



Technical Data Sheet

TOWER 18-M MRC/SOLVENT **FAST DRYING INK SOLVENT AND MRC**

DESCRIPTION:

Tower 18-M MRC/Solvent is an all purpose ink cleaner that can be used as a blanket wash, typewash, and metering roller cleaner.

DIRECTIONS FOR USE:

Apply full strength at room temperature. Flammable liquid. Keep away from heat and open flame. Use in a well ventilated area.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Very fast drying
- *No residue cleaner.
- *Excellent non-chlorinated metering roller cleaner.
- *Excellent silk screen cleaner for plastisol and vinyl inks.
- *Uses include metering roller cleaner and typewash.

SPECIFICATIONS:

Flashpoint: 0 degrees F

VOC=s: 5.7 lb/gal (679 grams/liter) 82% acetone exempt

Drying Speed: Very fast

Cleaning Strength: Strong

Odor: Solvent

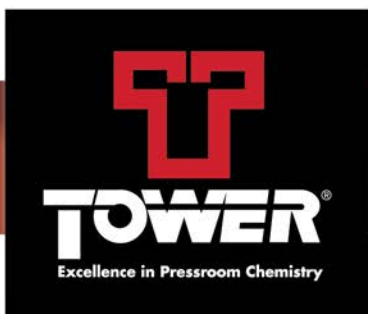
Composite Vapor Pressure (mmHG): 63.4

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

4 x 1 gallon case, 5 gallon pails, 55 gallon drums



Technical Data Sheet

TOWER 228-R SOLVENT

FLEXOGRAPHIC INK SOLVENT & CLEANER

DESCRIPTION:

Tower 228-R Solvent is a very fast drying general purpose flexographic ink thinning solvent and cleaner for solvent based flexographic ink. The product has a very fast evaporation rate and dries residue free.

DIRECTIONS FOR USE:

Apply full strength at room temperature. Flammable liquid. Keep away from heat and open Use in well-ventilated area. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- Excellent cleaner for solvent based flexographic inks.
- Can be used to dilute or thin solvent based flexographic ink.
- Fast drying press wash for press equipment.

SPECIFICATIONS:

Flashpoint: Less than 55 degrees F. (calculated)

VOC's: 6.75lb./gal. 100% (811 grams/liter)

Drying Speed: Very Fast

Solvent Strength: Very Strong

Odor: Alcohol/Solvent

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums

TOWER 396 U.V. WASH

ROLLER AND BLANKET WASH FOR ULTRAVIOLET INKS

DESCRIPTION:

Tough UV inks need an extra tough wash. 396 U.V. has a controlled evaporation rate and a mild odor for maximum performance and convenience, along with a high flashpoint. Not for use on EPDM Compounds.

DIRECTIONS FOR USE:

ROLLERS & BLANKETS: Apply 396 U.V. full strength using a saturated cloth or wash bottle.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Very mild odor.
- *High flashpoint.
- *Effective on all UV inks.
- * Medium drying speed for effective cleaning on large unit presses.
- * Strong cleaning action .

SPECIFICATIONS:

Flashpoint: 115 F TCC

VOC Content: 7.56 lbs/gallon, 906 grams/liter, 100%

Solvent Strength: Strong

Odor: Mild Solvent

Composite Vapor Pressure (mmHG): 3.0

HMIS CODE:

Flammability: 2 Health: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drum

10/21/2009



Excellence in Pressroom Chemistry

Toll Free Hotline: (800) 527-8626

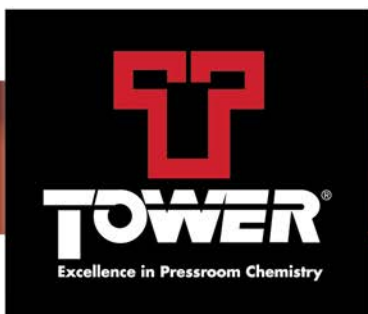
TOWER PRODUCTS, INC. • 2703 FREEMANSBURG AVE. • P.O. BOX 3070 • EASTON, PA 18043-3070

www.towerproducts.com

For Best Results, Tower Products Should Be Used Only As Directed

The information herein is given in good faith, but no warranty is made.

TOWER



Technical Data Sheet

TOWER 600 CLEANER CONCENTRATE **WATER-BASED PRESSROOM INK CLEANER**

DESCRIPTION:

Tower 600 Cleaner Concentrate represents state of the art technology in water-based pressroom ink cleaning. It's safe and effective formula rapidly cleans water-based and newsprint ink from machinery and floors without solvents.

Tower 600 Cleaner Concentrate is an odorless, non-flammable, zero VOC concentrate that can be diluted up to 7 to 1 with water for an end use cost that is extremely affordable.

DIRECTIONS FOR USE:

For use on all surfaces for pressroom ink cleaning. Mix up to 7 to 1 with plain water and apply or use full strength for difficult cleaning applications.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Water-based Concentrate.
- * Outstanding ink cleaner for newspaper applications.
- * Will not damage equipment or rubber surfaces.
- * Zero VOC formulation.
- * Odorless and non-flammable.

SPECIFICATIONS:

Flashpoint: None

VOC: None

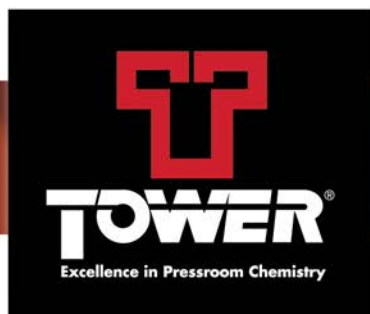
Odor: Detergent

HMIS RATING:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums, 275 gallon totes



Technical Data Sheet

AR-7500

HIGH TECHNOLOGY ALCOHOL REPLACEMENT

DESCRIPTION:

AR-7500 is a high technology alcohol substitute designed to increase the viscosity of water when used in continuous dampening systems. The product does not contain any HAP's and will not damage unbaked CTP plates. When used with Tower fountain solutions, it provides the optimum ink water balance for outstanding press performance.

DIRECTIONS FOR USE:

Add 1 to 4 ounces of AR-7500 to the press ready fountain solution reservoir. In conjunction with Millennium 7000 fountain solution, the recommended dosage is 1.5 to 3 ounces per gallon. For UV printing, 1.5 ounces per gallon is recommended with Millennium 7000.

Recommended Fountain Solutions: Millennium 7000 / Millennium SF

READ MSDS BEFORE USE

FEATURES AND BENEFITS:

- *Contains high technology wetting agents and no HAP's.
- *Formulated for continuous dampening systems.
- *Increases water viscosity and lowers water roller speeds.
- *Reduces ink feedback and reduces blanket piling.
- *Superior performance when used with UV inks.

SPECIFICATIONS:

Flashpoint: Greater than 200 degrees F

VOC: 6.4 lbs./gallon, 81%

Appearance: Water white liquid

Odor: Mild

HMIS RATING:

Health: 2 Flammability: 1 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail 30 gallon drum 55 gallon drum



Technical Data Sheet

Automatic Blanket Cleaning Cloth Rolls

Tower Products, Inc. provides a full range of automatic blanket wash cloth rolls for a variety of press types. Made from a premium, non-woven material, our washcloth will not break under tension providing a problem free wash-up. Our product is low linting which quickly removes ink and solvent for an effective automatic blanket wash on any press.

<u>Press Type</u>	<u>Roll Size</u>	<u>Rolls/Case</u>
Komori 40	41.5"x12 yards	20
Komori 28	29.3" x 6.67 yards	25
Heidelberg XL-105	42.125" x 14.67 yards	20
Heidelberg CD74/XL75	30.12"x 13.46 yards	20
Heidelberg SM-74	30.125" x 10 yards	25
Heidelberg SM-52	21.0" x 9 yards	25
KBA Rapida 105	42.91 x 12 yards	20
M-1000 Web	38.75" x 12 yards	25



Technical Data Sheet

CALCIUM CUTTER

Calcium Inhibitor Additive

DESCRIPTION:

Tower Calcium Cutter is a high technology fountain solution additive formulated to sequester or chelate free calcium that can contaminate the fountain solution during a press run. This product can prevent and inhibit calcium salts from building up on the image of the plate, causing dot loss and plate blinding during the run. It can also help the plates clean up faster on re-starts and aids in the ink transfer process. Calcium Cutter can be used with both sheetfed and web fountain solutions.

Tower Calcium Cutter is an excellent additive for all Tower fountain solutions when extreme calcium exists in the printing process. The product is compatible with CTP plates as well as conventional plate materials.

FEATURES:

- Formulated to prevent free calcium build up.
- Compatible with all acid fountain solutions.
- Powerful calcium sequestering additive.
- Helps with fast, true rollups on CTP Plates.

DIRECTIONS FOR USE:

Add 5-7 ounces of Calcium Cutter per gallon of mixed fountain solution to prevent calcium contamination on press. This product needs to mixed well or shaken before use. READ MSDS BEFORE USE.

SPECIFICATIONS:

Flash Point: None

VOC Data: None

pH of Concentrate: 4.8

Appearance: Clear to yellowish liquid with mild odor.

HMIS RATING:

Health: 1 Fire: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails



Technical Data Sheet

CALIFORNIA U.V. WASH

ROLLER AND BLANKET WASH FOR UV AND EB INKS

DESCRIPTION:

California UV Wash is specially formulated to work with EPDM compounds. California UV Wash does not contain any aliphatic or aromatic hydrocarbons and has a high flashpoint and mild odor. California Wash is approved for use by Baldwin, Rotodyne and Bottcher and will not harm CTP plates.

DIRECTIONS FOR USE:

Apply full strength or premix with up to 30% water to clean UV inks from rollers and blankets. *Automatic Units:* Add to reservoir according to the directions of the system manufacturer. **READ MSDS BEFORE USE.**

FEATURES AND BENEFITS:

- *Very mild odor with high flashpoint
- * Baldwin approved for automatic wash units
- * Will not damage EPDM rollers.
- * Medium drying speed for effective cleaning on large unit presses.
- * Approved by Bottcher and Rotodyne
- * Great for cleaning flexographic UV inks.

SPECIFICATIONS:

Flashpoint: 106 F TCC
VOC Content: 7.66 lbs/gallon, 919 grams/liter, 99%
Odor: Mild Solvent
Solvent Strength: Strong
Composite Vapor Pressure (mmHG): Less than 5.0

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

CHROME ROLLER CLEANER

Chrome Roller Cleaner and Desensitizer

DESCRIPTION:

Tower Chrome Roller Cleaner is a powerful liquid cleaner that will effectively clean and desensitize the chrome dampening rollers. This product will restore the water carrying capacity of the roller by replacing the ink and oxidation contamination with a protective water receptive film.

DIRECTIONS FOR USE:

Shake Well Before Use. Always clean the dampening system of ink before using this product. Apply a liberal amount of the product to the chrome roller with a damp cloth or sponge. For best results, buff the roller dry or allow roller time to air dry.

READ SDS BEFORE USE.

FEATURES:

- Outstanding cleaning power.
- Non-abrasive formula.
- Restores water loving characteristics of the dampening roller.
- Mild odor and easy to work with.

SPECIFICATIONS:

Flash Point: Greater than 150 degrees F. (TCC)

VOC Data: 1.1 pounds/gallon, 156 grams per liter, 14%

pH of Concentrate: 2.2-2.4

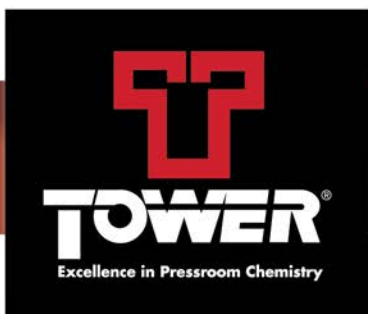
Odor and Appearance: White liquid emulsion with mild odor.

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

12x1 quart case



Technical Data Sheet

COATINGS CLEANER AC

Aqueous Coatings and Pressroom Cleaner

DESCRIPTION:

Tower Coatings Cleaner AC was developed to quickly clean the toughest aqueous coating, even dried coating, without the use of ammonia. Coatings Cleaner AC will not only clean the coating, but also any residual ink as well. Coatings Cleaner AC features a mild odor and will not damage rollers and blankets. Additionally, the product is an excellent pressroom cleaning solution for removing ink from press frames and floor areas.

DIRECTIONS FOR USE:

For Heavy Coating Build-Up: Spray the product liberally on the dried coating and wait 30 seconds for the product to penetrate and soften the coating. Wipe off the coating with a rag.

For Lighter Coating Build-Up: Apply the product with a rag and wipe until clean.

For Pressroom Cleaner: Apply using a saturated shop towel or spray product on surfaces and wipe ink away.

READ MSDS BEFORE USE.

FEATURES:

- Outstanding cleaning power.
- Does not contain ammonia.
- Non-damaging cleaning of rubber rollers, blanket and press parts.
- Mild odor and easy to work with.

SPECIFICATIONS:

Flash Point: Greater than 142 degrees F. (TCC)

VOC Data: 2.7 pounds/gallon, 320 grams per liter, 36%

pH of Concentrate: 9-11

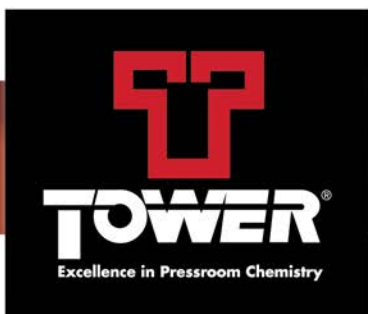
Odor and Appearance: Water white liquid with mild ether odor.

HMIS RATING:

Health: 1 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

12x1 quart case, 4x1 gallon case, 55 gallon drums



Technical Data Sheet

COLORKLEEN

CITRUS SCENTED, WATER MISCIBLE WASH

DESCRIPTION:

Why buy a run-of-the-mill wash when you can have the superior performance and safety features of Colorkleen for the same price? Colorkleen, which has a pleasant, citrus scent, mixes with up to 30% water and has a moderate evaporation rate for great results on any type of press.

DIRECTIONS FOR USE:

ROLLERS: Apply Colorkleen straight or diluted with water up to 30% across the top of the roller. Allow to run down the roller train for a few minutes and engage washup blade. Reapply as necessary until the fluid runs clear into the washup tray. **BLANKETS:** Apply Colorkleen straight or premixed with up to 30% water. **AUTOMATIC UNITS:** Add to automatic reservoir units per the manufacturer's directions. **READ MSDS BEFORE USE.**

FEATURES AND BENEFITS:

- * Removes gum, glaze and ink in one wash up.
- * Helps to condition rubber rollers and blankets.
- * Can be mixed with up to 30% water to reduce VOC's and costs.
- * Economical selling price versus a large number of competitive products.
- * Citrus odor ideal for confined presses.

SPECIFICATIONS:

Flashpoint: 105 F. TCC
VOC: 6.8 lb/gal (815 grams/liter), 99%
Drying Speed: Moderate
Solvent Strength: Moderate
Odor: Citrus
Composite Vapor Pressure (mmHG): 3.0

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

CTP SCRATCH REMOVER *SCRATCH REMOVER FOR CTP MEDIA*

DESCRIPTION:

Tower CTP Scratch Remover is an advanced formulation of specialty cleaning agents for use on CTP Plates. The product removes ink, glaze, gum and paper dust and leaves the non-image area clean and desensitized. This is an acid based emulsion cleaner that can clean the plate and remove scratches in one application. Approved for use on Kodak, Agfa and Fuji plates.

DIRECTIONS FOR USE:

For Metal Plates: For best results make sure that the press is stopped and Shake Well before use. Sheet off excess ink from the plate. Apply the product with a water dampened sponge or cloth. Wipe off with a clean water dampened rag. READ MSDS BEFORE USE.

FEATURES:

- Desensitizes scratches and non-image area of the plate.
- Strong, effective emulsion cleaner.
- Provides quick and clean restarts.
- Can be used on plates, chrome fountain rollers, impression cylinders.
- Approved for use on Kodak Thermal Gold/Platinum/Direct Trillion SP, Sword Excel P45, Eltecta XD P0080. Approved for use on Fuji LH-PJ and LP-NV2. Approved for use on Agfa Azura, Amigo, Elite, P970 and N91V

SPECIFICATIONS:

Flash Point: Over 150 degrees F. (TCC)
VOC Data: 1.3 pounds/gallon (156 grams/liter) 14%
Glycol Ether Solvents: None
pH: 2.2-2.4
Odor and Appearance: Mild Solvent Odor/White Emulsion

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

12 x 1 quart case



Technical Data Sheet

DELUXE CALCIUM RINSE **CALCIUM ROLLER CLEANER**

DESCRIPTION:

Deluxe Calcium Rinse was formulated to dissolve calcium deposits not just on the surface of the rollers, but deep down into the rubber to give you really clean rollers. Calcium build ups can affect production costs and print quality if they are not treated. Deluxe Calcium Rinse emulsifies the calcium on contact when applied to the rollers, back cylinders and chrome rollers.

FEATURES:

- Removes calcium build up from rollers and back cylinders.
- Desensitizes chrome rollers and back cylinders.
- Stops the build-up of calcium from alkaline papers.
- Can be added to fountain solution to prevent build up.
- Strong, effective cleaning technology.

DIRECTIONS FOR USE:

Rubber Rollers: Clean all ink from press rollers. After rollers are clean and dry, disengage wash-up blade and apply product. Allow to run in for 2-3 minutes. Engage wash-up blade and rinse with warm water.

Chrome Rollers: Wipe on cylinder and allow to penetrate for one minute. Remove with warm water.

Fountain Solution Additive: Add ½ -1 ounce per gallon of mixed fountain solution if calcium precipitation from paper is severe. READ MSDS BEFORE USE.

TECHNICAL SPECIFICATIONS:

Flash Point: Greater than 142 degrees F. (TCC)

Maximum VOC's: 4%

pH Value: 1.5

Appearance and Odor: Clear liquid with mild acid odor

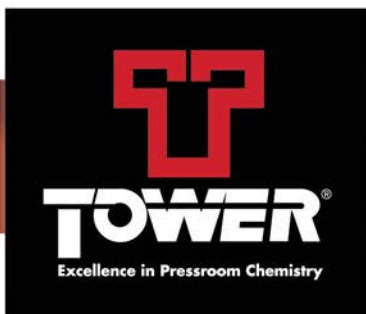
HMIS RATING:

Health: 3 Fire: 2 Reactivity: 0 Personal Protection: C

Caution: Corrosive Liquid.

PACKAGING:

12 X 1 Quart Case



Technical Data Sheet

DELUXE QUICK DRY **FAST DRYING PRESS SOLVENT**

DESCRIPTION:

Deluxe Quick Dry is an economical, non-photochemically reactive blanket wash that can be used on both web and sheetfed presses. The product is formulated to help printers in non-attainment air quality areas to comply with clean air regulations.

DIRECTIONS FOR USE:

Apply straight using a saturated cloth or wash bottle. Reapply as necessary.

For automatic units, apply to reservoir per mfg. recommendations.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Non photochemically reactive.
- * Competitively priced.
- * High flash point.
- * Effective on web and sheetfed presses.

SPECIFICATIONS:

Flashpoint: 104 degrees TCC

VOC Content: 6.4 pounds per gallon (770 gm/L), 100%

Composite Vapor Pressure (mmHG): 1.0

Drying Speed: Slow

Solvent Strength: Moderate

Odor: Mild

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

DISCOVERY WASH 1171 UV

Low VOC UV Press Wash

DESCRIPTION:

Discovery Wash 1171 UV is a very low VOC wash for cleaning both offset and flexographic UV ink. Unlike many of the current low VOC washes on the market, this product is water based and does not leave a greasy residue on the blankets and rollers. It has a VOC content of 11% or 95 grams per liter, which complies with SCAQMD 1171 and Bay Rule 20.

DIRECTIONS FOR USE:

Flexographic Ink Cleaning: Apply full strength or dilute with water to desired strength and apply to the press for cleaning.

Blankets: Apply full strength saturated wipe or cloth. Follow with a water dampened rag. **Rollers:** Apply full strength across the top of the roller train. Allow the product to work into the rollers for a few minutes and engage washup blade. Follow with a water rinse or with Tower 250 WA mixed at 5% to water. OR Apply a small amount of LO-VO Wash CA-100 or CA-200 to across the top of the roller train. Allow the product to work into the rollers and then use Discovery Wash 1171UV as a second step rinse until the rollers are clean. **Automatic Units:** Add to unit per manufacturers recommendations. Add 5% of Tower 250WA to the water tank of the unit for best results.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Very low VOC product at 11% or 95 grams per liter.
- * New, water based technology for cleaning UV inks.
- * Odorless product with a very high flashpoint.

SPECIFICATIONS:

Flashpoint: Greater than 200 degrees F
VOC: 0.8 lbs./gal. , (95 grams/liter), 11%
Odor: Detergent
Drying Speed: Slow to Moderate

HMIS Ratings:

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums



Technical Data Sheet

DYNAMIC ARP

ALCOHOL SUBSTITUTE FOR SHEETFED AND WEB PRESSES

DESCRIPTION:

Dynamic ARP is a high technology alcohol substitute designed to increase the viscosity of water when used in continuous dampening systems. Dynamic ARP reduces ink feedback and can be used at very low dosage ratios versus traditional alcohol replacements and isopropyl alcohol.

DIRECTIONS FOR USE:

Add 2 to 4 ounces of Dynamic ARP to the press ready fountain solution reservoir. Dynamic ARP will not affect the conductivity or pH of the fountain solution.

Recommended Fountain Solutions: **Millennium SF / Millennium Gold / Millennium 7000**

READ MSDS BEFORE USE

FEATURES AND BENEFITS:

- *Contains high technology wetting agents.
- *Formulated for continuous dampening systems.
- *Increases water viscosity and lowers water roller speeds.
- *Reduces ink feedback.

SPECIFICATIONS:

Flashpoint: Greater than 227 degrees F

VOC: 6.2 lbs./gallon, 84%

Appearance: Water white liquid

Odor: Mild

HMIS RATING:

Health: 2 Flammability: 1 Reactivity: 0 Personal Protection: B

PACKAGING:

4x1 gallon case, 5 gallon pail, 30 gallon drum, 55 gallon drum, 275 gallon totes



Technical Data Sheet

ECONOMY IP WASH CONCENTRATE **CONCENTRATE TO BLEND IP WASH OR** **RECHARGE TOWER WATER MISCIBLE WASHES**

DESCRIPTION:

This product is the concentrate to locally blend Tower Products IP Wash an outstanding, automatic water miscible wash or to recharge reclaimed Tower water miscible washes that have a flashpoint under 140 degrees F.

FEATURES OF FINISHED LOCALLY BLENDED PRODUCT:

- Outstanding product for automatic blanket washers
- Effective on both web and sheetfed presses
- Very low odor product
- Water miscible up to 30%

DIRECTIONS FOR BLENDING CONCENTRATE:

Add five gallons of Economy IP Wash Concentrate to 50 gallons of specified local chemical raw materials and mix until fully blended.

DIRECTIONS FOR RECHARGING TOWER WATER MISCIBLE WASHES:

Add 4% of Economy IP Wash Concentrate to a gallon of reclaimed material. For 50 gallons of reclaimed material, add 2 gallons of product to yield 52 gallons of reusable water miscible wash. This product will add back the surfactant and fragrance to the reclaimed material.

SPECIFICATIONS OF CONCENTRATE:

Flash Point: Greater than 100 degrees F.

Specific Gravity: 0.802

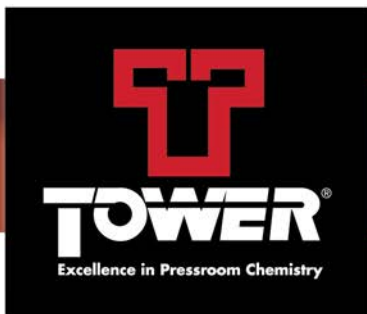
VOC Data: 5.75 pounds/gallon (690grams/liter) 86%

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

EXEMPT WASH HF

HIGH FLASHPOINT WATER MISCIBLE WASH

DESCRIPTION:

Exempt Wash HF is a high flashpoint, non-photochemically reactive blanket wash that can be used on both web and sheetfed presses. The product is formulated to help printers in non-attainment air quality areas to comply with clean air regulations.

DIRECTIONS FOR USE:

Rollers: Apply straight or diluted with water up to 30% across the top of the roller. Allow to run down the roller train for a few minutes and engage washup blade. Reapply if necessary until fluid runs clear into the washup tray.

Blankets: Apply straight or premixed with up to 30% water with a saturated cloth on the blanket.

Automatic Units: Can be used in all units.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Non photochemically reactive.
- * No aromatic hydrocarbons.
- * High flash point and water miscible.
- * Effective on web and sheetfed presses.
- * Mild odor.

SPECIFICATIONS:

Flash Point: >140 F. (calculated)

V.O.C.: 6.6 lbs/gallon, (792 grams/liter), 99%

Drying Speed: Slow

Solvent Strength: Moderate

Composite Vapor Pressure (mmHG): 1.0

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

FAST DRY EXEMPT WASH

NON-ACETONE FAST DRYING LOW VOC PRESS WASH

DESCRIPTION:

Fast Dry Exempt Wash is a quick drying low VOC press wash that does not contain acetone, which can be harsh on rollers and blankets. This product will work on both rollers and blankets with a drying speed that leave no residue and does not have to be followed by any water rinsing.. It can be used to clean both conventional, hybrid and UV inks.

DIRECTIONS FOR USE:

ROLLERS: Apply full strength on top roller and allow product to run in.

Engage wash up blade. Reapply as necessary. **BLANKETS:** Apply full strength with a saturated cloth to blankets. **FLEXOGRAPHIC INK:** Apply full strength to clean on all surfaces. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Dissolves ink and varnish very effectively and quickly.
- * Cleans conventional, hybrid and UV ink fast.
- * Fast drying speed.
- * Will not damage rubber under normal conditions.
- * No acetone formula.

SPECIFICATIONS:

Flashpoint: 64 degrees F TCC

VOC: 0.75 lbs/gallon, 9% (90 grams per liter)

Drying Speed: Fast

Solvent Strength: Moderate to Strong

Odor: Vanilla

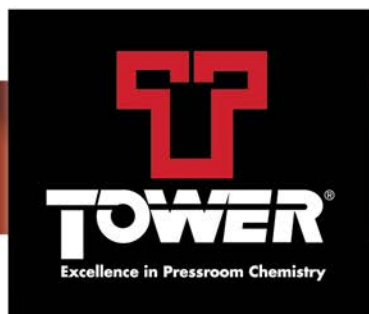
Composite Vapor Pressure (mmHG): 0.5

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail, 55 gallon drum



Technical Data Sheet

INFINITY WASH HMK-1 WM

FOGRA APPROVED WASH FOR AUTOMATIC SYSTEMS

DESCRIPTION:

Infinity Wash HMK-1 WM is a FOGRA Approved wash for use in automatic blanket washing systems for the KBA, MAN Roland and Heidelberg range of sheetfed presses. The product complies to the health and safety guidelines for flammability with a flashpoint over 142 degrees F and contains corrosion inhibitors. This product features a low odor and is water miscible.

DIRECTIONS FOR USE:

Rollers: Apply straight or diluted with up to 30% water across the top of the roller. Allow the product to run into the roller train for a few minutes and engage the washup blade. Reapply as necessary.

Blankets: Apply straight or premixed with up to 30% water with a saturated cloth.

Automatic Units: Can be used in all automatic units. FOGRA Approved.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- FOGRA Approved for automatic units and for hand washing.
- For use with KBA, MAN Roland and Heidelberg sheetfed presses. And Baldwin Automatic Blanket Wash units.
- Very low odor and low vapor pressure product.
- No aromatic hydrocarbons. Contains corrosion inhibitors.
- Water miscible up to 30%.

SPECIFICATIONS:

Flash Point: 147 degrees F.

Composite Vapor Pressure (mmHG): less than 1.0

VOC Data: 6.5 pounds/gallon (782 grams/liter) 99%

Drying Speed: Slow-Moderate Solvent Strength: Moderate

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums

INFINITY WASH HMK-2

FOGRA Approved Wash for Automatic Systems

DESCRIPTION:

Infinity Wash HMK-2 WM is a FOGRA Approved wash for use in automatic blanket washing systems for the KBA, MAN Roland and Heidelberg range of sheetfed presses. The product complies to the health and safety guidelines for flammability with a flashpoint over 150 degrees F and contains corrosion inhibitors. This product features a low odor and is appropriate for use in filtration and recovery systems.

DIRECTIONS FOR USE:

Rollers: Apply full strength across the top of the roller. Allow the product to run into the roller train for a few minutes and engage the washup blade. Reapply as necessary.

Blankets: Apply full strength with a saturated cloth.

Automatic Units: Can be used in all automatic units. FOGRA Approved.

READ MSDS BEFORE USE.

FEATURES:

- FOGRA Approved for automatic units and for hand washing.
- For use with **KBA, MAN Roland and Heidelberg** sheetfed presses. And **Baldwin** Automatic Blanket Wash units.
- Very low odor and low vapor pressure product.
- No aromatic hydrocarbons. Contains corrosion inhibitors.
- Can be used with filtration and recovery systems.

SPECIFICATIONS:

Flash Point: Greater than 150 degrees F.

Composite Vapor Pressure (mmHG): less than 0.05 at 68 degrees F

VOC Data: 6.77 pounds/gallon (812 grams/liter) 99%

Drying Speed: Slow **Solvent Strength:** Moderate

HMIS:

Health: 1 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums and 5 gallon pails

Updated 2/16/10



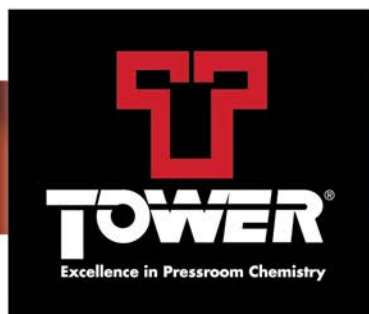
Excellence in Pressroom Chemistry

Toll Free Hotline: (800) 527-8626

¹ TOWER PRODUCTS, INC. • 2703 FREEMANSBURG AVE. • P.O. BOX 3070 • EASTON, PA 18043-3070

www.towerproducts.com

For Best Results, Tower Products Should Be Used Only As Directed
The information herein is given in good faith, but no warranty is made.



Technical Data Sheet

INFINITY WASH HMK UV

FOGRA APPROVED WASH FOR UV AND EB INKS

DESCRIPTION:

Infinity Wash HMK UV is a FOGRA Approved Wash for UV/EB inks. The product features excellent cleaning power and a mild odor. There are no reportable hazardous ingredients in this formulation and it has a high flashpoint.

DIRECTIONS FOR USE:

Apply full strength or premix with up to 30% water to clean UV and EB inks from rollers and blankets. Automatic Units: Add to reservoir according to the directions of the system manufacturer. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

Very mild odor with high flashpoint.
FOGRA Approved Wash for UV and EB.
Will not damage EPDM or Composite Rollers.
Moderate drying speed for effective cleaning on large press units.

SPECIFICATIONS:

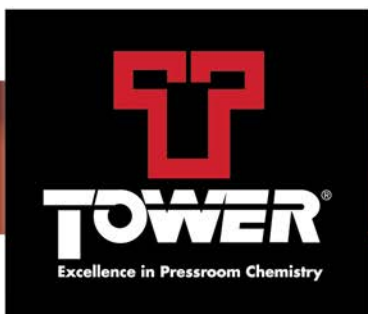
Flashpoint: 167 degrees F TCC (75C)
VOC Content: 7.12 lbs/gallon, 855 grams/liter, 89%
Odor: Mild Solvent
Solvent Strength: Strong
Composite Vapor Pressure (mmHG): Less than 1.0

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon plastic drums and 5 gallon plastic pails



Technical Data Sheet

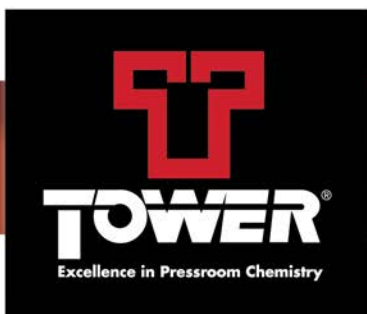
Ink Fountain Liners for Heidelberg Presses

Tower Products, Inc. provides a full range of ink fountain liners specifically for Heidelberg presses. These liners are manufactured using high quality polyester from Dupont that provides a consistent liner gauge from end to end. Conventional Liners are 7.5 Mils in thickness; UV Liners are 10 Mils. Each box also contains a certificate of quality assurance.

Tower Products, Inc. offers the follow liner sizes:

<u>Heidelberg Press</u>	<u>Quantity per box</u>
XL-105	100
Speedmaster 102	100
Speedmaster 102 UV	50
Speedmaster 74	100
Speedmaster 74CD	100
Speedmaster 52	100
Speedmaster 52CD	100
GTO 52	100
MO 65	100
Quickmaster 46	100

Other sizes and specifications may be available upon request. Please call our customer service department at 800.527.8626.



Technical Data Sheet

I.P. WASH

Automatic Water Miscible Wash

DESCRIPTION:

I. P. Wash is a versatile low odor water miscible wash that can be used in all automatic wash units, and also as an effective hand wash. It is citrus scented, has a moderate drying speed and terrific cutting power. I. P. Wash can be used full strength or mixed with up to 30% water to quickly remove ink and varnish.

FEATURES AND BENEFITS:

- Great cleaning power for auto units and for hand washing.
- Effective on both web and sheetfed presses.
- Baldwin Approved and many other OEM Approvals too.
- Very low odor and low vapor pressure product.
- Water miscible up to 30%.

DIRECTIONS FOR USE:

Rollers: Apply straight or diluted with up to 30% water across the top of the roller. Allow the product to run into the roller train for a few minutes and engage the washup blade. Reapply as necessary.

Blankets: Apply straight or premixed with up to 30% water with a saturated cloth.

Automatic Units: Can be used in all automatic units.

READ MSDS BEFORE USE.

SPECIFICATIONS:

Flash Point: 112 degrees F.

Composite Vapor Pressure (mmHG): Less than 3.0

VOC Data: 6.8 pounds/gallon (816 grams/liter) 99%

Drying Speed: Moderate

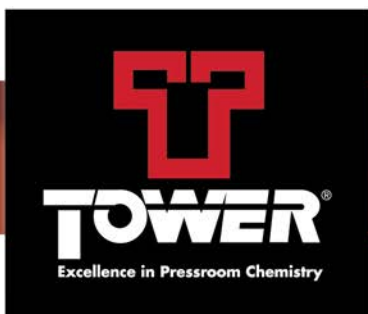
Solvent Strength: Moderate

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

LO-VO WASH 50

LOW VOC ROLLER & BLANKET WASH

DESCRIPTION:

Formulated to meet the needs of printers who are attempting to reduce VOC's, LO-VO WASH 50 is an easy one-step method of cleaning. LO-VO WASH 50 contains less than 3.5 pounds per gallon of VOC's and can be mixed with water up to 50% to further reduce emissions. The product contains no reportable hazardous ingredients, has a flashpoint over 140 F and has a very mild odor.

DIRECTIONS FOR USE:

BLANKETS: Apply LO-VO WASH 50 full strength or diluted up to 50% with water, across the blanket. For best results, wipe off with a water dampened rag and buff dry. On web presses a water follow-up is not necessary since the web will dry the blanket. **ROLLERS:** Apply a small quantity (approximately 2-3 ounces) of LO-VO WASH 50 to the rollers. Allow press to idle for 20 seconds and engage the washup blade. Apply another 2 ounces of product followed by a water rinse, using about twice as much water as product. **PIPE ROLLERS:** Apply full strength. **READ MSDS BEFORE USE.**

FEATURES AND BENEFITS:

- * High Flashpoint (142)
- * Less than 3.5 pounds per gallon of VOC's.
- * Does not contain water but can be mixed with water.
- * Great cutting power and very low odor.

SPECIFICATIONS:

Flashpoint: Greater than 142 F TCC
VOC: 3.45lbs. per gallon, 414 grams per liter, 50%
Drying Speed: Slow
Solvent Strength: Moderate
Composite Vapor Pressure (mmHG): 5.0

HMIS INFORMATION

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

LO-VO WASH 2000 AUTOMATIC QW

**LOW VOC WASH FOR USE IN SHEETFED AND WEB
AUTOMATIC BLANKET WASHER SYSTEMS**

DESCRIPTION:

LO-VO WASH 2000 AUTOMATIC QW was designed to be used in automatic blanket washer systems on sheetfed and web presses. The product features a strong cleaning action with no residual surfactant residue to contaminate the spray bars or the blankets.

DIRECTIONS FOR USE:

Automatic Blanket Washers: Add to blanket washer reservoir for automatic application per the manufacturer's guidelines. For best results, make sure that the water pulse is at least double the solvent pulse and extra water for a rinse is preferred, but always check with the manufacturer. **Hand Blanket Wash:** Apply a small quantity of product to the rag and make sure that the rag is not in any way saturated. Apply to the blanket. Follow by a water dampened rag and buff dry or dampen the rag first and add a small quantity of product to the rag and apply to the blanket. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Low VOC content that meets the EPA Control Technology Guidelines.
- *Specially formulated for automatic units to decrease residue.
- *High Flash Point and very low in odor.
- *Excellent cleaning efficiency.
- *Approved for use in Oxy-Dry, Elettra and Heidelberg automatic web systems.

SPECIFICATIONS:

Flashpoint: >142 degrees F. TCC
VOC: 2.02 lbs. /gallon, (245 grams/liter), 30%
Drying speed: Slow
Solvent Strength: Moderate Odor: Mild
Composite Vapor Pressure (mmHG): 1.0

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drum



Technical Data Sheet

LO-VO WASH CA-100

**LOW VOC PRESS WASH FOR USE IN SHEETFED AUTOMATIC
BLANKET WASH SYSTEMS-HEIDELBERG APPROVED.**

DESCRIPTION:

LO-VO WASH CA-100 was designed to be used in automatic blanket washer systems on sheetfed and web presses. The product features a strong cleaning action with no residual surfactant residue to contaminate the spray bars or the blankets. LO-VO Wash CA-100 can also be used as a hand wash. This product is formulated to be used only as a blanket and roller wash for offset lithography.

DIRECTIONS FOR USE:

Automatic Blanket Washers: Add to blanket washer reservoir for automatic application per the manufacturer's guidelines. For best results, make sure that the water pulse is at least double the solvent pulse and extra water for a rinse is preferred. *A water additive, Tower 250 WA may be added in the water tank to help aid in rinsing.*

Hand Blanket/Roller Wash: Apply a small quantity of product to the rag and make sure that the rag is not in any way saturated. Apply to the blanket. Follow by a water dampened rag and buff dry. For rollers, apply full strength followed by a water rinse. **READ MSDS BEFORE USE.** Store above 45 degrees F with container tightly closed.

FEATURES AND BENEFITS:

- *Specially formulated for automatic units to decrease residue.
- *High Flash Point and very low in odor.
- *Excellent cleaning efficiency.
- *Meets SCAQMD Regulations 1171 at less than 100 grams/liter VOC Content
- *Heidelberg/FOGRA Approved

SPECIFICATIONS:

Flashpoint: 231 degrees F. TCC
VOC: 0.8 lbs. /gallon, (98 grams/liter), 12%
Drying speed: Slow Solvent Strength: Moderate Odor: Mild
Composite Vapor Pressure (mmHG): Less than 1.0

HMIS RATING:

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drum



Technical Data Sheet

LO-VO WASH CA-200 LOW VOC PRESS WASH

DESCRIPTION:

LO-VO WASH CA-200 is designed to be used as a press wash to comply with Rule 1171 VOC regulations. It can be used in automatic blanket washer systems on sheetfed and web presses. The product can also be used as a hand wash. The product is intended to be used undiluted, but it can be mixed with up to 30% water.

DIRECTIONS FOR USE:

Automatic Blanket Washers: Add to blanket washer reservoir for automatic application per the manufacturer's guidelines. For best results, make sure that the water pulse is at least double the solvent pulse and extra water for a rinse is preferred. *A water additive, Tower 250 WA may be added in the water tank to help aid in rinsing.*

Hand Blanket/Roller Wash: Apply a small quantity of product to the rag and make sure that the rag is not in any way saturated. Apply to the blanket. Follow by a water dampened rag and buff dry. For rollers, apply full strength followed by a water rinse.

READ MSDS BEFORE USE. Store above 45 degrees F with container tightly closed.

FEATURES AND BENEFITS:

- *High Flash Point and very low in odor.
- *Excellent cleaning efficiency.
- *Meets SCAQMD Regulations 1171 at less than 100 grams/liter VOC Content

SPECIFICATIONS:

Flashpoint: Greater than 142 degrees F. TCC
VOC: 0.78 lbs. /gallon, (94 grams/liter), 11%
Drying speed: Slow
Solvent Strength: Moderate
Odor: Mild
Composite Vapor Pressure (mmHG): Less than 1.0

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drum



Technical Data Sheet

LO-VO WASH ELT-30

LOW VOC WASH FOR USE IN ELETTRA SHEETFEED AND WEB AUTOMATIC BLANKET WASHER SYSTEMS

DESCRIPTION:

LO-VO WASH ELT-30 was designed to be used in automatic blanket washer systems on sheetfed and web presses. The product features a strong cleaning action with no residual surfactant residue to contaminate the spray bars or the blankets. LO-VO WASH ELT-30 has a high flashpoint and a VOC content of 30%. The product will not damage roller compounds and is approved for use by RotaDyne Roller Company.

DIRECTIONS FOR USE:

Automatic Blanket Washers: Add to blanket washer reservoir for automatic application per the manufacturer's guidelines. For best results, make sure that the water pulse is at least double the solvent pulse and extra water for a rinse is preferred, but always check with the manufacturer.

Hand Blanket Wash: Apply a small quantity of product to the rag and make sure that the rag is not in any way saturated. Apply to the blanket. Follow by a water dampened rag and buff dry or dampen the rag first and add a small quantity of product to the rag and apply to the blanket.

READ MSDS BEFORE USE. Store above 45 degrees F.

FEATURES AND BENEFITS:

- *Low VOC content that meets the EPA Control Technology Guidelines.
- *Specially formulated for automatic units to decrease residue.
- *High Flash Point and very low in odor with excellent cleaning efficiency.
- *Approved for use in Elettra automatic web systems.

SPECIFICATIONS:

Flashpoint: >142 degrees F. TCC

VOC: 2.0 lbs. /gallon, (240 grams/liter), 30%

Drying speed: Slow Solvent Strength: Moderate Odor: Mild

Composite Vapor Pressure (mmHG): Less than 1.0

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drum, 330 gallon tote



Technical Data Sheet

LO-VO WASH CA-UV

LOW VOC PRESS WASH FOR UV/EB AND HYBRID INKS

DESCRIPTION:

LO-VO WASH CA-UV is designed to be used as a press wash to comply with low VOC regulations for UV/EB and Hybrid ink applications. It can be used in automatic blanket washer systems on sheetfed and web presses. The product can also be used as a hand wash. The product is intended to be used undiluted, but it can be mixed with up to 30% water and is not oily.

DIRECTIONS FOR USE:

Automatic Blanket Washers: Add to blanket washer reservoir for automatic application per the manufacturer's guidelines. For best results, make sure that the water pulse is at least double the solvent pulse and extra water for a rinse is preferred. *A water additive, Tower 250 WA may be added in the water tank to help aid in rinsing.*

Hand Blanket/Roller Wash: Apply a small quantity of product to the rag and make sure that the rag is not in any way saturated. Apply to the blanket. Follow by a water dampened rag and buff dry. For rollers, apply full strength followed by a water rinse. **READ MSDS BEFORE USE.** Store above 45 degrees F with container tightly closed.

FEATURES AND BENEFITS:

- *Non-Oily Formula, high flash point and low odor.
- *Excellent cleaning efficiency for UV and Hybrid Inks
- *Low VOC formula at less than 100 grams/liter VOC Content

SPECIFICATIONS:

Flashpoint: Greater than 142 degrees F. TCC
VOC: 0.79 lbs. /gallon, (95 grams/liter), 10%
Drying speed: Slow
Solvent Strength: Moderate
Odor: Mild
Composite Vapor Pressure (mmHG): Less than 1.0

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drum



Technical Data Sheet

METER CLEAN

METERING ROLLER CLEANER AND DEGREASER

DESCRIPTION:

Tower Meter Clean is a fast drying cleaner for continuous dampening systems. The product thoroughly cleans the rollers in the dampening system to help prevent any ink or resin buildup that can feed back into the dampening system. When used as a degreaser for parts and equipment, Meter Clean cuts through the toughest soils and dries residue-free.

DIRECTIONS FOR USE:

For Metering Rollers: Disengage metering roller from contact with other rollers.

Apply full strength using a saturated cloth. Metering rollers should be cleaned daily or whenever a build-up appears. *For Degreasing:* Apply full strength by brush, spray or immersion. Avoid prolonged contact with aluminum or soft alloys.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Extremely effective cleaner
- * Very fast drying speed
- * Leaves no oily residue

SPECIFICATIONS:

Flashpoint: 20 degrees F. TCC

VOC: 6.3 lb/gal (756 grams/liter), 99%

Drying Speed: Very fast

Solvent Strength: Strong

Odor: Mild Citrus

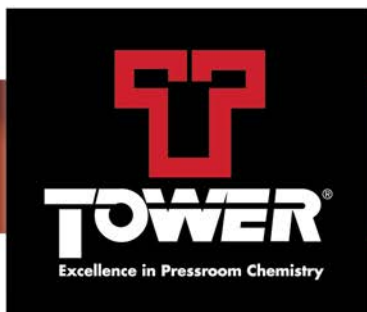
Composite Vapor Pressure (mmHG): 20

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

4x1 gallon case, 55 gallon drum



Technical Data Sheet

MILLENNIUM 1000

PREMIUM, ONE-STEP FOUNTAIN SOLUTION

DESCRIPTION:

Millennium 1000 is a premium one-step fountain solution that does not require the addition of alcohol or alcohol substitutes to the fountain. It is formulated to run metal plates on all types of dampening systems. The product can effectively replace traditional two step products in most applications at a lower dosage.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.
Add 5 ounces of Millennium 1000 per gallon of water.
READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology wetting agents.
- *Formulated for continuous dampening systems.
- *Lower dosage, one step product for dosing ease on press.
- *Buffered against calcium carbonate.
- *Fast, true rollups without plate blinding.

SPECIFICATIONS:

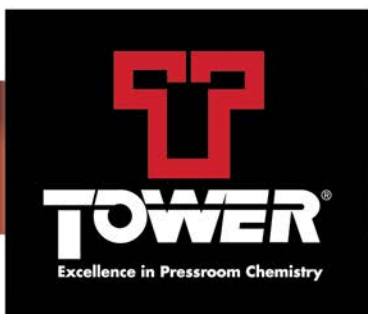
Flashpoint: 155 degrees F TCC
VOC: 4.79 lbs./gallon (575 grams/liter), 56%
Conductivity Range: 440 micromhos per ounce plus water.
Expected pH: 3.6-3.8
PRESS READY SOLUTION (5 ounces per gallon in DI Water)
Conductivity: 2200 pH: 3.7

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

4x1 gallon case 5 gallon pail 55 gallon drum



Technical Data Sheet

MILLENNIUM 2000

PREMIUM, ONE-STEP FOUNTAIN SOLUTION

DESCRIPTION:

Millennium 2000 is a premium one-step fountain solution that does not require the addition of alcohol or alcohol substitutes to the fountain and has exceptional wetting ability. It is formulated to run metal plates on all types of dampening systems, especially Komori presses where ink feedback is an issue. The product can effectively replace traditional two step products in most applications at a lower dosage.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.
Add 4 to 6 ounces of Millennium 2000 per gallon of water.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology wetting agents.
- *Reduced ink feedback and maintains a steady functional pH on press.
- *Lower dosage, one step product for dosing ease on press.
- *Highly buffered against calcium carbonate.
- *Fast, true rollups without plate blinding.

SPECIFICATIONS:

Flashpoint: 155 degrees F TCC

VOC: 5.48 lbs./gallon (657 grams/liter), 65%

Conductivity Range: 400 micromhos per ounce plus water.

Expected pH: 3.6-3.8

PRESS READY SOLUTION (4 ounces per gallon in DI Water)

Conductivity: 1600 micromhos pH: 3.6

HMS RATINGS:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail 55 gallon drum



Technical Data Sheet

MILLENNIUM 7000

SHEETFED FOUNTAIN SOLUTION WITH CALCIUM CONTROL

DESCRIPTION:

Millennium 7000 is a high technology fountain solution formulated to run well with difficult integrated dampening systems. The product has a unique buffering system that helps to prevent calcium deposits. In conjunction with AR 7500, it allows the printer to reduce water roller speeds and obtain the best possible ink/water balance. Millennium 7000 does not contain any HAP's and is free of VOC's. It is compatible with UV, Hybrid, Metallic and conventional inks since it does not contain any glycol materials.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

METAL PLATES: Add 3-4 ounces of Millennium 7000 per gallon of water in conjunction with 2-3 ounces of Tower AR 7500 Alcohol Replacement or 2 ounces per gallon of Dynamic ARP. For UV printing, dosage is 3 ounces of Millennium 7000 and 1.5 ounces of AR-7500. **READ MSDS BEFORE USE.**

FEATURES AND BENEFITS:

- * Formulated for UV, Hybrid, Metallic and Conventional inks.
- * Zero VOC product and no HAP's
- * Fast rollups on CTP plates
- * Controls calcium to reduce plate blinding and ink roller stripping.

SPECIFICATIONS:

Flashpoint: Greater than 200 degrees F. T.C.C.

VOC: None pH (working solution): 4.1-4.3

Conductivity Range: 520 micromhos/ounce plus the water.

PRESS READY SOLUTION (3 ounces per gallon in DI Water)

Conductivity: 1560 micromhos pH: 4.2

HMIS RATING:

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 30 & 55 gallon plastic drums, 275 gallon totes



Technical Data Sheet

MILLENNIUM DGT **ONE-STEP CTP FOUNTAIN SOLUTION**

DESCRIPTION:

Millennium DGT is a one-step fountain solution for web presses. The product has a strong buffering system and will work well in various types of dampening systems. The product was designed to maximize the performance of printer running CTP plates, but the product also works well with conventional plates. Millennium DGT has an expected pH of 3.8 to 4.2.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

Metal Plates: Add 3-5 ounces of Millennium DGT per gallon of water. The pH of the working solution should be between 3.8 and 4.2 and the conductivity should read approximately 475 micromhos per ounce used over the water.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology wetting agent for reducing surface tension.
- *Formulated for CTP plates and continuous dampening systems.
- *One step product for dosing ease on press.
- *Strong, unique buffering system against calcium carbonate.
- *Fast, true rollups without plate blinding.
- *Reduces ink feedback into the dampening system.

SPECIFICATIONS:

Flashpoint: 154 degrees F

VOC: 0.64 lbs./gallon, 7%

Odor: Mild

Appearance: Bluish Green liquid

Conductivity Range: 475 micromhos per ounce plus water.

Expected pH: 3.8 to 4.2

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail 30 gallon drum 55 gallon drum 275 gallon tote effective date: Jan 15, 2005



Technical Data Sheet

MILLENNIUM HSW-100

HIGH SPEED, HEATSET WEB FOUNTAIN SOLUTION

DESCRIPTION:

Millennium HSW-100 is a one-step fountain solution for heatset web presses running at high speeds. The product has a strong buffering system and will work well in various types of dampening systems to provide fast, clean restarts. The product was designed to maximize the performance of printer running CTP plates and will run in RO to medium hard waters.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

Add 4 to 6 ounces of Millennium HSW-100 per gallon of water. The pH of the working solution should be between 4.0 and 4.2 and the conductivity should read approximately 480 micromhos per ounce used over the water.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology wetting agent for reducing surface tension.
- *Formulated for CTP plates and continuous dampening systems.
- *Designed for high speed web press applications.
- *Strong, unique buffering system against calcium carbonate.

SPECIFICATIONS:

Flashpoint: 164 degrees F TCC VOC: 0.55 lbs./gallon, 6%
Odor: Mild Appearance: Bluish Green liquid
Conductivity Range: 480 micromhos per ounce plus water.
Expected pH: 4.0 to 4.2 Phosphorous Content: 1030 ppm
PRESS READY SOLUTION (5 ounces/gallon in DI Water)
Conductivity: 2400 micromhos pH: 4.0-4.2

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums, 275 gallon totes



Technical Data Sheet

MILLENNIUM HSW-200

HEATSET WEB FOUNTAIN SOLUTION WITH NON-PILING ADDITIVE

DESCRIPTION:

Millennium HSW-200 is a one-step fountain solution for heatset web presses that contains a strong non-piling additive. The product has a strong buffering system and will work well in various types of dampening systems to provide fast, clean restarts. Millennium HSW-200 can also be used as a one step product for sheetfed presses and was designed to maximize the performance of printers running CTP plates.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

Add 4 to 6 ounces of Millennium HSW-200 per gallon of water. The pH of the working solution should be between 4.0 and 4.2 and the conductivity should read approximately 435 micromhos per ounce used over the water.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology wetting agent for reducing surface tension.
- *Unique non-piling additive incorporated in the formulation.
- *Formulated for CTP plates and continuous dampening systems.
- *Designed for high speed web press applications.
- *Strong, unique buffering system against calcium carbonate.

SPECIFICATIONS:

Flashpoint: 213 degrees F TCC

VOC: 0.45 lbs./gallon, 6%

Odor: Mild

Appearance: Bluish Green liquid

Conductivity Range: 435 micromhos per ounce plus water.

Expected pH: 4.0 to 4.2

Phosphorous Content: 905 ppm

PRESS READY SOLUTION (5 ounces/gallon in DI Water)

Conductivity: 2175 micromhos pH: 4.0-4.2

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drum and 275 gallon totes



Technical Data Sheet

MILLENNIUM SF

ADVANCED FOUNTAIN SOLUTION FOR SHEETFED PRESSES

DESCRIPTION:

Millennium SF is a high technology fountain solution formulated to run well with difficult integrated dampening systems. In conjunction with Dynamic ARP, Millennium SF allows the printer to reduce water roller speeds and thereby decrease ink consumption. Millennium SF is formulated to run with soft and medium water and is buffered to run an expected pH of 3.8 - 4.2. Millennium SF will increase print quality over old technology fountain solutions now in use.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

Two Step Application: METAL PLATES: Add 3-4 oz. of Millennium SF per gallon of water, in conjunction with 1 to 4 oz. per gallon of Dynamic ARP or AR-7500 alcohol substitute.

Heidelberg Alcolor: 3 oz. Millennium SF, 2 oz. Dynamic ARP or AR-7500.

One Step Application: METAL PLATES: Add 6 oz. Millennium SF per gallon of water.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Formulated for difficult continuous dampening systems.
- * Eliminates aqueous plate blinding.
- * Buffered against calcium carbonate.
- * Fast, true rollups on CTP plates.

SPECIFICATIONS:

Flashpoint: 158 degrees F. T.C.C. VOC: 1.70 lbs./gal., 19%

Conductivity: 575 micromhos per ounce pH (working solution): 3.8-4.2

PRESS READY SOLUTION (4 ounces/gallon in DI Water)

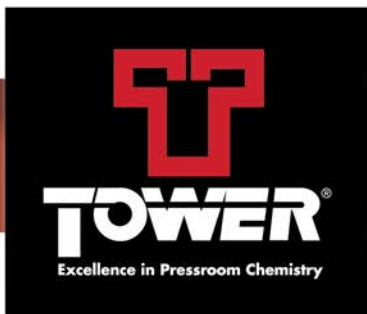
Conductivity: 2300 micromhos pH: 4.0-4.2

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

4 X 1 gallon case, 5 gallon pails, 30 & 55 gallon plastic drums, 275 gallon totes



Technical Data Sheet

MILLENNIUM SILVER

ONE STEP FOUNTAIN SOLUTION FOR POLYESTER PLATES

DESCRIPTION:

Millennium Silver was designed and formulated to give outstanding performance for printers using Silvermaster/Megalith and other polyester and laser plates. Millennium Silver contains a new generation of wetting agents and buffers to keep the plate clean, prevent toning and print the sharpest dot possible. The product will also work on short run metal plates for even more versatility. Millennium Silver is a buffered product that has an expected pH of 3.6 - 4.0. Water hardness range is not an issue with the product.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

POLYESTER PLATES, BLACK/SILVER PLATES, LASER PLATES: Add 6-8 oz. of Millennium Silver per gallon of water.

METAL PLATES: Add 6-8 oz. of Millennium Silver per gallon of water.

Recommended for use on Myriad 2 plates from Xante and Omega plates by Autotype.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Low VOC formula without alcohol.
- * No reportable hazardous ingredients.
- * No alcohol or additives usually required.
- * For all polyester, black/silver plates and laser plates.
- * Works with short run metal plates.

SPECIFICATIONS:

Flashpoint: Greater than 142 F. TCC

VOC: 1.1 lbs/gal, 14%

pH (working solution): 3.6 - 4.0

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

4 X 1 gallon cases



Technical Data Sheet

MILLENNIUM 3000

PREMIUM, LOW VOC ONE-STEP FOUNTAIN SOLUTION

DESCRIPTION:

Millennium 3000 is a premium, low solvent, one-step fountain solution that does not require the addition of alcohol or alcohol substitutes to the fountain. It is formulated to run metal plates on all types of dampening systems. The product helps to prevent counter etching when metallic inks are used on press and keeps the chrome rollers extremely clean.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.
Add 4-6 ounces of Millennium 3000 per gallon of water.
READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology low VOC wetting agents.
- *Excellent for use with metallic inks.
- *Lower dosage, one step product for dosing ease on press.
- *Low solvent content and buffered against calcium carbonate.
- *Fast, true rollups without plate blinding.

SPECIFICATIONS:

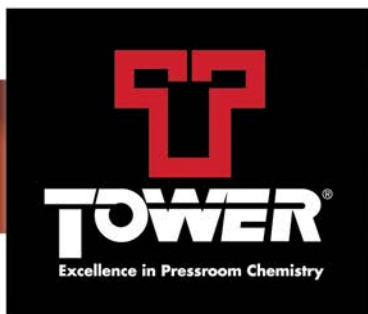
Flashpoint: Over 200 degrees F TCC
VOC: 0.45 lbs./gallon (54 grams/liter), 6%
Conductivity Range: 583 micromhos per ounce plus water.
Expected pH: 3.8-4.0
PRESS READY SOLUTION (5 ounces per gallon in DI Water)
Conductivity: 2915 pH: 3.9

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail 55 gallon drum



Technical Data Sheet

MILLENNIUM 8000

HIGHER pH SHEETFED FOUNTAIN SOLUTION

DESCRIPTION:

Millennium 8000 is a high technology fountain solution formulated to run well with difficult integrated dampening systems. The product has a unique buffering system that helps to prevent calcium deposits by running at an increased pH of 4.5-4.7. In conjunction with AR 7500, it allows the printer to reduce water roller speeds and obtain the best possible ink/water balance. Millennium 8000 does not contain any HAP's and is free of VOC's. It is compatible with UV, Hybrid, Metallic and conventional inks since it does not contain any glycol materials.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

METAL PLATES: Add 3-4 ounces of Millennium 8000 per gallon of water in conjunction with 2-3 ounces of Tower AR 7500 Alcohol Replacement or 2 ounces per gallon of Dynamic ARP or 8-12% alcohol.

For UV printing, dosage is 3 ounces of Millennium 8000 and 1.5 ounces of AR-7500.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Formulated for UV, Hybrid, Metallic and Conventional inks.
- * High pH balanced formula.
- * Controls calcium to reduce plate blinding and ink roller stripping.

SPECIFICATIONS:

Flashpoint: Greater than 200 degrees F. T.C.C.

VOC: None pH (working solution): 4.5-4.7

Conductivity Range: 520 micromhos/ounce plus the water.

PRESS READY SOLUTION (3 ounces per gallon in DI Water)

Conductivity: 1560 micromhos pH: 4.6

HMIS RATING:

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: B

PACKAGING:

4x1 gallon cases, 5 gallon pails, 55 gallon plastic drums, 275 gallon totes



Technical Data Sheet

MRC 100

ULTRA FAST DRYING, 100 GRAM/LITER METERING ROLLER CLEANER

DESCRIPTION:

MRC 100 is an ultra- fast drying Metering Roller Cleaner formulated to meet the requirements of 100 grams per liter as legislated by SCAQMD. This product is only intended to be used as a metering roller cleaner and not a roller and blanket wash.

DIRECTIONS FOR USE:

Apply full strength at room temperature. Flammable liquid. Keep away from heat and open flame. Store and use in a well ventilated area. For use as a metering roller cleaner only.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Very fast drying
- *No residue cleaner.
- *Excellent non-chlorinated metering roller cleaner.
- *Low VOC by SCAQMD 1171 standards at 92 grams per liter.

SPECIFICATIONS:

Flashpoint: 0 degrees F
VOC=s: 0.8 lb/gal (92 grams/liter) 12% acetone exempt
Drying Speed: Very fast
Cleaning Strength: Very Strong
Odor: Strong Solvent
Composite Vapor Pressure (mmHG): 63.4

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums



Technical Data Sheet

MRC 2010

LOW VAPOR PRESSURE, FAST DRYING METERING ROLLER CLEANER

DESCRIPTION:

MRC 2010 is a fast drying solvent blend formulated to clean metering rollers in continuous dampening systems. The product is considered a low vapor pressure product with a composite vapor pressure under 10mm HG. This product will clean quickly and leave no residue. It can also be used to clean back cylinders and used as a fast drying typewash.

DIRECTIONS FOR USE:

For Metering Rollers: Disengage metering roller from contact with other rollers. Apply full strength using a saturated cloth. Metering rollers should be cleaned daily or whenever a build-up appears.

FLAMMABLE LIQUID. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Low Vapor Pressure product
- * Extremely effective metering roller cleaner
- * Fast drying speed
- * Leaves no oily residue
- * Cleans back cylinders

SPECIFICATIONS:

Flashpoint: Greater than 45 degrees F. TCC

VOC: 6.59 lb/gal (790 grams/liter), 100%

Drying Speed: Fast

Solvent Strength: Strong

Odor: Solvent

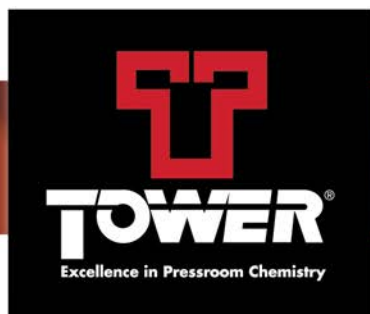
Composite Vapor Pressure (mmHG): 9.58 at 20 degrees F

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: C

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

MRC-LV

LOW VOC METERING ROLLER CLEANER

DESCRIPTION:

MRC-LV is a very fast drying, low VOC metering roller cleaner. The product features great cleaning strength and no residue.

DIRECTIONS FOR USE:

Apply full strength at room temperature. Keep away from heat and open flame. Use in a well ventilated area.

FLAMMABLE LIQUID. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Very fast drying
- *No residue cleaner.
- *Excellent non-chlorinated metering roller cleaner.
- *Low VOC Product to meet local regulations.
- *Uses include metering roller cleaner and typewash.

SPECIFICATIONS:

Flashpoint: 18 degrees F
VOC=s: 1.68 lb/gal (202 grams/liter) 26% acetone exempt
Drying Speed: Very fast
Cleaning Strength: Strong
Odor: Solvent

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

N.M.C. II

NUMBERING MACHINE CLEANER

DESCRIPTION:

In one easy application, N.M.C. II cleans and lubricates numbering machines with a special non-separating formula. The microscopic coating of lubricant that N.M.C. II leaves behind is ink-compatible, so when it's time to re-use the machine, no pre-cleaning is necessary. Apply by brush, spray or immersion.

DIRECTIONS FOR USE:

Apply full strength by brush, spray or immersion.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Cleans and lubricates in one step.
- *Can be used in tank systems, ultrasonic units and by hand.
- *No chlorinated solvents or ODP's.
- *Non-separating formula.
- *Lubricant is ink receptive.

SPECIFICATIONS:

Flashpoint: 120 F TCC
VOC: 6.7 lbs/gallon (809 gm/L) 94%
Drying Speed: Medium
Solvent Strength: Strong
Odor: Slight Solvent Odor

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail



Technical Data Sheet

PLATE CLEANER & PRESERVER

PLATE CLEANER, FINISHER AND PRESERVER FOR CTP PLATES

DESCRIPTION:

Plate Cleaner & Preserver is an outstanding plate cleaner that also desensitizes and provides a short term gum preservative for CTP plates. The product will not damage the image of a CTP Plate as it is an acid emulsion cleaning product. Along with cleaners and gum, the product provides excellent lubrication for the plate to help with fast roll ups on press. Plate Cleaner & Preserver is an excellent choice for short term storage of plates for re-use.

DIRECTIONS FOR USE:

For Metal Plates: For best results make sure that the press is stopped and Shake Well before use. Sheet off excess ink from the plate. Apply the product with a water dampened sponge or cloth. Wipe off with a clean rag. For short term storage, apply as described and buff dry after all ink has been removed from the plate.

READ MSDS BEFORE USE.

FEATURES:

- One step cleaning, finishing and preservative product.
- Fast and strong emulsion cleaner that provides quick and clean restarts.
- Desensitizes the non-image area of CTP plates.
- Low VOC product under 100 grams per liter for use in California.
- Approved for use on Kodak Thermal Gold/ Platinum/Direct, Sword Excel P45, Electra XD 0080 and Trillian SP. Approved for use on Fuji LH-PJ and LP-NV2. Approved for use on Agfa Azura, Amigo, Elite, P970 and N91V. Approved for use on Presstek Aeon.

SPECIFICATIONS:

Flash Point: Greater than 145 degrees F. (TCC)
VOC Data: 0.83 pounds/gallon (100 grams/liter) 11%
Glycol Ether Solvents: None pH: 3.7-3.9
Odor and Appearance: Mild Solvent Odor/White Emulsion

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

12 X 1 Quart case



Technical Data Sheet

PLATE PREP

CTP PLATE PREPARATION FLUID

DESCRIPTION:

Tower Plate Prep was developed to solve the issue of handling scratches and plate sensitivity prior to mounting the plate on press. Handling scratches, especially on unbaked CTP plates, is a major production issue. Plate Prep when applied correctly, will remove the small handling scratches and desensitize the plate prior to press start up. Because the product has an acid pH, plate blinding and image damage is not an issue.

DIRECTIONS FOR USE:

For Metal Plates: For best results make sure that the press is stopped and Shake Well before use. Apply the product to the plate with a sponge, cloth or wipe saturated with Plate Prep prior to starting up. No buffing or drying is needed.

READ MSDS BEFORE USE.

FEATURES:

- Outstanding scratch healing.
- Thin viscosity emulsion product.
- Provides quick and clean press starts.
- Desensitizes the non-image area of CTP plates.

SPECIFICATIONS:

Flash Point: 180 degrees F. (TCC)

VOC Data: 3.35 pounds/gallon

Glycol Ether Solvents: None

pH: 3.5-4.0

Odor and Appearance: Mild Solvent Odor/White Thin Emulsion

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail



Technical Data Sheet

PREMIER NEUTRAL

WORLD CLASS, NEUTRAL FOUNTAIN SOLUTION

DESCRIPTION:

Premier Neutral is a high technology fountain solution formulated for today's demanding web printer. Premier Neutral contains a unique wetting agent package that promotes lower ink emulsification than other competitive products. This results in bold solids, brilliant colors and faster roll-ups. An excellent product for spray bars, the solution continuously cleans the dampening system for consistently clean equipment. Premier Neutral contains no hazardous air pollutants, or VOC's.

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

DILUTION: Add 2 ounces of Premier Neutral per gallon of water.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Fast, clean roll ups
- *Low dosage required
- *Water hardness not an issue
- *Advanced wetting agents for brilliant colors.
- *Outstanding biocide protection.

SPECIFICATIONS:

Flashpoint: None

VOC Content: None

pH of working solution: 6.8-7.0

Conductivity Range: 525 micromhos per ounce plus the water

PRESS READY SOLUTION (2 ounces per gallon in DI water)

Conductivity: 1050 micromhos

pH: 7.0

HMIS RATING:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums, 275 gallon totes



Technical Data Sheet

PREMIER NEWS 145 MA FOUNTAIN SOLUTION

ONE OUNCE, MILD ACID FOUNTAIN SOLUTION

DESCRIPTION:

Premier News 145 MA is a low dosage, high technology, mild acid fountain today's demanding web printer. The product contains a unique wetting agent package that promotes lower ink emulsification than other competitive products. This results in bold solids, brilliant colors and faster roll-ups. It also provides a large operating window even at one ounce per gallon dosage!

DIRECTIONS FOR USE:

Always clean the dampening system before changing fountain solution.

DILUTION: Add 1 ounce of Premier News 145 MA per gallon of water.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Fast starts on CTP plates
- *Very Low dosage required
- *Mild acid pH for faster cleanups
- *Advanced wetting agents for brilliant colors.
- *Outstanding biocide protection.

SPECIFICATIONS:

Flashpoint: None

VOC Content: None

pH of working solution: 4.6 - 5.0

Conductivity Range: 1150 micromhos per ounce plus the water

PRESS READY SOLUTION (1 ounces per gallon in DI water)

Conductivity: 1150 micromhos pH: 4.8

HMIS RATING:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums, 275 gallon totes



Technical Data Sheet

PREMIUM OTF PLATE CLEANER

NON-EMULSION PLATE CLEANER FOR BAKED AND UNBAKED PLATES

DESCRIPTION:

Premium OTF Plate Cleaner is a non-emulsion cleaner used to clean baked and unbaked printing plates on the fly in a production setting. The product quickly and effectively desensitizes scratches while the web press is running without removing the image on the plate. Premium OTF Plate Cleaner will help you minimize press downtime and maximize print quality by rapidly cleaning and conditioning the plate without damage.

DIRECTIONS FOR USE:

Web Press: Spray or apply the product directly to the dampening roller system while the press is running.

Sheetfed Press: Moisten a soft cloth or sponge and wipe on plate in direction of the scratches.

Wash plate with water or fountain solution immediately after cleaning.

READ MSDS BEFORE USE.

FEATURES:

- Low VOC product without any HAP's.
- Strong, effective cleaner without plate image impact.
- Provides quick and clean restarts.
- Desensitizes scratches on the fly.
- Approved for use with Fujifilm, Agfa and Kodak plates.

SPECIFICATIONS:

Flash Point: Greater than 200 degrees F. (TCC)

VOC Data: 0.3 pounds/gallon (38 grams/liter) 4%

Drying Speed: N/A

Odor: Mild Detergent Odor

HMIS RATING:

Health: 2 Fire: 1 Reactivity: 0 Personal Protection: B

PACKAGING:

12 X 1 Quart Case, 55 gallon drum



Technical Data Sheet

PRESS PRO

PREMIUM, ONE-STEP WATER MISCIBLE WASH

DESCRIPTION:

For printers who demand the very best, Press Pro is the finest water miscible wash we make. Press Pro contains a unique package of high technology cleaning agents, conditioners and deglazing compounds for thorough deep cleaning action. Press Pro can be used straight or be mixed with up to 50% water for maximum economy and VOC reductions. The product has moderate drying speed, low vapor pressure and a very mild odor.

DIRECTIONS FOR USE:

Rollers: Apply straight or diluted with up to 50% water across the top of the roller. Allow the product to run into the roller train for a few minutes and engage the wash-up blade. Reapply if necessary until the fluid runs clear into the wash-up tray.

Blankets: Apply straight or premixed with up to 50% water with a saturated cloth.

READ MSDS BEFORE USE.

FEATURES:

- * Low vapor pressure that exceeds EPA requirements
- *Water miscible up to 50%
- *Strong Cleaning Action
- *Excellent wash for hybrid inks

SPECIFICATIONS:

Flash Point: 105 degrees F.

Composite Vapor Pressure (mmHG): Less than 3.0

VOC Data: 6.1 pounds/gallon (732 grams/liter) 94%

Drying Speed: Medium

Solvent Strength: High

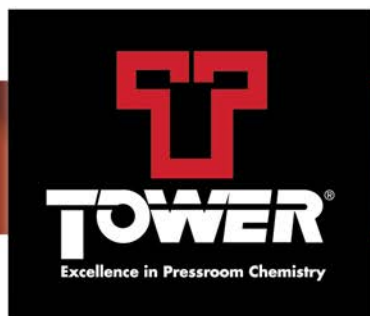
Odor: Vanilla

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

PRESSTO! 123

FAST DRYING ROLLER & BLANKET WASH

DESCRIPTION:

This wash is perfect for the small press operator who wants deep, fast cleaning WITHOUT the hazards of a flammable or toxic solvent. Pressto! 123 has a high flashpoint and does not contain any chlorinated solvents.

DIRECTIONS FOR USE:

ROLLERS: Apply full strength on top roller and allow to run in. Engage wash up blade or use cleaner sheets to remove product after cleaning.

BLANKETS: Apply full strength with a saturated cloth to blankets.

AUTOMATIC UNITS: Can safely be used in all automatic systems. Speed adjustment to wash up cycle may be needed.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Can be used in automatic washup units.
- * Very mild odor.
- * Can be used on larger presses
- * Dissolves ink and varnish quickly.
- * Drying speed is fast, but not ultra-fast. This is for a more controlled cleaning function.
- * Does not contain any chlorinated solvents and has a high flashpoint.

SPECIFICATIONS:

Flashpoint: 102 F. (TCC)

VOC: 6.9 lbs/gal (826 grams/liter) 100%

Drying Speed: Fast

Solvent Strength: Strong

Odor: Sweet Floral

Composite Vapor Pressure (mmHG): 2.8

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

RECHARGE CONCENTRATE HF

Recharge Additive

DESCRIPTION:

This product is an additive concentrate to recharge reclaim high flashpoint Tower water miscible washes. Using this product with reclaimed solvent will add back the surfactant, corrosion inhibitors and fragrance lost in the distilling process.

DIRECTIONS FOR RECHARGING TOWER WATER MISCIBLE WASHES:

Add 5.5% of Recharge Concentrate HF to a gallon of reclaimed material. For 52 gallons of reclaimed material, add 3 gallons of Recharge Concentrate HF to yield 55 gallons of reusable water miscible wash. This product will add back the surfactant, corrosion inhibitors and fragrance to the reclaimed material.

SPECIFICATIONS OF CONCENTRATE:

Flash Point: Greater than 142 degrees F.

Specific Gravity: 0.80

VOC Data: 5.95 pounds/gallon (714 grams/liter) 91%

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

RESTORKLEEN

ROLLER AND BLANKET DEGLAZER, REJUVENATOR AND CONDITIONER

DESCRIPTION:

RESTORKLEEN is a one-step blanket deglazer and rejuvenator for all size presses. The product will strip away glaze and leave behind a plasticizer to help restore the rubber surface and prevent dehydration. Restorkleen is not to be used as a daily wash, but rather as a maintenance product.

DIRECTIONS FOR USE:

ROLLERS: Pour on top of roller and roller train and let run in. Follow with a water rinse or a 50-50 mixture of water and a water miscible wash like Press Pro, Colorkleen, or I.P. Wash.

BLANKETS: Apply full strength using a saturated cloth. A second wipe with a damp cloth will remove any excess plasticizer after the product has been applied.

The product should be rinsed to prevent surfactant build-up.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Makes rollers and blankets velvety smooth and feel like new.
- * Three products in one (deglazer, rejuvenator and conditioner).
- * No red label and low odor.
- * Not a fast drying product, but a deep cleaner.
- * Meant to be used as a maintenance product, not a daily wash.

SPECIFICATIONS:

Flashpoint: 112 F. TCC

VOC: 6.97 lbs/gal (836 grams/liter), 90%

Drying Speed: Slow

Solvent Strength: Strong

Odor: Bubble Gum

Composite Vapor Pressure (mmHG): 3.0

HMIS Rating:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

4 x 1 gallon cases, 5 gallon pails, 55 gallon drums



Technical Data Sheet

SHORTSTOP

ONE-STEP WATER MISCIBLE WASH

DESCRIPTION:

We call SHORTSTOP a "best buy" because no competitive wash can match its value. Features include water-miscibility up to 30%, an operator-friendly, virtually odorless formula, and enthusiastic testimonials from U.S. and Canadian printers running everything from duplicators to webs.

DIRECTIONS FOR USE:

ROLLERS: Apply SHORTSTOP straight or diluted with water up to 30% across the top of the roller. Allow to run down the roller train for a few minutes and engage wash-up blade. Reapply if necessary until fluid runs clear into the wash-up tray.
BLANKETS: Apply SHORTSTOP straight or premixed with up to 30% water with a saturated cloth on the blanket.
READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Removes gum, glaze and ink in one wash up.
- * Helps to condition rubber rollers and blankets.
- * Can be mixed with 30% water.
- * Economical selling price versus a large number of competitive products.

SPECIFICATIONS:

Flashpoint: 113 F. TCC
VOC: 6.8 lbs./gallon (816 grams/liter) , 99%
Drying Speed: Medium
Solvent Strength: Moderate
Odor: Sweet Floral
Composite Vapor Pressure (mmHG): 2.9

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail, 55 gallon drum



Technical Data Sheet

SmartFlex FLEXO-WASH PLUS

ADVANCED, WATER-BASED FLEXOGRAPHIC INK CLEANER

DESCRIPTION:

SmartFlex Flexo-Wash PLUS represents the state of the art technology in water-based flexographic ink cleaning. Its' low odor and effective formula rapidly cleans conventional and most UV flexographic ink from plates, machinery and floors without harsh solvents. The product will not swell photopolymer printing plates and can be applied by hand or used in plate cleaning machinery, ultrasonic and hot tank units.

DIRECTIONS FOR USE:

Flexographic Ink Cleaning: Apply full strength or dilute with water up to 50% to clean water-based flexographic ink.

Hot Tank or Ultrasonic Units: Mix Flexo-Wash PLUS with up to 90% water. Set tank temperature to a maximum of 140 degrees F. READ MSDS BEFORE USE. DO NOT ALLOW PRODUCT TO FREEZE.

FEATURES AND BENEFITS:

- * Water-Based Concentrate.
- * Will not damage rubber or photopolymer plates.
- * Low odor and non-flammable product.
- * Cleans conventional and most UV water based flexographic inks.

SPECIFICATIONS:

Flashpoint: None

VOC: 0.38 lbs./gal. , (45 grams/liter), 5%

Odor: Detergent

Appearance: Orange Liquid

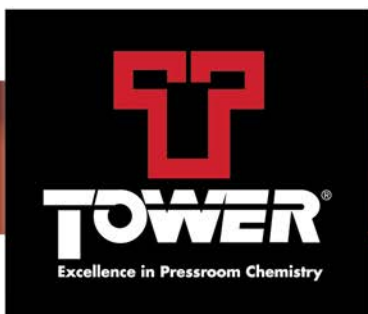
Drying Speed: Not Applicable

HMIS RATING:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums



Technical Data Sheet

SmartFlex WASHOUT SOLUTION NF *New Generation, Photopolymer Developing Solution*

DESCRIPTION:

SmartFlex Washout Solution NF is formulated for processing photopolymer sheets used in flexographic printing. This new technology product is suited for most photopolymer developing systems designed to handle solvent developed plates. A unique formulation provides the user with a one-step product from original use to distillation without having to recalibrate the solution.

APPLICATION:

Add to the processing system per the manufacturers' instructions. Typical washout rates for *SmartFlex Washout Solution NF* are 6-8 mils per minute. After washout, plates must be rinsed with clean *SmartFlex Washout Solution NF*. Blot dry with a lint free towel if excess dampness remains. Drying ovens should operate between 135-145 degrees F.

READ MSDS BEFORE USE.

SOLVENT RECOVERY:

SmartFlex Washout Solution NF should be reclaimed when solid content reaches 5-10%, depending on the unit. Used solvent can be reclaimed by an in-house distillation unit or a solvent recovery service. There is no adjustment needed for the recycled material. Just add back to the processing unit or mix with virgin material. *SmartFlex Washout Solution NF* can also be recovered using a cold reclamation system.

FEATURES AND BENEFITS:

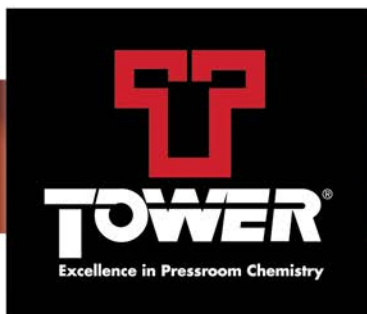
- *One step process from start to recovery.
- *No calibration needed with a Part A and Part B.
- *Lower plate tack and less orange peel for better print quality.
- *Consistent drying times.
- *Can be used in most solvent developing systems.
- *Mild odor and high flashpoint.

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

SmartFlex ANILOX ROLLER CLEANING GEL **PREMIUM, ANILOX ROLLER CLEANER**

DESCRIPTION:

SmartFlex ANILOX ROLLER CLEANING GEL will effectively and quickly clean anilox rollers of aqueous, solvent based, oil based or UV ink. This is a paste product designed to clean in-line at a significantly less cost per roller than an off-line cleaning method. Using *SmartFlex* ANILOX ROLLER CLEANING GEL will provide a more consistent cell volume, which will improve control of coat weights and ink films.

DIRECTIONS FOR USE:

Place a small amount of *SmartFlex* ANILOX ROLLER CLEANING GEL on a rag and apply evenly over the surface of the roller. Use a rag or appropriate brush and gently apply in a circular motion and leave sit for 10-15 minutes. Wipe the surface with a clean rag and then wet a second rag with warm to hot water and wipe again. Rinse any remaining residue. Please note that severely clogged rollers may require an extra application.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Excellent technology product.
- * Cleans rollers while still in the press.
- * Gel product for easy application and cleaning.

SPECIFICATIONS:

Flashpoint: Greater than 200 degrees F
VOC: 0.82 lbs./gal. , (98 grams/liter), 10%
Appearance: Light Grey Gel
Odor: Orange
Drying Speed: Not Applicable

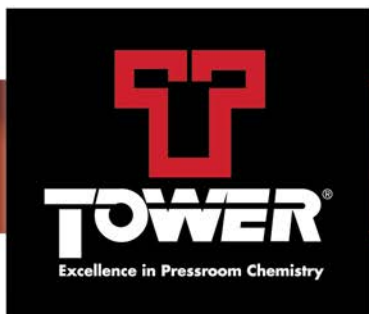
HMIS Ratings:

Health: 2 Flammability: 1 Reactivity: 0 Personal Protection: C

PACKAGING:

5 pound tubs (4 per case) , 20 ounce bottle (4 per case)

Updated 5/15



Technical Data Sheet

SmartFlex HIGH TECH ANILOX CLEANER **LIQUID ANILOX ROLLER CLEANER**

DESCRIPTION:

SmartFlex High Tech Anilox Cleaner is formulated to quickly clean water-based, UV and solvent based inks both manual and cleaning machinery applications. The product will penetrate deeply into the anilox cells to clean dried ink and sequester it so it will not re-deposit during the cleaning process. This is an aggressive, highly alkaline anilox roller cleaner and should not be used where soft metals are present.

DIRECTIONS FOR USE:

Flexographic Ink Cleaning: Apply full strength or dilute with water up to 50% to clean water-based conventional, solvent and UV flexographic ink.

Hot Tank or Ultrasonic Units: Mix with up to 90% water. Set tank temperature to a maximum of 140 degrees F.

READ MSDS BEFORE USE. DO NOT ALLOW PRODUCT TO FREEZE. AVOID CONTACT WITH SOFT METALS LIKE ALUMINUM. CORROSIVE LIQUID.

FEATURES AND BENEFITS:

- * Strong, Water-Based Concentrate.
- * Cleans anilox rollers, rubber rolls, Ink Pans and Floors.
- * Low odor and non-flammable and zero VOC product.
- * Will not damage photopolymer materials.

SPECIFICATIONS:

Flashpoint: None

VOC: None

Odor: Detergent

pH: 12.5-13.0 (Concentrate)

Appearance: Translucent Water Based Mixture

Drying Speed: Not Applicable

HMIS RATING:

Health: 2 Flammability: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums



Technical Data Sheet

SMARTFLEX UV CLEANER #8

MIXED MODE, UV / WATER-BASED FLEXOGRAPHIC INK CLEANER

DESCRIPTION:

SmartFlex UV Cleaner #8 is an outstanding technology cleaning product for facilities running a mix of water-based and UV flexographic inks. Its low odor and effective formula rapidly cleans the flexographic ink from plates and machinery. When used as directed, the product will not swell photopolymer printing plates and can be applied by hand or used in plate cleaning units.

DIRECTIONS FOR USE:

Flexographic UV Ink Cleaning: Apply full strength or dilute with water up to 50% to clean flexographic ink.

Plate Cleaning Units: Mix with up to 50% water. Set machine temperature to 95-105 degrees F.

Hot Tank, Anilox or Ultrasonic Units: Mix with up to 90% water. Set tank temperature to a maximum of 140 degrees F.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Strong cleaning formulation.
- * Will not damage rubber or photopolymer plates.
- * Low solvent odor with a high flashpoint.
- * Mixed Mode product that cleans UV well as conventional water-based flexographic inks.

SPECIFICATIONS:

Flashpoint: Greater than 172 degrees F (TCC)

VOC: 4.7 lbs./gal. , (570 grams/liter), 60%

pH: 10.5-11.0 Concentrate

Odor: Mild Solvent Appearance: Water White to Pale Liquid

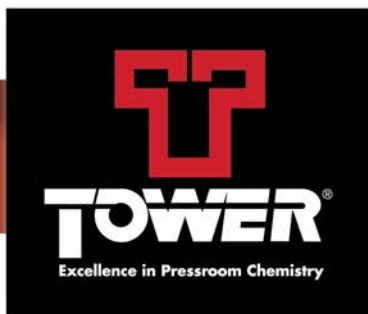
Drying Speed: Moderate

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums



Technical Data Sheet

SMARTFLEX UV FLEXO CLEANER **HIGH STRENGTH, UV FLEXOGRAPHIC INK CLEANER**

DESCRIPTION:

SmartFlex UV Flexo Cleaner is an outstanding technology cleaning product for UV flexographic inks. Its' low odor and effective formula rapidly cleans UV flexographic ink from plates and machinery. When used as directed, the product will not swell photopolymer printing plates and can be applied by hand or used in plate cleaning units.

DIRECTIONS FOR USE:

Flexographic UV Ink Cleaning: Apply full strength or dilute with water up to 50% to clean UV flexographic ink.

Plate Cleaning Units: Mix with up to 50% water. Set machine temperature to 95-105 degrees F.

Hot Tank, Anilox or Ultrasonic Units: Mix with up to 90% water. Set tank temperature to a maximum of 140 degrees F.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Strong cleaning formulation.
- * Will not damage rubber or photopolymer plates.
- * Low solvent odor with a high flashpoint.
- * Cleans solvent based UV as well as conventional flexographic inks.

SPECIFICATIONS:

Flashpoint: Greater than 142 degrees F (TCC)

VOC: 7.87 lbs./gal. , (944 grams/liter), 99%

Odor: Mild Solvent Appearance: Clear Liquid

Drying Speed: Moderate

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums



SP-125DC

Metering Roller Cleaner / Degreaser

Description

Nova SP-125DC is specially formulated to be a dual purpose cleaner. It is a fast-drying blend safe to use as a metering roller cleaner and strong enough to use for deep cleaning and deglazing on ink rollers and blankets.

Directions

Metering Roller: Disengage the metering roller from contact with other rollers and wipe clean with a cloth saturated with SP-125DC. The metering roller should be cleaned daily at the end of the shift or when ever a build-up of ink appears.

Rollers and Blankets: For deglazing of ink rollers and blankets, wash with blanket wash and follow with SP-125DC.

Product Need and Usage

Continuous dampening systems depend on the smooth surface of the metering roller to ensure uniform dampening of the plate and to prevent streaking in the solids and screens. SP-125DC is ideal for cleaning all rollers in the dampening system, leaving them clean and free of any ink or resin build-up that can promote ink feedback into the dampening system.

Features

- * Dual-purpose metering roller cleaner and deglazer.
- * Fast-drying.
- * Compatible with nitrile rubber compounds.

Technical Specifications

Flash Point (°F TCC)	10
VOC (lb/gal method 24)	4.80
Specific Gravity	0.74
Water-Miscible	Yes
Color	Colorless
Odor/Fragrance	Medium / Solvent

Rev. 7/30/2007

Disclaimer: Unless otherwise restricted by applicable law, nothing contained in this literature shall be deemed a representation or warranty of any kind, either expressed or implied. See the Material Safety Data Sheets (MSDS) for this product for safety information prior to use.



Technical Data Sheet

SPEEDY WASH **FAST DRYING ROLLER AND BLANKET WASH**

DESCRIPTION:

Used to be, that if you wanted a press wash with a drying time this fast, it had to be harsh. Not anymore! Speedy Wash cleans deeply and dries FAST without any residue and without noxious odors. It's perfect for small presses using cleaner sheets and as a fast wipe-on wash for blankets on any press.

DIRECTIONS FOR USE:

ROLLERS: Apply full strength on top roller and allow to run in. Engage wash up blade or use cleaner sheets to remove product after cleaning.

BLANKETS: Apply Speedy Wash full strength with a saturated cloth to blankets.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Dissolves ink and varnish very effectively and quickly.
- * Non-photochemically reactive.
- * Very fast drying speed.
- * Will not damage rubber under normal conditions.
- * Can be used in automatic systems.
- * Very mild odor.

SPECIFICATIONS:

Flashpoint: 50 degrees F TCC

VOC: 6.26 lbs/gallon, 100% (750 grams per liter)

Drying Speed: Fast

Solvent Strength: Moderate

Odor: Vanilla

Composite Vapor Pressure (mmHG): 4.4

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums



Technical Data Sheet

STAR WASH

HIGH FLASHPOINT, WATER MISCIBLE WASH

DESCRIPTION:

Star Wash was formulated for printers that require solid cleaning power but need a flashpoint over 142 degrees F. This product features a low odor and a water miscible link that creates a thin film emulsion when mixed with water. Star Wash is the perfect product for solvent recovery systems on Heidelberg presses and other spray type cleaning systems.

DIRECTIONS FOR USE:

Rollers: Apply straight or diluted with up to 30% water across the top of the roller. Allow the product to run into the roller train for a few minutes and engage the washup blade. Reapply as necessary.

Blankets: Apply straight or premixed with up to 30% water with a saturated cloth.

Automatic Units: Can be used in all automatic units.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- Great cleaning power for auto units and for hand washing.
- Effective on both web and sheetfed presses.
- Very low odor and low vapor pressure product.
- Water miscible up to 30%.
- Approved for use in Elettra Automatic Heatset and Coldset Units

SPECIFICATIONS:

Flash Point: 142 degrees F.

Vapor Pressure: Less than 1.0 mmHG at 68 degrees F., 20 degrees C.

VOC Data: 6.8 pounds/gallon (815 grams/liter) 98%

Drying Speed: Moderate

Solvent Strength: Moderate

Odor: Solvent

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

SUPER ROLLER CLEANER

DEEP CLEANING ROLLER WASH AND DEGLAZER

DESCRIPTION:

SUPER ROLLER CLEANER will effectively and quickly clean, deglaze and condition ink rollers. Rollers that have become contaminated with glaze, paper dust and ink can cause poor printing quality. With regular use, SUPER ROLLER CLEANER will help maintain the rollers for optimum print quality. The product can also be used for fast color changes during the course of the day for improved pressroom productivity.

DIRECTIONS FOR USE:

Wash up using your normal procedure. Apply SUPER ROLLER CLEANER across the top of the roller train and allow it to run in for 5 to 10 minutes. Wash the rollers clean with a high quality Tower press wash.

For use only as a roller wash.

READ MSDS BEFORE USE

FEATURES AND BENEFITS:

- *Deep cleans rollers below the surface.
- *Great for quick color changes.
- *Emulsion product for easy application and cleaning.
- *Low VOC product with mild odor.
- *Deglazes and conditions ink rollers in one application.

SPECIFICATIONS:

Flashpoint: 158 F TCC

VOC: 1.96 lbs./gal. , (235 grams/liter), 30%

Appearance: Tannish emulsion

Odor: Mild

Drying Speed: Slow

HMIS RATING:

Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

12 x 1 quart case



Technical Data Sheet

SUPERWASH STEP ONE

DEEP CLEANING ROLLER WASH FOR DARK-TO-LIGHT COLOR CHANGES

DESCRIPTION:

Superwash Step One is a solvent/detergent/water emulsion which is formulated to solubilize lint, gum and other water soluble contaminants in the roller train as well as dissolved ink and varnish. The product is for use on rollers only and should be flushed with Superwash Step Two or a high quality water miscible wash.

DIRECTIONS FOR USE:

Apply Superwash Step One uniformly across the top roller. Run press at wash-up speed for 2-4 minutes or until All ink and contaminants have been dissolved or become suspended in the Superwash Step One. Engage the wash-up blade and collect the residual ink and wash in the wash-up tray. Rinse with a high quality Tower water miscible wash like Colorkleen, I.P Wash or Tech Wash IF as a second step.

READ MSDS BEFORE USE

FEATURES AND BENEFITS:

- *Outstanding technology product
- *Deep cleaning for dark to light color changes
- *Viscous emulsion for uniform flow down the roller train.

SPECIFICATIONS:

Flashpoint: 130 F. TCC
V.O.C.: 4.6 lb/gallon (552 grams/liter), 68%
Drying Speed: Slow
Solvent Strength: Strong
Odor: Mild Solvent
Composite Vapor Pressure (mmHG): 1.0

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail, 55 gallon drum



Technical Data Sheet

TECH WASH IF

ONE STEP WATER-MISCIBLE ROLLER AND BLANKET WASH

DESCRIPTION:

TECH WASH is a highly effective wash that will quickly remove ink and varnish. Because it is water miscible, TECH WASH will also remove gum, glaze, paper, lint and other water soluble compounds. TECH WASH is also an excellent choice for automatic blanket wash systems.

DIRECTIONS FOR USE:

ROLLERS: Apply TECH WASH straight or diluted with water up to 30% across the top of the roller train. Allow the product to run down the roller train for a few minutes and engage the wash up blade. Reapply as necessary until the fluid runs clear into the wash up tray.

BLANKETS: Apply TECH WASH straight or premixed with up to 30% water with a saturated cloth on the blanket.

AUTOMATIC UNITS: Can be used in all units.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Water miscible up to 30%
- * Excellent cleaning power.
- * Very pleasant scent.
- * Very Mild on Rollers

SPECIFICATIONS:

Flashpoint: 108 degrees F (TCC)

VOC: 6.78 lbs. per gallon 812 grams per liter, 99%

Drying Speed: Moderate

Solvent Strength: Moderate

Odor: Mild

Composite Vapor Pressure (mmHG): Less than 5.0

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails, 55 gallon drums, 330 gallon totes



Technical Data Sheet

TOWER 250 WA

WATER ADDITIVE FOR AUTOMATIC BLANKET WASH SYSTEMS

DESCRIPTION:

Tower 250 WA is added to the water tanks in an automatic blanket wash system to help aid in the rinsing and cleaning process. The product is compatible in a system with LO-VO Wash CA-100 and LO-VO Wash CA-200.

DIRECTIONS FOR USE:

Add Tower 250 WA at 6 ounces (5%) per gallon to the water tank.

DO NOT ALLOW PRODUCT TO FREEZE!!

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Enhances Cleaning Results of Low VOC Washes.
- * Help to rinse oily residue from the blanket.
- * Odorless and non-flammable.

SPECIFICATIONS:

Flashpoint: None

VOC: 0.3 lbs./gal. , (36 grams/liter), 3%

Odor: Detergent

Drying Speed: Not Applicable

HMIS RATING:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

4x1 gallon cases, 5 gallon pails



Technical Data Sheet

TOWER MRC

VERY FAST DRYING METERING ROLLER CLEANER

DESCRIPTION:

Tower MRC is a fast drying solvent blend formulated to clean metering rollers in continuous dampening systems. This product will clean quickly and leave no residue. It can also be used to clean back cylinders and used as a fast drying typewash.

DIRECTIONS FOR USE:

For Metering Rollers: Disengage metering roller from contact with other rollers. Apply full strength using a saturated cloth. Metering rollers should be cleaned daily or whenever a build-up appears.
FLAMMABLE LIQUID. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Extremely effective metering roller cleaner
- * Very fast drying speed
- * Leaves no oily residue
- * Cleans back cylinders

SPECIFICATIONS:

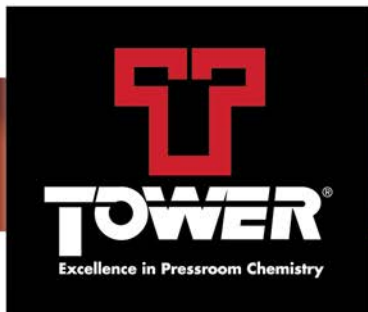
Flashpoint: Less than 20 degrees F. TCC
VOC: 4.20 lb/gal (503 grams/liter), 84% acetone exempt
Drying Speed: Very fast
Solvent Strength: Strong
Odor: Solvent
Composite Vapor Pressure (mmHG): 25 at 68 degrees F

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

4x1 gallon case and 55 gallon drums



Technical Data Sheet

ROLLER LUBE

PREMIUM ROLLER LUBRICANT

DESCRIPTION:

Tower Roller Lube is a high technology lubricant for printing units running without ink. The product is unique in that it can be used on both web units running half sheets and sheetfed units for lubrication.

FEATURES:

- Easy to apply with very low odor.
- No strong solvents or abrasives.
- Compatible with most rubber compounds except EPDM.

DIRECTIONS FOR USE:

Rollers: Apply liberally to the top of ink distributor rollers and let it work in. Wash off with any Tower presswash.

READ MSDS BEFORE USE

SPECIFICATIONS:

Flash Point: 400 degrees F.

VOC Data: None

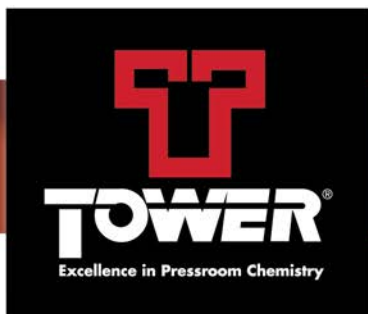
Drying Speed: Slow

HMS RATING:

Health: 1 Fire: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

3 pound cans 4 per case



Technical Data Sheet

ROLLER PASTE **PREMIUM ROLLER CLEANING PASTE**

DESCRIPTION:

Tower Roller Paste is a high technology cleaning paste for thoroughly cleaning printing rollers. The product is unique in that it accomplishes the cleaning function without strong solvents or abrasive chemical additives. The product is ideal for color changes and daily roller maintenance.

FEATURES:

- Easy to apply roller paste with very low odor.
- No strong solvents or abrasives. Will not cause plate wear
- Eliminates roller glazing.
- Go from black to yellow in one application.
- Conditions rollers.
- Will not harm EPDM or NBR rollers.

DIRECTIONS FOR USE:

Rollers: Wash up the roller train with roller wash. Apply the product in a thin bead across the top roller and let it run in for three minutes. Engage the wash up blade and rinse with roller wash. Reapply as necessary. Tower Roller Paste can be left on rollers overnight and over the weekend for conditioning.

SPECIFICATIONS:

Flash Point: Greater than 200 degrees F.

VOC Data: None

Drying Speed: Slow

Solvent Strength: Moderate

HMIS RATING:

Health: 1 Fire: 0 Reactivity: 0 Personal Protection: B

PACKAGING:

2 pound cans 8 per case



Technical Data Sheet

UV WASH 100 PLUS

DEEP CLEANING UV/HYBRID INK CLEANER

DESCRIPTION:

UV WASH 100 PLUS is a deep cleaning wash for both UV and hybrid inks. The product has a controlled evaporation rate with a high flashpoint and is water miscible with a high flashpoint. The product will not harm EPDM compounds.

DIRECTIONS FOR USE:

ROLLERS & BLANKETS: Apply full strength using a saturated cloth or mix with water up to 30% as a water miscible wash. AUTOMATIC UNITS: Add the product to the unit per the manufacturer's guidelines.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Very mild odor.
- *High flashpoint .
- *Effective on all UV and Hybrid inks.
- *Medium drying speed for effective cleaning on large unit presses.
- *Strong cleaning action that will not harm EPDM compounds.
- *No HAP's

SPECIFICATIONS:

Flashpoint: 138 degrees F TCC
VOC Content: 7.4 lbs/gallon, 888 grams/liter, 99%
Solvent Strength: Strong
Odor: Mild Solvent
Composite Vapor Pressure (mmHG): 3.0

HMIS RATING:

Flammability: 2 Health: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail, 55 gallon drum



Technical Data Sheet

UV WASH MA **DEEP CLEANING UV INK CLEANER**

DESCRIPTION:

UV WASH MA is a deep cleaning wash for UV inks. The product has a mild odor and moderate evaporation rate with a high flashpoint. It has strong cleaning action. This product is not recommended for EPDM compounds.

DIRECTIONS FOR USE:

ROLLERS & BLANKETS: Apply full strength using a saturated cloth.
AUTOMATIC UNITS: Add the product to the unit per the manufacturer's guidelines.
READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Very mild odor.
- *High flashpoint.
- *Effective on all UV inks.
- *Medium drying speed for effective cleaning on large unit presses.
- *Strong cleaning action.

SPECIFICATIONS:

Flashpoint: Greater than 100 degrees F TCC
VOC Content: 7.4 lbs/gallon, 887 grams/liter, 100%
Solvent Strength: Strong
Odor: Mild Solvent
Composite Vapor Pressure (mmHG): 3.0

HMIS RATING:

Flammability: 2 Health: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

UV WASH LED

ROLLER AND BLANKET WASH FOR LED AND UV INKS

DESCRIPTION:

UV Wash LED is specially formulated to work with EPDM compounds and in the LED UV process. The product does not contain any aliphatic or aromatic hydrocarbons and has a mild odor.

DIRECTIONS FOR USE:

Apply full strength or premix with up to 30% water to clean UV inks from rollers and blankets. *Automatic Units:* Add to reservoir according to the directions of the system manufacturer. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Very mild odor.
- * Formulated for use in UV LED Systems
- * Will not damage EPDM rollers.
- * Medium drying speed for effective cleaning.

SPECIFICATIONS:

Flashpoint: 110 F TCC
VOC Content: 7.40 lbs/gallon, 888 grams/liter, 99%
Odor: Mild Solvent
Solvent Strength: Strong
Composite Vapor Pressure (mmHG): Less than 9.0

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pails and 55 gallon drums



Technical Data Sheet

WASH 5005

FAST DRYING ROLLER AND BLANKET WASH

DESCRIPTION:

A moderately fast drying roller and blanket wash that will quickly remove ink and varnish. WASH 5005 was specifically designed for applications where speed is a factor, but chlorinated solvents and flammable products are prohibited.

DIRECTIONS FOR USE:

ROLLERS, BLANKETS AND METERING ROLLERS: Apply straight using a saturated cloth or wash bottle.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Mild odor.
- *High flash point.
- *Approved for Oxy-Dry automatic units (1910S).

SPECIFICATIONS:

Flashpoint: 108 F., T.C.C.
VOC's: 7.1lbs./gallon (851 grams/liter), 100%
Composite Vapor Pressure (mmHG): 3.0
Drying Speed: Fast
Solvent Strength: Strong
Odor: Mild Floral

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

WASH 6800

PREMIUM, HIGH FLASHPOINT, WATER MISCIBLE WASH

DESCRIPTION:

Wash 6800 is a premium high flashpoint wash that was formulated for printers that require solid cleaning power but need a flashpoint over 142 degrees F. This product features a low odor and a water miscible link that creates a thin film emulsion when mixed with water. Wash 6800 is the perfect product for any size press where deep cleaning power and a high flashpoint are required.

DIRECTIONS FOR USE:

Rollers: Apply straight or diluted with up to 30% water across the top of the roller. Allow the product to run into the roller train for a few minutes and engage the washup blade. Reapply as necessary.

Blankets: Apply straight or premixed with up to 30% water with a saturated cloth.

Automatic Units: Can be used in all automatic units.

READ MSDS BEFORE USE.

FEATURES:

- Great cleaning power for auto units and for hand washing.
- Effective on both web and sheetfed presses.
- Very low odor and low vapor pressure product.
- Water miscible up to 30%.

SPECIFICATIONS:

Flash Point: Greater than 142 degrees F.

Vapor Pressure: Less than 1.0 mmHG at 68 degrees F., 20 degrees C.

VOC Data: 6.9 pounds/gallon (825 grams/liter) 98%

Drying Speed: Moderate

Solvent Strength: Moderate to Strong

Odor: Solvent

HMIS RATING:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums



Technical Data Sheet

WASH 1200 FAST DRY **FAST DRYING LOW VOC PRESS WASH**

DESCRIPTION:

Wash 1200 Fast Dry is a quick drying low VOC press wash that does not contain acetone. This product will work on both rollers and blankets with a drying speed that leave no residue and does not have to be followed by any water rinsing. It can be used to clean both conventional, hybrid and UV inks.

DIRECTIONS FOR USE:

ROLLERS: Apply full strength on top roller and allow product to run in. Engage wash up blade. Reapply as necessary. **BLANKETS:** Apply full strength with a saturated cloth to blankets. **FLEXOGRAPHIC INK:** Apply full strength to clean on all surfaces. READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- * Dissolves ink and varnish very effectively and quickly.
- * Cleans conventional, hybrid and UV ink fast.
- * Fast drying speed.
- * No acetone formula.

SPECIFICATIONS:

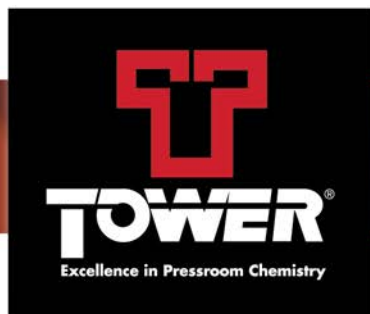
Flashpoint: Less than 20 degrees F TCC
VOC: 0.75 lbs/gallon, 11% (99 grams per liter)
Drying Speed: Fast
Solvent Strength: Moderate to Strong
Odor: Mild
Composite Vapor Pressure (mmHG): 0.5

HMIS RATING:

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: B

PACKAGING:

5 gallon pail, 55 gallon drum



Technical Data Sheet

WASH 4550

Low Odor, Economy Water Miscible Wash

DESCRIPTION:

Wash 4550 is an outstanding, low odor water miscible wash that provides a great value for today's printer. The product features a controlled drying speed and good cutting power. The product has a high flashpoint and is safe on all roller and blanket compounds.

DIRECTIONS FOR USE:

ROLLERS: Apply straight or diluted with up to 30% water across the top of the roller. Allow the product to run into the roller train for a few minutes and engage the washup blade. Reapply as necessary.

BLANKETS: Apply straight or premixed with up to 30% water with a saturated cloth.

Automatic Units: Can be used in all automatic units.

READ MSDS BEFORE USE.

FEATURES:

- Effective on both web and sheetfed presses
- Very low odor product
- Water miscible up to 30%

SPECIFICATIONS:

Flash Point: Greater than 100 degrees F.

Composite Vapor Pressure (mmHG): 5.0

VOC Data: 6.37 pounds/gallon (764 grams/liter) 99%

Drying Speed: Slow to Moderate

Solvent Strength: Moderate

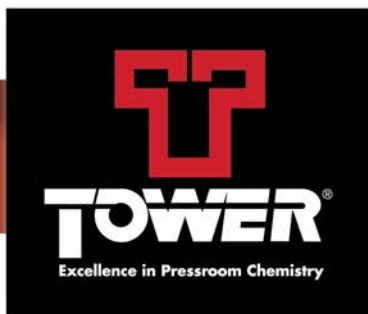
Odor: Mild

HMIS Rating:

Health: 2 Fire: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums and 5 gallon pails



Technical Data Sheet

WEB CONDITIONER

SUPERIOR, ANTISTATIC WEB CONDITIONER

DESCRIPTION:

Web Conditioner is a new generation high technology, antistatic web conditioner for the web pressroom. The product significantly lowers the use cost of silicone emulsions by using a reduced dosage to better achieve quality printing results. Traditional silicone emulsion products cannot compete with this advanced technology.

DIRECTIONS FOR USE:

Add 3 to 6 ounces of Web Conditioner per gallon of water using any standard applicator. For use only as a web conditioning agent.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology wetting agents and lubricants.
- *Formulated to run at significantly lower dosages than silicone emulsions.
- *Allows for increased press speeds and less marking.
- *Does not require additional antistatic additives.
- *Prevents streaking, marking and static on the web.
- *Outstanding sheeter results, even on light stocks.

SPECIFICATIONS:

Flashpoint: None

VOC: None

Appearance: Opaque White Emulsion

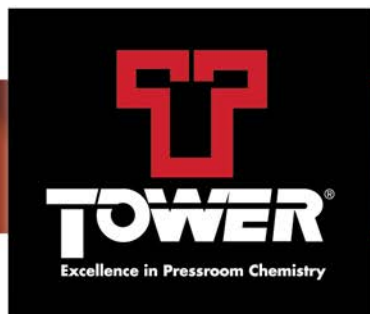
Odor: Mild

HMIS RATING:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: X

PACKAGING:

55 gallon plastic drums 275 gallon plastic totes



Technical Data Sheet

WEB CONDITIONER 30A **ANTISTATIC WEB CONDITIONER**

DESCRIPTION:

Web Conditioner 30A is a high technology, antistatic web conditioner for the web pressroom. The product contains about 30% active silicone solids for excellent performance at a great price point.

DIRECTIONS FOR USE:

Add 5-15% (3 to 19 ounces) of Web Conditioner 30A per gallon of water using any standard applicator. Adjust silicone applicator to lowest setting that will provide good signature delivery with no visible former board marking.
READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Contains high technology wetting agents and lubricants.
- *Allows for increased press speeds and less marking.
- *Contains antistatic additives.
- *Prevents streaking, marking and static on the web.

SPECIFICATIONS:

Flashpoint: None
VOC: None
Appearance: Opaque White Emulsion
Odor: Mild

HMIS RATING:

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: X

PACKAGING:

55 gallon plastic drums 275 gallon plastic totes



Technical Data Sheet

W.O.W. OXY-DRY 1149

OXY-DRY/HEIDELBERG APPROVED AUTOMATIC WEB WASH

DESCRIPTION:

Tower W.O.W. Oxy-Dry 1149 is approved for use by Oxy-Dry Corporation and Heidelberg Harris in their automatic web blanket wash systems. The product approval documentation for this wash is available from Tower on request. A water miscible version of this product is also available.

DIRECTIONS FOR USE:

Add to blanket wash reservoir per manufacturer guidelines.

READ MSDS BEFORE USE.

FEATURES AND BENEFITS:

- *Approved for use by Oxy-Dry and Heidelberg
- *High Flash Point
- *Outstanding cleaner
- *Meets vapor pressure requirements

SPECIFICATIONS:

Flash Point: 145 degrees F. (TCC)
V.O.C.: 6.96 lbs./gallon (835 grams/liter), 100%
Composite Vapor Pressure (mmHG): 5.0
Drying Speed: Moderate
Solvent Strength: Strong
Odor: Solvent

HMIS RATING:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

PACKAGING:

55 gallon drums, 330 gallon totes