FOR PROFESSIONAL USE ONLY

INSULTHANE® EDGE 2K 600

OPERATING INSTRUCTIONS

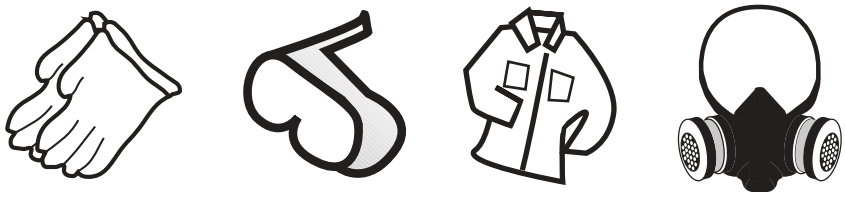
FOR TWO-COMPONENT LOW PRESSURE KITS

ELASTOCHEM®

INSTRUCTIONS FOR USE

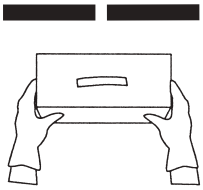
When spraying the dispensing unit for the first time or when starting a new kit, **it is recommended to trigger the gun only 1/4 to 1/3 open, until the desired output is achieved.** This controllable metering ability is a major advantage of this dispensing unit. It allows the user complete control of the flow rate that best fits the application.

INITIAL PREP

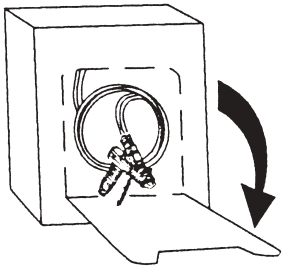


Wear nitrile gloves, protective eyewear and suitable work clothes during use. Recommend using in a well ventilated area and with certified respiratory protection or a powered air purifying respirator (PAPR). For best results, use when material is between 70–85°F (21–29°C).

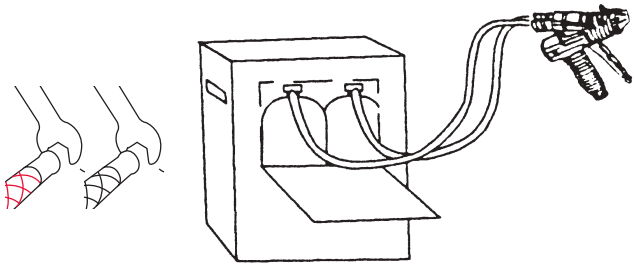
SETUP PROCEDURES FOR SINGLE-PACKAGE TWO-COMPONENT MODELS



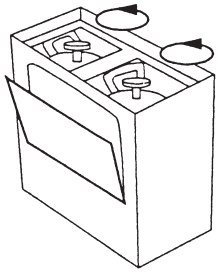
1. Shake kit for at least 1 minute before use to ensure proper mixing. Typically chemical should be between 70–85°F (21–29°C). See TDS for formula shaking and temperature recommendations.



2. Push in top of back panel to open. Pull down flap for dispensing unit hose assembly. Remove nozzle packet and read instructions.

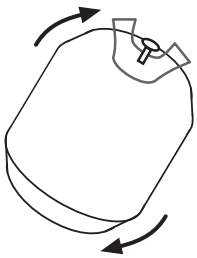


3. Thread **red coded hose to A-component cylinder** and **black coded hose to B-component cylinder** and tighten with supplied 9/16" wrench. Extend gun hose assembly.
4. Open top flap of box to expose cylinder valves. Extend attached dispensing unit hose assembly.

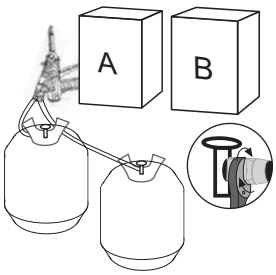


5. Open the valves completely by turning the valves COUNTER CLOCKWISE. Close the top flap of the box.
6. After attaching nozzle, unit is ready to use.

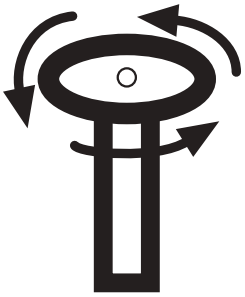
SETUP PROCEDURES FOR DUAL-PACKAGE TWO-COMPONENT MODELS



1. Shake each cylinder for at least 1 minute before use to ensure proper mixing. Typically chemical should be between 70–85°F (21–29°C). See TDS for formula shaking and temperature recommendations.

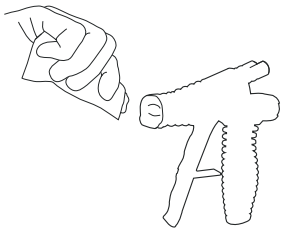


2. Thread **red coded hose to A-component cylinder** and **black coded hose to B-component cylinder** and tighten with supplied 9/16" wrench.

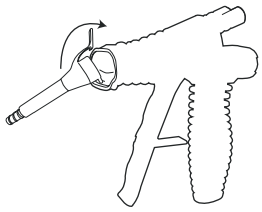


3. Open the valves completely by turning the valves COUNTER CLOCKWISE. Cylinder valves must be upright during use.

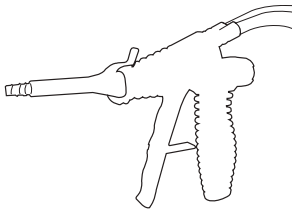
ATTACHING THE NOZZLE



1. Before attaching nozzle, use petroleum jelly on face of gun.



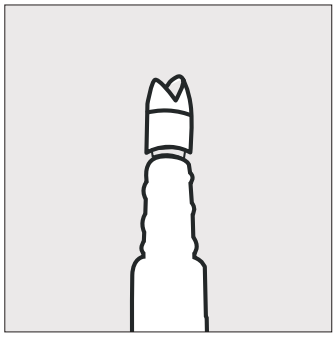
2. Insert bottom tab of nozzle into bottom slot of dispensing unit.
3. Attach top latch by pushing towards back of unit, until an audible "snap" is heard.



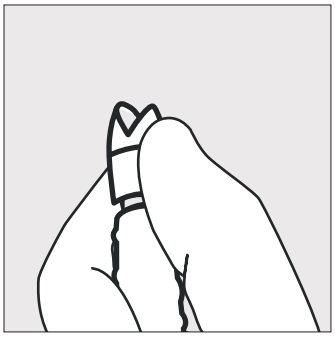
4. Unit is ready to use.
5. After attaching nozzle, spray into "test shot" receptacle. To ensure equal parts A- and B-chemicals, double check foam is curing.
6. To remove used nozzle, push top latch up and forward to unsnap.

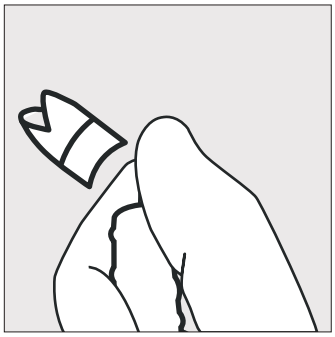
USING THE SNAP-TIP NOZZLE

Easily transition from a fan spray pattern to a cone spray pattern with the same nozzle.*
NOTE: Not available with every formulation. Contact your local sales representative or distritbutor for more information.

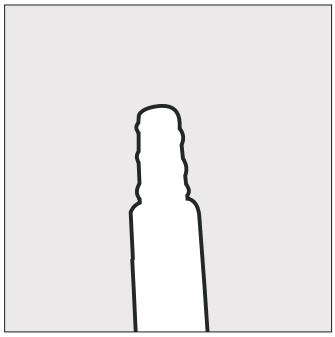


Nozzles provided allow for a fan spray pattern.





Easily snap-off the fan tip to change spray pattern!



Snap-tip nozzle now allows for a cone spray pattern.

***Once nozzle tip has been snapped to change to the cone spray pattern, if a fan spray pattern is needed, a new nozzle must be used.**

SPRAYING FOAM

1. Wear protective glasses with sideshields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Use only in a well ventilated area with certified respiratory protection or a powered air purifying respirator (PAPR). See SDS for more information..
2. For best results, use when material is between 70–85°F (21–29°C), see TDS for formula specific temperature recommendations. Clean grease, oil, dirt and water off surfaces to be foamed. Shake kit before use for at least 1 minute, depending on the product requirements (See TDS for more information). For all kits, thread hose to cylinder until hand tight then tighten with supplied 9/16" wrench.
3. Fully open both cylinder (A & B) valves.
4. Attach nozzle to the dispensing unit; use of enclosed petroleum jelly on the face of the dispensing unit before attaching nozzle may help prevent contamination by cured foam or chemical and help keep the sealing ports clean. (Detailed instructions for attaching nozzle shown above.)
5. When spraying the dispensing unit for the first time and with each new kit, dispense foam by squeezing the trigger only 1/4 to 1/3 open until desired output is achieved. This controllable metering is a major advantage of the dispensing unit, allowing the user complete control of the flow rate that best suits the application.
6. **Once the trigger is released it MUST BE REACTIVATED WITHIN 30 SECONDS** or a new nozzle must be installed. Failure to do this could result in chemical leakage, spills or splashes which can ruin the dispensing unit and/or hoses.
7. **IMPORTANT**: After releasing trigger, activate the trigger safety to prevent accidental discharge.
8. All dispensing unit nozzles are easily cleanable and solvent resistant. To clean nozzles, liquid chemical must be dissolved prior to its complete chemical reaction by flushing the nozzle with a suitable solvent such as acetone cleaner. Gun face can be kept clean with the use of petroleum jelly on the face or with a soft cloth to remove residue.
9. Do not remove hoses from cylinders. Do not flush/clean hoses with air, water or solvent. Removing and/or cleaning hoses may compromise the foam.

IMPORTANT APPLICATION NOTES

1. See product Technical Data Sheets for product-specific yields. Disposable kit yields are measured in board feet. A board foot is a square foot with 1" thickness (12" x 12" x 1"). Actual yields will vary depending on factors such as ambient conditions, application technique, foam density, etc.
2. Suitability of this product for any particular purpose, such as achieving desired structural properties, performance specifications or application requirements must be determined by the end user, prior to use. Verification that product is properly applied and installed is also the responsibility of the end user.
3. It is strongly recommended that in all applications the foam be protected by approved facings or coatings.
4. Take care when applying excessive layers at one time because of exothermic heat generation. **For thickness greater than 2-3" (5-8 cm) apply foam in multiple layers, allowing heat to dissipate between applications.**

STORAGE AND REUSE

1. Close cylinder valves.
2. Do not store full cylinders at temperatures above 100°F (38°C) (partial or used cylinders above 90°F [32°C]) (or below 50°F (10°C). Kits stored below 70°F must be given sufficient time (1-2 days) for the chemical to warm up to 70–85°F (21–29°C), see TDS for formula specific temperature recommendations.
3. The used nozzle should be left on the dispensing unit during storage in order to help keep the outlet ports of the dispensing unit clean and free from any dust, dirt or chemical that can affect the proper sealing of the nozzle. SAFETY: Always engage the trigger safety and close all supply valves during storage.
4. All dispensing unit nozzles are easily cleanable and solvent resistant. To clean nozzles, liquid chemical must be dissolved prior to it's complete chemical reaction by flushing the nozzle with a suitable solvent such as acetone cleaner. Gun face can be kept clean with the use of petroleum jelly on the face or with a soft cloth to remove residue.
5. **Do not remove hoses from cylinders. Do not flush/clean hoses with air, water or solvent. Removing and/or cleaning hoses may compromise the foam.**

To reuse dispensing unit after storage:

1. Remove the used nozzle.
2. Check the face of the dispensing unit to make sure the outlet ports are clear and the face of the unit is free from dirt, chemical or other debris. If necessary, use a soft cloth or rag to remove any cured foam or chemical from the face of the dispensing unit. Use of enclosed petroleum jelly is recommended to cover the face of the unit in order to prevent further contamination or if chemical is accidentally leaked into this area.
3. Shake kit or cylinders for at least 1 minute to ensure proper mixing. Typically chemical should be between 70–85°F (21–29°C). See TDS for formula specific shaking and temperature recommendations.
4. Fully open all supply valves.
5. Dispense into waste container to verify that both chemicals are being dispensed in approximately equal streams.
6. The dispensing unit is a disposable unit not designed for prolonged storage or continuous re-use. To help extend the storage life, it is recommended to dispense a minimal amount of foam from unit at least once every three (3) days to ensure optimum flow of chemical through hoses. **ONCE OPENED, CONTENTS SHOULD BE USED WITHIN 30 DAYS.**

EFFECTS OF TEMPERATURE

- Proper temperature plays a critical role in the performance of any two-component polyurethane foam system. Chemical temperature, ambient air temperature and substrate temperature (i.e. mold temperature) will affect system performance.
- Recommended chemical temperature is 70–85°F (21–29°C), see TDS for formula specific temperature recommendations. If the chemicals are not at the proper temperature, they may dispense in an improper ratio, thereby leading to poor quality foam. Please see Technical Data Sheets (TDS) for specific formulation temperature requirements.
- **NOTE: It may take from several hours to several days (in the case of the larger systems) for the chemical temperature to reach the proper temperature. This is especially true if the product has been recently shipped or stored in colder temperatures.**
- For best results, it is advantageous to heat the mold substrate temperature to 80-100°F (27-38°C), as this will improve both the adhesion of the foam and allow for proper expansion of the foam. A colder substrate will act as a heat sink, taking away the heat that is generated from the exothermic reaction of the chemicals during cure. This may reduce expansion, flowability and performance.
- NOTE: It is important to use caution when using warming substrates. Contact your local sales representative for proper procedures.

DISPOSAL PROCEDURES

Always wear proper protective equipment as you would while spraying the two-component foam in a well-ventilated area. Procedure for handling empty or partially used disposable cylinders (not returnable):

1. **DO NOT INCINERATE CYLINDERS.**
2. Empty cylinders by dispensing the foam into a waste container like a cardboard box or plastic bag. Depressurize the used cylinders using the dispensing unit with a new nozzle attached. Spray the foam until one of the components/cylinders no longer sprays chemical.
3. Remove the nozzle and then continue to depressurize by dispensing the remaining chemical(s) and blowing agent into a waste container (a box lined with a plastic bag) that has adequate industrial liquid absorbing medium in the bottom. Dispense the residual chemicals until the pressure is down to a minimum or there are just large bubbles in the hose.
4. Close the cylinder valves completely, and then operate the dispensing unit again to empty and depressurize the hoses. Use a 9/16" wrench and remove the hoses from the cylinders. Use caution in case there is some residual chemical and/or pressure in the hoses.
5. Invert the cylinder and point away from face. Slowly open the cylinder over the waste container to catch any residual spray.
6. Return the cylinder to an upright position. Shake the container; there should not be any sloshing of liquid. Make sure to leave valves OPEN-do not close. **DO NOT PUNCTURE.**
7. The user of this material has the responsibility to dispose of empty cylinders, unused material and residues in compliance to all applicable federal, state, international and local regulations regarding the treatment, storage, and disposal for hazardous and nonhazardous wastes. Check with your local waste disposal service for guidance.
8. **NOTE: After dispensing if one cylinder has chemical left in it; treat as hazardous material.**

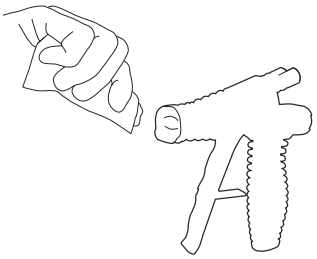
TROUBLESHOOTING GUIDE

Equivalent flow of both A-component and B-component is required with all two-component polyurethane systems in order to obtain proper performance, curing and optimum yields. If a problem occurs, the cause is typically due to uneven chemical flow that is caused by a blockage of one of the chemicals.*

PROBLEM	POSSIBLE CAUSE	SOLUTION
Poor chemical flow	Cylinder valves not fully open	Turn cylinder valves counter-clockwise until they stop
	Cylinder valves in incorrect position	Place cylinder valves in upright position
	Damaged rubber gasket in nozzle	Replace nozzle
	Material is too cold	Chemical temperature must be between 70–85°F (21–29°C)
Foam leaking from hose connections	Hoses not tightened	Tighten all hose fittings
	Cross-threaded hose	Replace gun hose assembly
Dark crunchy foam/ off-ratio (A-rich)	Material is too cold	Chemical temperature must be between 70–85°F (21–29°C)
	Clogged nozzle	Replace nozzle
	Blockage of one chemical port	Clean gun face and apply petroleum jelly
	Gun crossover	Replace hose
White spongy or shrinking foam/ off-ratio (B-rich)	Material is too cold	Chemical temperature must be between 70–85°F (21–29°C)
	Clogged nozzle	Replace nozzle
	Blockage of one chemical port	Clean gun face and apply petroleum jelly
	Gun crossover	Replace hose
Sputtering from nozzle	Propellant off-ratio	Shake the kit for at least 1 minute.
	Cylinders are empty	Switch to new kit
	Clogged nozzle	Replace nozzle
	Hose blockage	Replace hose
*If kit is still not fully operational, stop spraying and contact the distributor where purchased. If anticipating any type of replacement, keep ALL components until instructed otherwise.		

NOZZLE CARE AND USAGE

Apply a small amount of petroleum jelly, which is provided with each kit, to help keep the gun face clean from cured foam or contamination that could block one of the chemical ports.



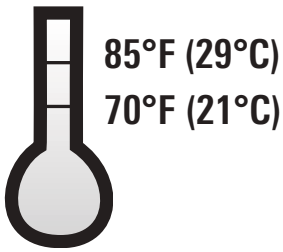
Change nozzles frequently! Foam will cure inside the nozzle in the same amount of time that foam becomes tack-free in the air.

USE SOLVENTS!

- All nozzles are easily cleanable and solvent resistant.
- To clean nozzles, liquid chemical must be dissolved prior to its complete chemical reaction by flushing the nozzle with acentone cleaner or other suitable solvent.
- Gun face can be kept clean with the use of petroleum jelly on the face or with a soft cloth to remove residue.
- Cleaning a nozzle more than twice is not recommended.

TEMPERATURE AND STORAGE

- Chemical temperature is very important, store kits at or above 70°F (21°C) prior to use.
- Cold chemical may lead to off-ratio flow.
- Optimum chemical temperature is 70–85°F (21–29°C).
- See TDS for formula specific temperature recommendations.



- The A-component chemical may eventually harden and clog the hose if stored for too long.
- The gun hose assembly is disposable and is not intended for continuous re-use.
- For best results, dispense liquid from hose at least once every 3 days.
- **USE CONTENTS WITHIN 30 DAYS OF INITIAL USE.**

LIMITED WARRANTY

The Manufacturer warrants only that the product shall meet its specifications: this warranty is in lieu of all other written or unwritten, expressed or implied warranties and The Manufacturer expressly disclaims any warranty of merchantability, or fitness for a particular purpose. The buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the replacement of the material. Failure to strictly adhere to any recommended procedures shall release the Manufacturer of all liability with respect to the materials of the use thereof. User of this product must determine suitability for any particular purpose, including, but not limited to, structural requirements, performance specifications and application requirements prior to installation and after product has been properly applied.

DISCLAIMER

Spray foam products are composed of a diisocyanate, blowing agent, amine catalyst and polyol. Consult the product's SDS for specific information. The urethane foam produced from these ingredients will support combustion and may present a fire hazard if exposed to a fire or excessive heat about 240°F (116°C). Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Recommend using in a well ventilated area with certified respiratory protection or a powered air purifying respirator (PAPR). See SDS for specific information. For more information regarding a certified respiratory program please visit http://www.cdc.gov/niosh/. FOR PROFESSIONAL USE ONLY.

WARNINGS

WARNING: Non-flammable compressed gas. Keep away from heat. Smoking and open flames, including hot work, should be prohibited in the vicinity of a foaming operation. Avoid contact with skin and eyes. May cause sensitization by inhalation and/or direct skin contact. Avoid prolonged or repeated breathing of vapor. KEEP OUT OF REACH OF CHILDREN.
FIRST AID: In any first aid case, CONSULT A PHYSICIAN. EYES: Flush with water for at least 15 minutes. SKIN: Remove contaminated clothing. Wash skin with plenty of soap and water. Cured foam must be removed manually. INHALATION: If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. INGESTION: Give large quantities of water. Do NOT induce vomiting. Contact a physician immediately in any first aid situation. Consult the product's SDS for specific information.

NOTE: Physical properties shown are typical and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal conditions and may vary upon use, temperature and ambient conditions. Right to change physical properties as a result of technical progress is reserved. This information supersedes all previously published data. Yields shown are optimum and will vary slightly depending on ambient conditions and particular application. Read all product directions and safety information before use. This product is organic, and therefore, is combustible. Consult local building codes for specific requirements regarding the use of cellular plastics or urethane foam in construction.

ELASTOCHEM®