

# Alchemical symbol for calx

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This is a continuation of SEW item [#629](#), *Follow-up revised designs of the alchemical symbols block*. Some members of SEW thought that the proposed glyph for U+1F74C *calx* would be best as a new character. The proposal in #629 was to change the glyph from an abbreviation to its most common symbol, but Wallace Hooper at the Newton Chymistry Project (p.c. 2025) agrees that it would be better as a new character so that scholarly projects do not replace the representative glyph independently. A new symbol would need to go into a separate block, presumably Miscellaneous Symbols Supplement.

The original proposal summarized the glyph changes as:

| Character         | Proposed changes in representative glyphs |               |                |
|-------------------|---|---------------|----------------|
|                   | 2009 glyph                                | Current glyph | Proposed glyph |
| 1F74C <i>calx</i> | C   | €             | ₩              |

The original 2009 Unicode design for U+1F74C ALCHEMICAL SYMBOL FOR CALX was simply the Latin letter capital C. In my revision of the representative glyphs of the block, I proposed that this be made distinct from ASCII C by adding a cross, for a ligature €, which is the glyph currently on the chart. However, € is inconsistent with its derived symbol for quicklime. Quicklime has two common designs: an abbreviation CV for Latin *calx viva*, analogous to the abbreviation C for *calx*, and a symbol ₩, which is based on the symbol ₩ for *calx*. It was the symbol ₩ that was chosen as the glyph for U+1F741 ALCHEMICAL SYMBOL FOR QUICK LIME. For consistency, the symbol for *calx* should be the one that forms the basis of the ₩ symbol for *calx viva*, namely ₩.

## Character

### Alchemical symbol

₩ 1CED1 ALCHEMICAL SYMBOL FOR CALX-2.

## Properties

1CED1;ALCHEMICAL SYMBOL FOR CALX-2;So;0;ON;;;;N;;;;;

## chart

## Miscellaneous Symbols Supplement

1CECO

1CEFF

## References

Andrew Bell (ca. 1800). Plate CXXXII of an unidentified publication. Available online at [wellcomecollection.org](https://wellcomecollection.org).

Isaac Newton, Liber Mercurioum Corporum. Keynes ms 31, King's College Library, Cambridge University.

Louis Reutter de Rosemont (1932) *Histoire de la pharmacie a travers les ages*, vol II: 4 plates after p. 260 and 2 plates after p. 268.

Basil Valentine (1671) *The last will and testament of Basil Valentine, monke of the Order of St. Bennet*. Edward Brewster, London.

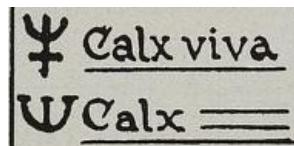
# Figures

## $\psi$ *calx* and $\Psi$ *calx viva*

The original Unicode design was simply the Latin letter C. This abbreviation may have an additional element such as an x or a cross. However, the more abstract symbol  $\psi$  may be placed first in symbol lists as the more common form;  $\psi$  is the basis of U+1F741  $\Psi$  *calx viva*.



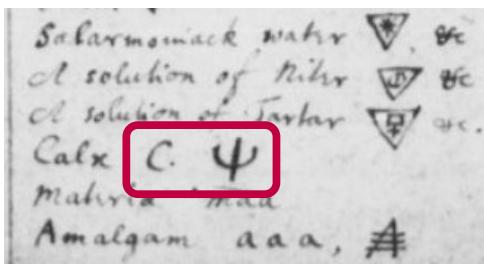
**Figure 1.** Valentine. (red) The *calx* symbol  $\psi$  and its derivative  $\Psi$  *calx viva*, of which it forms the top element. (blue) At center of the first line is an abbreviation C+ for *calx*, and at the right of the second line is an abbreviation CV for *calx viva*.



**Figure 2.** De Rosemont.  $\Psi$  for *calx viva* and the proposed glyph  $\psi$  for *calx*.



**Figure 3.** Bell. The symbol  $\Psi$  and the abbreviation CV for Latin *calx viva*, parallel to  $\psi$  and C for *calx*.



**Figure 4.** Newton. Table of symbols showing two variants of 'calx' in Newton's manuscripts: a capital Latin letter 'C' and the requested symbol  $\psi$ .

ISO/IEC JTC 1/SC 2/WG 2  
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS  
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>1</sup>

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.

Please ensure you are using the latest Form from std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.  
See also std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps.

**A. Administrative**

|  |                                   |  |
|--|-----------------------------------|--|
| 1. Title:  | <i>Alchemical symbol for calx</i> |  |
| 2. Requester's name:   | <i>Kirk Miller</i>                |  |
| 3. Requester type (Member body/Liaison/Individual contribution): | <i>individual</i>                 |  |
| 4. Submission date:  | <i>2025 August 04</i>             |  |
| 5. Requester's reference (if applicable):                        |                                   |  |
| 6. Choose one of the following:                                  |                                   |  |
| This is a complete proposal:                                     | <i>yes</i>                        |  |
| (or) More information will be provided later:                    |                                   |  |

**B. Technical - General**

|   |   |  |
|---|---|--|
| 1. Choose one of the following:   |   |  |
| a. This proposal is for a new script (set of characters):   |   |  |
| Proposed name of script:  |   |  |
| b. The proposal is for addition of character(s) to an existing block:   | <i>yes</i>  |  |
| Name of the existing block:   | <i>Miscellaneous Symbols Supplement</i>                     |  |
| 2. Number of characters in proposal:  | <i>1</i>  |  |
| 3. Proposed category (select one from below - see section 2.2 of P&P document):   |   |  |
| A-Contemporary <input checked="" type="checkbox"/>  | B.1-Specialized (small collection) <input type="checkbox"/> | B.2-Specialized (large collection) <input type="checkbox"/>      |
| C-Major extinct <input type="checkbox"/>  | D-Attested extinct <input type="checkbox"/>                 | E-Minor extinct <input type="checkbox"/>                         |
| F-Archaic Hieroglyphic or Ideographic <input type="checkbox"/>  |   | G-Obscure or questionable usage symbols <input type="checkbox"/> |
| 4. Is a repertoire including character names provided?  |   |  |
| a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?   | <i>yes</i>  |  |
| b. Are the character shapes attached in a legible form suitable for review?   | <i>yes</i>  |  |
| 5. Fonts related:   |   |  |
| a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?   | <i>Kirk Miller</i>  |  |
| b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):  | <i>Denis Moskowitz, dmm@suberic.net</i>                     |  |
| 6. References:  |   |  |
| a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?   | <i>yes</i>  |  |
| b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?  | <i>yes</i>  |  |
| 7. Special encoding issues:   |   |  |
| Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? | <i>yes</i>  |  |

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at [www.unicode.org](http://www.unicode.org) for such information on other scripts. Also see Unicode Character Database ([www.unicode.org/reports/tr44/](http://www.unicode.org/reports/tr44/)) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

<sup>1</sup> Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

### C. Technical - Justification

|  |  |
|--|--|
| 1. Has this proposal for addition of character(s) been submitted before?   | <input type="checkbox"/> <i>no</i>                   |
| If YES explain   | <input type="text"/>                                 |
| 2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?          | <input type="checkbox"/> <i>yes</i>                  |
| If YES, with whom?   | <input type="text"/>                                 |
| If YES, available relevant documents:  | <input type="text"/>                                 |
| 3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? | <input type="checkbox"/>                             |
| Reference:   | <input type="text"/>                                 |
| 4. The context of use for the proposed characters (type of use; common or rare)  | <input type="checkbox"/> <i>alchemy, rare</i>        |
| Reference:   | <input type="text"/>                                 |
| 5. Are the proposed characters in current use by the user community?   | <input type="checkbox"/> <i>yes</i>                  |
| If YES, where? Reference:  | <input type="text"/> <i>Newton Chymistry Project</i> |
| 6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?                                  | <input type="checkbox"/> <i>no</i>                   |
| If YES, is a rationale provided?   | <input type="checkbox"/>                             |
| If YES, reference:   | <input type="text"/>                                 |
| 7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?  | <input type="checkbox"/> <i>no</i>                   |
| 8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?  | <input type="checkbox"/> <i>no</i>                   |
| If YES, is a rationale for its inclusion provided?   | <input type="checkbox"/>                             |
| If YES, reference:   | <input type="text"/>                                 |
| 9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?               | <input type="checkbox"/> <i>no</i>                   |
| If YES, is a rationale for its inclusion provided?   | <input type="checkbox"/>                             |
| If YES, reference:   | <input type="text"/>                                 |
| 10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character?         | <input type="checkbox"/> <i>no</i>                   |
| If YES, is a rationale for its inclusion provided?   | <input type="checkbox"/>                             |
| If YES, reference:   | <input type="text"/>                                 |
| 11. Does the proposal include use of combining characters and/or use of composite sequences?   | <input type="checkbox"/> <i>no</i>                   |
| If YES, is a rationale for such use provided?  | <input type="checkbox"/>                             |
| If YES, reference:   | <input type="text"/>                                 |
| Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?  | <input type="checkbox"/> <i>no</i>                   |
| If YES, reference:   | <input type="text"/>                                 |
| 12. Does the proposal contain characters with any special properties such as control function or similar semantics?  | <input type="checkbox"/> <i>no</i>                   |
| If YES, describe in detail (include attachment if necessary)   | <input type="text"/>                                 |
| 13. Does the proposal contain any Ideographic compatibility characters?  | <input type="checkbox"/> <i>no</i>                   |
| If YES, are the equivalent corresponding unified ideographic characters identified?  | <input type="checkbox"/>                             |
| If YES, reference:   | <input type="text"/>                                 |