Acid Etching
A Guide to Resources
Rakow Research Library
The Corning Museum of Glass

CAUTION: Hydrofluoric acid is very dangerous to handle, and requires special training and the use of proper equipment. The fumes from this acid, when inhaled, will destroy lung tissue. Skin contact is painful and causes lasting mutilation.

The Corning Museum of Glass does not take responsibility for any of the information found in these articles and books.

Part 1: Historical Sources; Part 2: Contemporary publications; Part 3: Videos; Part 4: Safety & Treatment of Burns; Part 5: Etched glass history; Part 6: Websites; Part 7: Alternative methods

Historical Sources:

Note: First published in 1954 as Lehrbuch der Flachglasätzerei.
<Stacks: TP863.A46 1963>

<Stacks: TT360.C15 1983>

Note: Microfilm only.
<Microforms: R-1035, #38>

<Stacks: TP863.D97 1982>

Note: "1929 - Intaglio, Engraving, Etching and Badging," pp. 142-146.

Notes: "Etching Fancy Glass Articles," pp. 87-95; "Gilding and Embossing Sheet Glass," pp. 95-96.
<Stacks: TP859.2.H35 1912>
<Stacks: TP859.2.H35 1988; Microforms: F-11259>

Note: "Etching Glass, pp. 33-38.  
<Stacks: TP863.H45; Microforms: F-4102>

Notes: Includes instructions for gilding glass gold signs without leaf; for silvering glass; for frosting of glass; for etching on glass with acid; for preparation of decalcomania.  
<Stacks: TT273.H47>

Note: "Mattieren auf chemischem Wege," pp. 3-34.  
<Stacks: TP863.H58; Microforms: F-977>

Note: "Etching, Deep Etching, Matt Etching, etc.," pp. 515-518.  
<Stacks: TP857.H69 1925a>

<Stacks: TP857.H71; Microforms: F-2490>

Jefferson Glass Co.  Notebooks containing batch recipes, glass analysis, acid etching recipes and instructions, color schemes, charts for "cutting cost per dozen," and a variety of advice from others in the industry (named).  [Follansbee, WV: the company, 1914-1934].  
Notes: 2 notebooks.  Probably compiled by W. R. McCleary.  Sheets are individually dated, ca. 1914-1934.  
<Stacks: 752>

<Stacks: TP863.K15; Microforms: F-10406>


<Stacks: TP857.S76; Microforms: F-2355>

*Cage: TP863.M64 1928; Microforms: F-1105>*

*Note:* "Embossing on Glass and Glue Chipping." pp. 162-175.
*Cage: TT380.S42 1915>*

*Cage: TP863.S75; Microforms: F-4201>*

*Cage: TP863.S78; Microforms: F-4100>*

*Cage: NK5410.S78*>
Acid etching: Contemporary publications:


<Cage: TP863.A72; Microforms: F-444>

280 pp.  
Note: "Frosting and Etching Glass," pp. 61-68.  
<Stacks: TP859.B55 1983>  

<Stacks: TP863.C24; Microforms: F-14750>

Note: Author reproduces 1865 Italian "entry lites" in a Maine mansion.  
<VF: Glass Making -- Glass Decorating Techniques -- Etching, Acid>

<Stacks: TP863.D44>


<Stacks: TP863.S79; Microforms: F-10608>

Note: This same article is reprinted as paper no. 3 in Professional Stained Glass: Technical manual.

<Stacks: TP863.G45>

<VF:>


Note: Text in Korean; title in English and Korean; glossary terms in English, but definitions in Korean; bibliography, list of programs, galleries, etc. in English. Illustrations are quite useful, although there are no English captions. Page numbers are in small black boxes at the top of the left hand side pages. 
<Cage: TT298.J22; Microforms: F-17703>

<Stacks: TP863.K96; Microforms: F-10092>

Note: Frosting by acid etching.

<Stacks: TP863.S67 1979>


Notes: “Glass etching” pp. 144-150 – includes notes for working with acid, the resist (wax, liquid, lead foil), the acid, etching, embossing, French embossing, deep etching. “The use of hydrofluoric acid and fluorides (soluble),” p. 165.  
<Stacks: TP863.M42>


<Stacks: TP863.M56>


Picone, Syd and Terry. "Acid Etching...the Easy Way." Glasscraft news, V. 1, no. 6, [August 1984], pp. 9-10+.


Professional stained glass. V. 8, no. 4, May 1988. Note: Focus of issue is acid etching.

Professional Stained Glass. Technical manual. Albert Lewis, ed. New York: Professional Stained Glass, 1989. Notes: "Acid Etching," no. 3; "Acid Etching Finished Glass," no. 113; "Acid Etching Resists (and Handling of Acid Burns)," no. 2; "The Opportunities of Acid Etching," no. 178; "To Etch or Not to Etch." no. 183, "Using Acid-Etching Creams," #1. 200 reprints in loose leaf format of articles from the magazine, Professional Stained Glass. This item is missing from the Rakow Library; consult other articles in this bibliography for their original publication date in the magazine. <Stacks: TT298.P96; Microforms: F-15070>


*Note:* 7 un-numbered pages following p. 16.

*Notes:* Includes index. Includes painting and acid etching. Bibliography: p. [116].  
<Stacks: TT298.S19 ; Microforms F-10483>

*Note:* Notes on the acid etching process.  
<Stacks: TP863.S65; Microforms F-13028>

<Stacks: TP863.S65g; Microforms: F-12886>

*Note:* British Society of Master Glass Painters.


*VF:* Glass making—Glass decorating techniques—Etching, Acid

**Videos:**

*Note:* Two projects, as well as how to etch, pitfalls to avoid, sandblasting and acid etching techniques. NOT YET VIEWED. Commercially distributed.

*Note:* Originally recorded onto 3/4" tape at Dade County Television Access Project (CABLE-TAP). Credits for visual materials given to Steuben and The Corning Museum of Glass. Shelving Title: Glassworks Show #5

*Portrait of Glass.* Producer, Carborundum Film Unit Production. [196-?]. 30 min.  
*Note:* This film presents numerous glass decorating techniques: sandblasting, engraving, cutting, mirror production, acid etching, coating with metallic oxides. In addition, various manufacturing processes are introduced: mechanical production, ribbon machine, windshield production, and hand-formed glass. Other types of glass mentioned are contemporary glass, fiber glass, laminated and safety glass. Although topics are covered superficially, this is a good visual presentation. It is especially useful for the depiction of decorative processes and windshield production.
Safety & Treatment of Burns:


**Note:** Acids used in glass etching and stained glass.


<Stacks: TP859.2.H32; Microforms: F-14480>

**Note:** Includes fuel-fired furnaces and kilns, soldering materials used with stained glass, and acid etching.

[http://www.dodgestudio.com/sfy_arc.htm](http://www.dodgestudio.com/sfy_arc.htm)  
**Note:** “…Acids, such as etching creams with hydrofluoric acid derivatives which can cause skin irritation or severe eye injury. (Straight hydrofluoric acid used in acid bath etching is outright scary.) If you want the most complete information about the materials you are working with ask your supplier to see the MSDS (Manufacturers Safety Data Sheet) on them. (Federal law mandates that this information be available upon request.)”

Etched Glass History:

**Note:** 18th and 19th C. glass.

**Note:** Exhibition, March 1990. Bibliography: p. 32.  
<Stacks: NK5143.H42; Microforms: F-11690>

Lyon, Kenneth W. “Engraved or Etched?” The glass club bulletin, no. 144, Fall 1984, pp. 6-9.  
**Note:** Differences between wheel engraving and acid etching

**Note:** Decorative techniques created by acid: cut-back, etched, craquelle, frosted, etc.
Website:

“Design Etch by Richard Smith: Questions & Answers – a page for and from glass etchers.”
http://user.fundy.net/fpweb/1-answer.htm
Note: Sandblasting and other techniques.

Note: See “Product Demos” and “Project Corner” for brief instructions.

*** Look at stained glass supply stores/websites to find etching creams (Armour Etch, Etch Bath), acid etching resists and stencils, etc.

Alternative methods:

http://www.findarticles.com/cf_dls/m1041/7_80/87779937/p1/article.jhtml
Note: “Applying a white glass paint that mimics an etched look will help you avoid using acid-etching creams, which can be difficult…. Also, thick tempered glass, such as these vintage milk bottles, [and Pyrex] will not take etching creams.”

Note: Faux glass etching with laminates; also comparison of etching/engraving/sandblasting.

“Is there any paper that you can stick on glass and it will look like is etched?”
http://user.fundy.net/fpweb/1-answer.htm
Note: “There is a vinyl available that replicates the look of etched glass - most vinyl lettering companies or glass stores will have it available - check your yellow pages for a local company.”

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