

## BENEFITS

- Compatible with automated lift-off equipment
- Clean, scum-free removal
- Universal remover/stripper for removal of all resist films
- Room temperature processing
- No chlorinated or fluorinated hydrocarbons

## COMPATIBLE WITH

- PMGI & LOR
- PMMA & copolymer
- SU-8
- g-line, i-line and DUV resists

## NANO™ REMOVER PG

REMOVER PG is a proprietary NMP based solvent stripper designed for efficient and complete removal of PMGI, PMMA, SU-8, and other resist films on Si, SiO<sub>2</sub>, GaAs, and many other substrate surfaces. It may also be used as a lift-off solvent.

### INSTRUCTIONS FOR USE

REMOVER PG is supplied ready to use. Do not dilute.

When used in immersion mode, a two-bath system is recommended to reduce the possibility of redeposition of removed resist. The first bath removes the bulk of the resist and the second, cleaner bath removes remaining traces of material. When the 1st stripping bath has become spent/loaded with resist, it can be replaced with the 2nd 'drag-out' bath to increase bath yield. Remover baths should be changed when removal rate drops significantly and may be measured by the number of wafers processed. A 3rd water miscible solvent (e.g. IPA bath serves as a final solvent rinse prior to DI water rinse and dry.

ACTION	TEMPERATURE	PRODUCT
<b>1st Bath</b>	<b>Ambient to 50-80°C</b>	<b>Remover PG</b>
<b>2nd Bath</b>	<b>Ambient to 50-80°C</b>	<b>Remover PG</b>
<b>3rd Bath</b>	<b>Ambient</b>	<b>Iso-Propyl Alcohol (IPA)</b>
<b>Rinse</b>	<b>Ambient</b>	<b>Water</b>

### BATH OPERATING TEMPERATURE

To improve stripping performance, REMOVER PG may be used at operating temperatures well above ambient with CAUTION. Since the flash point of REMOVER PG is 88°C, closed cup, it may be used at temperatures up to approximately 80°C using routine caution regarding combustible liquids. Users should consult their Safety Department as to the safest method of heating.

## AGITATION

Mechanical or ultrasonic agitation will enhance physical transport of swollen/dissolved resist away from the substrate.

## TIME

Removal time will naturally depend on the environment the resist has seen previously.

## RINSE AND DRY

An IPA (isopropyl alcohol) rinse may be necessary prior to a DI (deionized) water rinse to avoid potential residue. Dry in a rinser/dryer or by N<sub>2</sub> blow dry.

## HANDLING (ENVIRONMENTAL, HEALTH AND SAFETY)

Use precautions in handling REMOVER PG. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Avoid breathing fumes. Wear chemical-resistant eye protection, chemical gloves (butyl, neoprene) and protective clothing when handling REMOVER PG. Contact with eyes, skin, and mucous membranes causes irritation. In case of eye contact, flush with water for 15 minutes lifting eyelids frequently. Call a physician immediately. Review the current MSDS (Material Safety Data Sheet) before using.

## MATERIAL AND EQUIPMENT COMPATIBILITY

REMOVER PG is compatible with glass, ceramic, unfilled polyethylene, high-density polyethylene, polytetrafluoroethylene (TEFLON), stainless steel, and equivalent materials. N-methyl-2-pyrrolidone, the primary ingredient, will attack various elastomers such as VITON A and NEOPRENE over time. It will also attack PVC, PVDC and polyester. EPDM is recommended for both O-rings and tubing. BUNA N may be used at room temperature.

## STORAGE

Store REMOVER PG upright in original containers in a dry area between 4 and 27°C (40-80°F). Keep away from sources of ignition, light, heat, oxidants, acids, and reducers. Shelf life is 13 months from date of manufacture.

## DISPOSAL

Each locality, state, and county has unique regulations regarding the disposal of organic solvent solutions of dissolved polymer such as used REMOVER PG. It is the responsibility of the customer to ensure proper disposal in compliance with all applicable Federal/Local codes and regulations. See MSDS for additional information.

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