

GEBAUER'S ETHYL CHLORIDE®

INDICATIONS AND USAGE:

Gebauer's Ethyl Chloride is a vapocoolant (skin refrigerant) intended for topical application to control pain associated with injections, starting IV's and venipuncture, minor surgical procedures (such as lancing boils or incision and drainage of small abscesses), and the temporary relief of minor sports injuries. The medium and fine streams are also intended for use as a counterirritant in the management of myofascial pain, restricted motion, and muscle tension.

PRECAUTIONS:

Do not spray in eyes. Inhalation of ethyl chloride should be avoided as it may produce narcotic and general anesthetic effects, and may produce deep anesthesia or fatal coma with respiratory or cardiac arrest. Ethyl chloride is **FLAMMABLE** and should never be used in the presence of an open flame or electrical cautery equipment. When used to produce local freezing of tissues, adjacent skin areas should be protected by an application of petrolatum. The thawing process may be painful, and freezing may lower local resistance to infection and delay healing.

ADVERSE REACTIONS: Cutaneous sensitization may occur, but appears to be extremely rare. Freezing can occasionally alter skin pigmentation.

CONTRAINDICATIONS: Ethyl chloride is contraindicated in individuals with a history of hypersensitivity to it.

WARNINGS:

For external use only. Do not spray in the eyes. Skin absorption of ethyl chloride can occur; no cases of chronic poisoning have been reported. Ethyl chloride is known as a liver and kidney toxin; long-term exposure may cause liver or kidney damage.

WARNING: This product contains a chemical known to the State of California to cause cancer.

KEEP OUT OF THE REACH OF CHILDREN

DIRECTIONS FOR USE:

To apply Gebauer's Ethyl Chloride from the amber bottle, hold the bottle inverted while spraying. Open the dispenseal spring valve completely allowing the Ethyl Chloride to flow from the bottle. To apply Gebauer's Ethyl Chloride from the aerosol can, hold can upright over the treatment area and depress the valve completely allowing Gebauer's Ethyl Chloride to spray from the can.

1. **PRE-INJECTION ANESTHESIA:** Prepare the syringe. Swab the treatment area with an antiseptic. Amber bottle - spray the target area with Gebauer's Ethyl Chloride continuously for 3 to 7 seconds (aerosol can 4 to 10 seconds) from a distance of 3 to 9 inches (8-23 cm). Spray the area until the skin just turns white; do not frost the skin. With skin taut, quickly introduce the needle. Follow these directions for other types of needle insertion procedures such as starting IV's and venipuncture.
2. **TOPICAL ANESTHESIA IN MINOR SURGERY:** Clean the operative site with a suitable antiseptic. Apply petrolatum to protect the adjacent area. Amber bottle - spray the target area with Gebauer's Ethyl Chloride continuously for 3 to 7 seconds (aerosol can 4 to 10 seconds) from a distance of 3 to 9 inches (8-23 cm). Spray the area until the skin just turns white; do not frost the skin. Promptly make incision. The anesthetic action of Gebauer's Ethyl Chloride lasts a few seconds to a minute.
3. **TEMPORARY RELIEF OF MINOR SPORTS INJURIES:** The pain of bruises, contusions, swelling, and minor sprains may be controlled with Gebauer's Ethyl Chloride. The amount of cooling depends on the dosage. Dosage varies with duration of application. The smallest dose needed to produce the desired effect should be used. The anesthetic effect of ethyl chloride rarely lasts more than a few seconds to a minute. This time interval is usually sufficient to help reduce or relieve the initial trauma of the injury. Determine the extent of the injury (fracture, sprain, etc.). Amber bottle - spray the affected area from a distance of 3 to 9 inches (8-23 cm) for 3 to 7 seconds (aerosol can 4 to 10 seconds) until the skin just turns white; do not frost the skin. Avoid spraying the skin beyond this state. Use as you would ice.
4. **SPRAY AND STRETCH TECHNIQUE FOR MYOFASCIAL PAIN:** Gebauer's Ethyl Chloride may be used as a counterirritant in the management of myofascial pain, restricted motion and muscle tension. Clinical conditions that may respond to Gebauer's Ethyl Chloride include low back pain (due to tight muscles), acute stiff neck, torticollis, acute bursitis of the shoulder, tight hamstrings, sprained ankle, tight masseter muscles and referred pains due to irritated trigger points. Relief of pain facilitates early mobilization and restoration of muscle function. The Spray and Stretch Technique is a therapeutic system that involves three states: Evaluation, Spraying, and Stretching. The therapeutic value of the Spray and Stretch Technique is most effective when the practitioner has mastered all of the stages and applies them in the proper sequence.

- a. Evaluation If the patient has been evaluated to have pain caused by an active, irritated trigger point then proceed to Step b.
- b. Spraying
 - i. Have the patient assume a comfortable position.
 - ii. Take precautions to cover the patient's eyes, nose and mouth if spraying near the face.
 - iii. Hold the bottle inverted. (Hold the can upright.) From a distance of 12 to 18 inches (30-46 cm) aim the stream so that it meets the skin at an acute angle to lessen the shock of impact.
 - iv. Direct the spray in parallel sweeps 0.5 to 1 inch (1.5-2 cm) apart at the rate of approximately 4 inches/second (10 cm/second). Continue until the entire muscle has been covered. The number of sweeps is determined by the size of the muscle. The spray should be applied from the muscle attachment over the trigger point, through and over the reference zone.
- c. Stretching Passively stretch the muscle during spray application. Gradually increase the force with successive sweeps. As the muscle relaxes, smoothly take up the slack by establishing a new stretch length. It is necessary to reach the full normal length of the muscle to completely inactivate the trigger point and relieve the pain. Rewarm the muscle. If necessary, repeat the procedure. Apply moist heat for 10 to 15 minutes following treatment. For lasting benefit, eliminate any factors that perpetuate the trigger mechanism.

CONTENTS: Ethyl chloride

STORAGE: Contents under pressure. Store in a cool place. Do not store above 120°F (50°C). Do not use near fire or flame or place on hot surfaces.

DISPOSAL: Dispose of in accordance with local, state, and national regulations.

To order Gebauer's Ethyl Chloride, ask for:

- **Fine Stream Spray - 3.5 oz. Glass Bottle - P/N 0386-001-04**
- **Medium Stream Spray - 3.5 oz. Glass Bottle - P/N 0386-001-03**
- **Mist Spray - 3.5 oz. Can - P/N 0386-0001-02**
- **Medium Stream Spray - 3.5 oz. Can - P/N 0386-001-06**

For more information about this product contact Gebauer Company.