to the guns and disconnect the nozzles. Once the system has reached the correct temperature, flush the system again with TECHNOMELT Cleaner Q 1924 at a low pump pressure (maximum of 2 bar) until the cleaner runs clear of any visible contaminants. Now the actual cleaning process is complete.
- 8) Remove the TECHNOMELT Cleaner Q 1924 by opening the drain/bypass valve and slowly increase the pump pressure to a maximum of 2 bar (29 psi). Once the tank is emptied, close the drain/bypass valve and reduce the system pressure to zero again.
- 9) Fill up the cleaned tank with your chosen TECHNOMELT adhesive and set the tank, hoses and guns to 20 – 40 °C below the recommended operating temperatures to keep the viscosity high. Flush the complete system again until you are sure the TECHNOMELT Cleaner Q 1924 has been fully removed. This is essential as any residual TECHNOMELT Cleaner Q 1924 could affect subsequent adhesive properties. Then reconnect the nozzles.
- 10) Before replacing any filters, please ensure the pump pressure is at zero.
- 11) Set and heat the tank, hoses and guns to the recommended operating.

OUR CLEANER RECOMMENDATION

## TECHNOMELT Cleaner Q 1924

First choice for EVA & mPO adhesives. Especially effective before changing the adhesive technology (e.g. from EVA to mPO technology).

Appearance	Granules
Working temperature	120 – 180 °C
Available packaging	25 kg PE / paper bag
CLP	Not hazardous according to Regulation (EC) No 1272/2008 (CLP)



# and nozzles



## HOW TO CLEAN YOUR HOTMELT SYSTEM

### Pressure sensitive/rubber based hotmelt adhesives

**ATTENTION:** In addition to your site's safety rules always wear the following PPE as part of this cleaning procedure: long sleeves, glasses and heat resistance gloves. Please be aware this is a liquid cleaner and therefore it is water thin at the application temperature of 140 – 160 °C.

TECHNOMELT Cleaner 102 is best used at temperatures of 140 – 160 °C and continually recycled through the system to dissolve all the hotmelt residue.

- 1) Reduce the pump pressure to zero on the melting unit.
- 2) Empty the tank by opening the drain/bypass valve whilst slowly increasing the pump pressure to a maximum of 1 bar (14 psi). Once emptied, close the drain/bypass valve and reduce the system pressure to zero again.
- 3) Manually remove any contaminants: Carbonized material, paper fibers, gels etc. from the inside of the tank with a spatula and soft cloth. Clean thoroughly. Do not use any metal tools as they may damage the tank coating.
- 4) Change the application temperatures to between 140 and 160 °C. Please do not exceed this temperature range. Then carefully add TECHNOMELT Cleaner 102 up to 80% of the tanks capacity.
- 5) Remove the hoses from the guns and place the hoses over the open tank to re-circulate the TECHNOMELT Cleaner 102 through the system at minimal pump pressure. This should be done until all the hotmelt has dissolved.
- 6) Remove the TECHNOMELT Cleaner 102 from the tank by opening the drain/bypass valve and then slowly increase the pump pressure to a maximum of 1 bar (14 psi). Once the tank is emptied, close the drain/bypass valve and reduce the system pressure to zero again. Remove any undissolved material from the tank.
- 7) Fill up the cleaned tank with your chosen TECHNOMELT adhesive and set the tank, hoses and guns to 20 – 40 °C below the recommended operating temperature to keep the viscosity high. Flush the complete system again until you are sure the TECHNOMELT Cleaner 102 has been fully removed. This is essential as any residual TECHNOMELT CLEANER 102 could affect subsequent adhesive properties.
- 8) Before replacing any filters, please ensure the pump pressure is at zero.
- 9) Set and heat the tank, hoses and guns to the recommended operating temperature and check the pump pressure is correct before restarting the line.

#### OUR CLEANER RECOMMENDATION

## TECHNOMELT Cleaner 102

Especially for pressure sensitive/rubber based hotmelt adhesives. TECHNOMELT CLEANER 102 is best used at temperatures of 140 – 160 °C and continually recycled through the system to dissolve all the hotmelt residue.

Appearance	Liquid
Working temperature	140 – 160 °C
Available packaging	20 kg net. / hobbock
CLP	Not hazardous according to Regulation (EC) No 1272/2008 (CLP)



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