

**Glass
Gleam™-4**

Glass Cleaner Concentrate

Designed for Professional Window Cleaners

Automotive and Window Film Applications

BENEFITS OF GLASS GLEAM-4

- Noticeably cleaner glass
- Almost no bleeding or crying
- Less detailing
- Kind to hands
- Excellent squeegee slip
- Consistent dependable formula, unlike dishwashing soaps
- Perfect foam level
- Biodegradable
- No phosphates, ammonia or hazardous ingredients
- Blue color indicator when diluted
- Superior wetting and rinsing for water-fed poles or hosing
- Stays wet longer on hot or windy days
- Softens water to reduce dirt redeposition
- Leaves no haze, even on polymer treated glass
- Earth friendly product



Glass Gleam-4 is a state-of-the-art liquid additive to water, designed for cleaning glass using a squeegee. Extensive field testing and customer feedback has proven that GG-4 cleans visibly better with less wipe-up time. It was developed by professional chemists specifically for glass. Titan Laboratories is a recognized leader in window cleaning and restoration chemicals.

GG-4 contains a new detergent system allowing improved cleaning and degreasing of the glass. The squeegee drag reduction (slip) is excellent. Other features include low fragrance, optimized foam level, kind to your hands, and a blue color indicator to reveal that it has been added to the bucket or spray bottle. High-tech polymeric water softeners condition the water to greatly reduce dirt redeposition. This feature alone makes GG-4 highly desirable in areas of hard water. (See comments below on water hardness).

DIRECTIONS

Bucket Applications

Add about 1/4 Fl. Oz. of GG-4 concentrate per gallon of water. (A dilution ratio of 1:500). Or about 1 ounce per 2-1/2 gallons of water. The actual amount needed depends on variables such as water hardness, temperature, humidity, rubber quality, dirt on glass and personal preference.

Some experimentation may be needed to find the optimum dose. Do not exceed twice the recommended dose.

Non-bucket Applications

Glass Gleam-4 is intended for glass cleaning with a squeegee because water evaporation has been reduced to allow longer wetting of the glass. GG-4 is typically added to water in a squeegee bucket. It is also ideal for "bucketless" systems, such as holster carriers, garden-type sprayers, trigger spray bottles, or pull-top sports bottles that dispense cleaning solution onto the strip washer. A gallon or more can be premixed for pouring into smaller dispensing containers. Labels are available to attach to these containers which identify the contents as "Glass Gleam-4 Ready-to-Use".

GG-4 can also be used with "hose-end" sprayers (sold for insecticides and fertilizer spraying), power washers, or window cleaning water-fed poles. The superior wetting and water softening of GG-4 allows clear drying on many windows, such as French windows and greenhouse windows, without the use of a squeegee. And with similar benefits to using softened water or deionized water. On some windows a horsehair brush or strip

washer can be used to agitate the dirt after applying GG-4. Then rinse with water from a hose or power washer.

Advantages of a professional product

The cost is of using GG-4 is pennies per bucket. Window cleaning expenses are almost all labor. The small cost of Glass Gleam-4 is more than offset by faster production with less effort, compared to dishwashing soaps or home-brewed solutions, for example. Dishwashing soaps often differ from one purchase to the next, leave a film on the glass (especially noticeable on mirrors), make tool handles slippery when wet and then tacky while drying, have excessive bleeding and too much foam, to name some drawbacks. Dish-washing soaps are intended to wash opaque dishware rinsed in hot water. A reflective residual film leaves a shiny surface and lots of foam in the sink are key selling features of dish soaps.

GG-4, in contrast, is a professional window cleaning solution designed for vision glass and the needs of the window cleaner. You and your customers will notice the difference. Plus you can use Glass Gleam-4 as a sales tool — that you use the best professional products.



- Raw materials are bio-based
- Natural sourced fragrance
- Highly concentrated to reduce packaging waste and transportation carbon release
- Not tested on animals
- Not a skin sensitizer
- Kind to hands, neutral pH, approximates skin value of 7.4
- Ready-to-use mixture is 1:500 dilution (0.2%)
- Contains no phosphates, ammonia or hazardous ingredients
- Contains no heavy metals, alkylphenol ethoxylates, ozone depleting compounds or carcinogens
- Biodegradable under the conditions of OECD 301F



OTHER USES FOR GLASS GLEAM-4

Automotive.

Add about 1/4 Fl. Oz. per gallon of water in the windshield spray reservoir of cars and trucks. This greatly improves the cleaning performance of the windshield wipers and reduces chatter. Also carry a ready-to-use mixture in a trigger spray bottle in your car, truck or van to clean the windshield and glass. Add GG-4 to the squeegee bucket at automotive service stations, quick lubes and fleet depots.

Solar Window Film Installation.

Use Glass Gleam-4 to clean windows and as a water-soap solution. GG-4 has a neutral pH, no ammonia or phosphates, and will not harm film.

Comments on Squeegee Drag

Glass Gleam-4 offers considerable drag reduction or slip. Because there is no residual soap film left on the glass after you squeegee, consider these hints:

- 1) Overlap less on cleaned glass so you have most of the squeegee rubber on the wetted glass.
- 2) If you wipe the rubber after each pass, use a damp sponge or cloth. Don't dry the rubber too much. Or tap the squeegee at the bottom or side of the window to remove excess water.
- 3) Don't press too hard. A lighter touch works fine and is less fatiguing.

Comments on Water Hardness

Glass Gleam-4 Glass Cleaner Concentrate is a newer companion product to the well known Glass Gleam-3. Some window cleaners wanted different features. In many parts of the country where the water is "hard" a new product was needed.

Glass Gleam-4 has polymeric water softeners especially desirable for use in hard water. Tap water is generally considered "hard" if the calcium or magnesium content is over 5 grains per gallon (gpg). If your water has over 10 gpg, it is considered very hard, and over 14 gpg extremely hard. Some hardness is usually present — even less than 3 gpg is classified as "slightly hard" by the Water Quality Association. The water-softening feature of GG-4 is important, providing water treatment similar to softened or de-ionized water without additional expense or effort.

Freeze Protection

Glass Gleam-4 does not provide freeze protection. To reduce the freezing point of water to 0°F (-18°C) it is necessary that methanol be added to the water so the mixture is about 28% methanol and 72% water. For protection to -20°F (-29°C) you need 36% methanol and 64% water. You can buy windshield washer fluid premixed for either 0°F or -20°F. Glass Gleam-4 should be added to this water/methanol mix, about 1/4 ounce per gallon, to provide the necessary cleaning and performance benefits.



Vinyl water-resistant labels identify secondary containers as "Glass Gleam-4 Ready to Use". Labels are available from your distributor or contact Titan Laboratories. Affix them to your squeegee bucket (they meet OSHA requirements for secondary containers), trigger spray bottles, pressurized sprayers, dispensing bottles (to apply solution direct to the strip washer), jugs with premixed solution, garden hose-end sprayers, etc. A light blue color is visible on clear or translucent containers after dilution.

REFERENCE VALUES, APPROXIMATE

Capful, Gal bottle	1/3 Fl. Oz	10 mL
Capful, Qt bottle	0.2 Fl. Oz.	6 mL
Ounce	1 Fl. Oz.	30 mL
Tablespoon	1/2 Fl. Oz.	15 mL
U.S. Gallon	128 Fl. Oz.	3.8 L
Typical Dose	1/4 Fl. Oz. per Gal.	2 mL per L
Max. Dose	1/2 Fl. Oz. per Gal.	4 mL per L
Typical Dilution	1:500	1:500

SQUEEZE DISPENSING BOTTLE.

Holds 16 Fl. Oz. (450 mL). To use, remove black cap and squeeze bottle to accurately fill measuring chamber. Calibrations at 1/2 oz. and 1 oz. (5, 15 and 30 mL). Then dump chamber into bucket. To refill reservoir, remove white cap. Reduces waste, provides consistent dose. Very convenient. Model 59116.



LIMITED WARRANTY.

This product will be replaced if defective in manufacture, labeling or packaging for a period of one year following purchase. Because of the variation in materials to be cleaned and techniques employed, which are beyond the control of the manufacturer or distributor, except for such replacement, the sale is without warranty or liability even though damage or loss is caused by negligence or other fault.

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