Ultrasonic Cleaning. The Sound Decision.



Cleaning anilox rolls is difficult. Cleaning fine-line screen anilox is even more difficult. Powered by sound, ultrasonic cleaning has revolutionized the way anilox rolls are restored. Ultrasonic cleaning is effective, less damaging, and easy. That said, even the best ultrasonic cleaner is useless without a strong cleaning solution to help emulsify and sequester the ink that gets blasted from anilox cells. When your company reputation—and bottom line—is built on quality printing, you need full cell volume from your anilox. That's why Flexo Shine developed Shock Wave Elite[™], the best in ultrasonic cleaning for your water-based and UV flexographic anilox. Period.

Specifically designed and painstakingly tested for removing stubborn ink, our advanced polymer system delivers unsurpassed results. Our sequestering additives ensure that you get a longer-lasting product and more rolls washed per order. In short, Shock Wave Elite provides more value, lower costs, and better print. Anything less simply wouldn't warrant the name Elite.

Embrace the proven benefits of Shock Wave Elite:

- · Ideal for ultrasonic cleaning
- Effective on water-based, UV, and varnish inks
- · Long lasting for better value
- Will not harm anilox rolls
- Improves cell volume
- Made from readily biodegradable ingredients

Proudly Made in America



You demand the best for your business. That is why we developed Flexo Shine[™] Shock Wave Elite. It is the best ultrasonic cleaner on the market... period.



GLOBAL HARMONIZATION DANGER (FLAMMABLE SYMBOL)

Causes severe skin burns and eye damage. Do not breathe dusts or mists. Wash thoroughly after handling. Wear protective nitrile gloves and safety glasses. Avoid contact with skin or clothes.

P260 Do not breathe dust/fumes/gas/mist/vapour/spray. P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/ face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT

induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower.

P363 Wash contaminated clothing before reuse.

 $\mathsf{P304}+\mathsf{P340}$ IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P321 Specific treatment for active ingredient poisoning is required.P405 Store locked up.P501 Dispose of contents/container in accordance with local,

state, and federal rules.

PERSONAL PROTECTION

For your safety, we recommend these precautions when using Shock Wave Elite:

- Safety glasses
- Nitrile gloves
- General ventilation

PHYSICAL PROPERTIES

The Shock Wave Elite formula results in safe physical properties:

- pH Neat: 13.45
- Specific Gravity: 1.10 g/ml
- Total VOC: 0 g/L
- Odor: Little Odor Flash Point: Does Not

Color: Clear/Natural

Flash (TCC)

DOT SHIPPING INFORMATION

UN1824, Sodium Hydroxide Solution, 8, PGIII

OTHER REGULATORY

Contains No SARA Title III Listed Materials

SHOCK WAVE ELITE INSTRUCTIONS

For best results and longer-life out of your cleaning solution:

- 1. Add Shock Wave Elite to your ultrasonic chemical reservoir undiluted.
- 2. Follow your manufacturer's guide on setting ultrasonic frequency.
- 3. Heating is not required for Shock Wave Elite.
- 4. Wash times may vary; however, wash times are typically completed within 30 minutes.
- 5. Monitor your concentration in your chemical reservoir by using pH if possible. For best results, maintain a pH above 12.8 at all times.
- 6. As water evaporates from ultrasonic tub, add fresh water as make-up water. Add detergent when cleaning performance is reduced. Consult your Flexo Shine representative for more information.

Tip: While not required, a fresh water rinse after cleaning will help reduce any detergent residues on the anilox.

SHOCK WAVE ELITE FIRST AID

SHOULD YOU NEED TO PERFORM FIRST AID RELATED TO SHOCK WAVE ELITE, WE RECOMMEND THE FOLLOWING:

- INGESTION: Drink two large glasses of water and seek medical attention.
- SKIN: Flush thoroughly with water and seek medical attention if irritation persists.
- EYES: Flush thoroughly with water and seek medical attention if irritation persists.
- INHALATION: Remove patient to fresh air and give artificial respiration.

Never give anything by mouth to an unconscious person. If patient is not breathing, ADMINISTER FIRST AID TREATMENT LISTED ABOVE, THEN CALL 1-800-851-7145 ext. 875 OR CONTACT A PHYSICIAN FOR FURTHER MEDICAL INSTRUCTION.

Flexo Shine[™] Springfield, MO 417-434-6388 flexoshine.com FS-1013-02A ©2013 Doss Specialty Products





<u>SAFETY DATA SHEET</u>

Shock Wave Elite

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER

- Product Name Shock Wave Elite
- Product Formula FS-9143

RELEVANT IDENTIFIED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

Relevant Use • Printing cleaner for ultrasonic machines.

SUPPLIER DETAILS

 Flexo Shine PO Box 216 Nixa MO 65714 Ph: 417-434-6388 orders@flexoshine.com

SECTION 2: HAZARD IDENTIFICATION

United States (US) - According to OSHA 29 CFR 1920.1200 Hazard Communication Standard

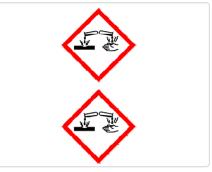
CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Hazard Classification	•	Serious Eye Damage/Eye Irritation - 1
		Skin Corrosion/Irritation - 1B

LABEL ELEMENTS

Signal Word and Pictogram •

Danger
 Danger



HAZARD STATEMENTS

H318	Causes serious eye damage
H314	Causes severe skin burns and eye damage

PRECAUTIONARY STATEMENTS

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe dust/fumes/gas/mist/vapour/spray.

SAFETY DATA SHEET

Shock Wave Elite

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment for active ingredient poisoning is required.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local, state, and federal rules.







SECTION 3: COMPOSITION INFORMATION ON

Chemical Identity	CAS	Percent Weight
Sodium Hydroxide No other reportable hazardous materials.	1310-73-2 N/A	<8
CTION 1. FIRST AID MEASURES		

- **INHALATION** If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Call a physician immediately.
 - **SKIN** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse.
 - **EYE** Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower

SAFETY DATA SHEET

and upper eyelids occasionally. Call a physician if irritation persists.

INGESTION • Do not induce vomiting. Never give anything by mouth to an unconscious person. Dilute by drinking two large glasses of water. Call a physician immediately.

SECTION 5: FIRE-FIGHTING MEASURES

- SUITABLE Use non-flammable or non-explosive extinguishing media. EXTINGUISHING MEDIA
 - **SPECIFIC** No known unusual hazards in a fire/explosion situation. **HAZARDS**
- SPECIAL
 In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.
 FIREFIGHTERS

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- FOR NON-EMERGENCY PERSONNEL • For non-emergency personnel, ventilate area of leak or spill and remove all ignition sources. Wear appropriate personal protective equipment as required to prevent any contamination of skin, eyes, and personal clothing. Isolate release area. Do not touch or walk through spilled material unless wearing the appropriate protective equipment. Keep unnecessary and unprotected personnel from entering.
 - **FOR EMERGENCY RESPONDERS** • For emergency responders, as an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep out of low areas. Keep unauthorized personnel away. Stay upwind. Ventilate closed spaces before entering.

ENVIRONMENTAL PRECAUTIONS

ACCIDENTAL RELEASE ENVIRONMENTAL • Stop leak if you can do it without risk. If possible, keep from entering into drains, surface water, or ground water. This product is biodegradable.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

• Contain and recover liquid when possible. Cover drains or cap spill when safe. AND CLEANUP • Collect liquid in an appropriate container or absorb with an inert material (e.g. vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Small spills may be flushed to the sanitary sewer with approval from local authorities.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

• Protect against physical damage. Store in a cool, dry well-ventilated location. Separate from incompatible materials.

CONDITIONS FOR SAFE STORAGE AND INCOMPATIBILITIES • Protect against physical damage. Store in a cool, dry well-ventilated location. Separate from incompatible materials.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

Chemical Identity	CAS	TLV
Sodium Hydroxide	1310-73-2	2 mg/m3
No other reportable hazardous materials.	N/A	N/A

APPROPRIATE ENGINEERING CONTROLS

• Use adequate ventilation systems as needed to maintain air concentrations below occupational exposure standards.

INDIVIDUAL PROTECTIONS MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

- **EYE / FACE** Chemical safety glasses. **PROTECTION**
- **SKIN PROTECTION** Nitrile gloves.
 - **RESPIRATORY PROTECTION** • None required for normal use. Use an approved NIOSH/MSHA air respirator where use may cause overexposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid.	Lower Limits	Not available.
Odor	Little odor.	Vapor Pressure	Not available.
рН	13.6 neat.	Vapor Density	Not available.
Melting Freezing Point	Not available.	Relative Density	1.08 g/ml
Initial Boiling Point	Not available.	Solubility	Miscible with water.
Flash Point	Does not flash.	Partition Coefficient	Not available.
Evaporation Rate	Not available.	Auto Ignition Temp	Not available.
Flammability	Not available.	Decomposition Temp	Not available.
VOC (g/L)	0 g/L	Viscosity	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	 No dangerous reaction known under conditions of normal use.
Chemical Stability	 Stable under normal temperatures and pressures.
Possibility of Haz Rxns	Will not occur.
Conditions to Avoid	No unusual conditions.
Incompatible Materials	 Do not mix with strong acids or bases. Do not mix with any other chemical unless instructed to do so by the manufacturer.
Hazardous Decomposition	 In case of fire, oxides of carbon, hydrocarbons, fumes or vapors, soot, and smoke may be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity	No specific information available for mixture.
Skin Corrosion/Irritation	No specific information available for mixture.
Serious Eye Damage/Irritation	No specific information available for mixture.
Respiratory or Skin Sensitization	No specific information available for mixture.
Germ Cell Mutagenicity	No specific information available for mixture.
Carcinogenicity	No specific information available for mixture.
Reproductive Toxicity	No specific information available for mixture.
STOT Single Exposure	No specific information available for mixture.
STOT Repeated Exposure	No specific information available for mixture.
Aspiration Hazard	No specific information available for mixture.

Target OrgansSkin.Routes of Entry ExposureIngestion, inhalation, skin, eye.

POTENTIAL HEALTH EFFECTS

INHALATION ACUTE INHALATION CHRONIC	 May irritate or burn nose, throat and lungs. Vapors or mists may aggravate pre-existing lung conditions.
SKIN ACUTE	 May cause irritation or burns, redness, or severe pain. Prolonged exposure should be avoided.
SKIN CHRONIC	 Sensitivity of the skin may occur with repeated, prolonged exposure. Scarring of tissue may occur. Permanent numbness or damage to nerve endings is possible.
EYE ACUTE	 May irritate or burn eyes. Prolonged exposure to eyes may cause permanent damage and should be avoided.
EYE CHRONIC	No data available.
INGESTION ACUTE	 May irritate or burn gastrointestinal tract. Ingestion of large amounts may cause nausea, vomiting and diarrhea or may even be fatal.
INGESTION CHRONIC	No data available.

SECTION 12: ECOLOGICAL INFORMATION

ΤΟΧΙΟΙΤΥ	 Not enough information on the mixture is available.
PERSISTENCE & BIODEGRADABILITY	 Not enough information on the mixture is available. The components of the mixture are determined as either readily biodegradable or inherently biodegradable. It is
BIOACCUMULATIVE POTENTIAL	 Not enough infomation on the mixture is available.
MOBILITY IN SOIL	 Not enough infomation on the mixture is available.
OTHER ADVERSE EFFECTS	 Not enough infomation on the mixture is available.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL
 Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: TRANSPORT INFORMATION

TRANSPORT ENVIRONMENTAL HAZARDS SPECIAL PRECAUTIONS

- UN 1824, Sodium Hydroxide Solution, 8, PGI
- None known.
 - None known.

SECTION 15: REGULATORY INFORMATION

SARA TITLE III INFORMATION

Chemical Identity

CAS / CAT CODE PERCENT WT

None Reportable

OTHER REGULATORY INFORMATION

- TSCA (Toxic Substance Control Act): All ingredients of this product are listed active on the TSCA inventory.
- CARCINOGENICITY: Not listed by IARC, NTP, or OSHA.
- CALIFORNIA PROPOSITION 65: This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins which would be subject to the proposition.

SECTION 16: OTHER INFORMATION

Last Revision Date 01/29/2024

Date Prepared 8/28/2015

KEY TO ABBREVIATIONS

N/E = Not Established. CAS = Chemical Abstract Service. ppm = Parts Per Million g/L = Grams per Liter mg/m3 = milligrams per cubic meter

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