

Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Internationale Standardisierungs-Organisation
Organisation Internationale de Normalisation
Διεθνής Οργανισμός Τυποποίησης
Международная организация по стандартизации

Doc Type: Working Group Document

Title: Proposal to encode historic alchemical symbols

Source: Uwe Mayer, Siegmund Probst, David Rabouin, Elisabeth Rinner,
Andreas Stötzner, Achim Trunk, Charlotte Wahl

Version: 3rd version

Previous versions: L-2517, L-2432 (L2/25-131)

Related: L-2443; “*On revision of 1F76D ALCHEMICAL SYMBOL FOR RETORT*” by A. Stötzner

Status: final

Action: intended for Unicode 18.0 pipeline

Date: November 25, 2025

Requester's reference: LUCP L-2532

1. Background and Update

There were discussions during the Zoom meeting on April 29, 2025, about the *hora* symbols issues. As a result, the proposed symbol ALCHEMICAL SYMBOL FOR HORA-2 has been dropped; it is regarded to be represented by character 29D6. Instead of a new character we proposed new annotations for characters 231B, 29D6 and 1F76E in the previous version, which suggestions have found preliminary approbation by the comments following the meeting on October 2. The characters ALCHEMICAL SYMBOL ENCLOSED SUN and ALCHEMICAL SYMBOL ENCLOSED MOON have been dropped because these are now recommended to be materialized by sequences using 20DE COMBINING ENCLOSING SQUARE. A new Unicode Technical Note upon this topic is an option.

For the character previously called *ALCHEMICAL SYMBOL FOR RETORT-2* we now propose a variation sequence encoding.

2. Alchemical symbols

We propose the addition of (now) *four* alchemical symbol characters to the UCS.

3. Characters

If this proposal gets accepted, the following new characters will exist:



ALCHEMICAL SYMBOL FOR OIL INVERTED



ALCHEMICAL SYMBOL FOR MOON-JUPITER



ALCHEMICAL SYMBOL FOR TARTAR-SALT

For this character we propose a new variation sequence:



variation sequence to 1F76D

Remark: In a separate contribution from Oct. 30 about the standard glyph of 1F76D, A. Stötzner proposed this glyph for RETORTE: 

4. Annotations – *Hora* characters

The current situation with various “hour“ symbols is partly confusing and needs a revision. The previously proposed ☒ *ALCHEMICAL SYMBOL FOR HORA-2* is to be unified with character 29D6 ☒ *WHITE HOURGLASS*. In order to reflect the alchemical usage properly, we propose three annotation changes in the standard:

4.1.

The current annotation to 231B is incorrect because this *pictographic* version of the hourglass symbol is used as a modern user interface symbol, but *not* in historic alchemical notation. Hence we propose a change of annotations:

231B ☒ *HOURGLASS*
→ **29D6 white hourglass**
• **in Alchemy 29D6 or 1F76E is used**
= alchemical symbol for hour – to be deleted

4.2.

So far a reference to Alchemy is missing in the annotations to 29D6. We propose:

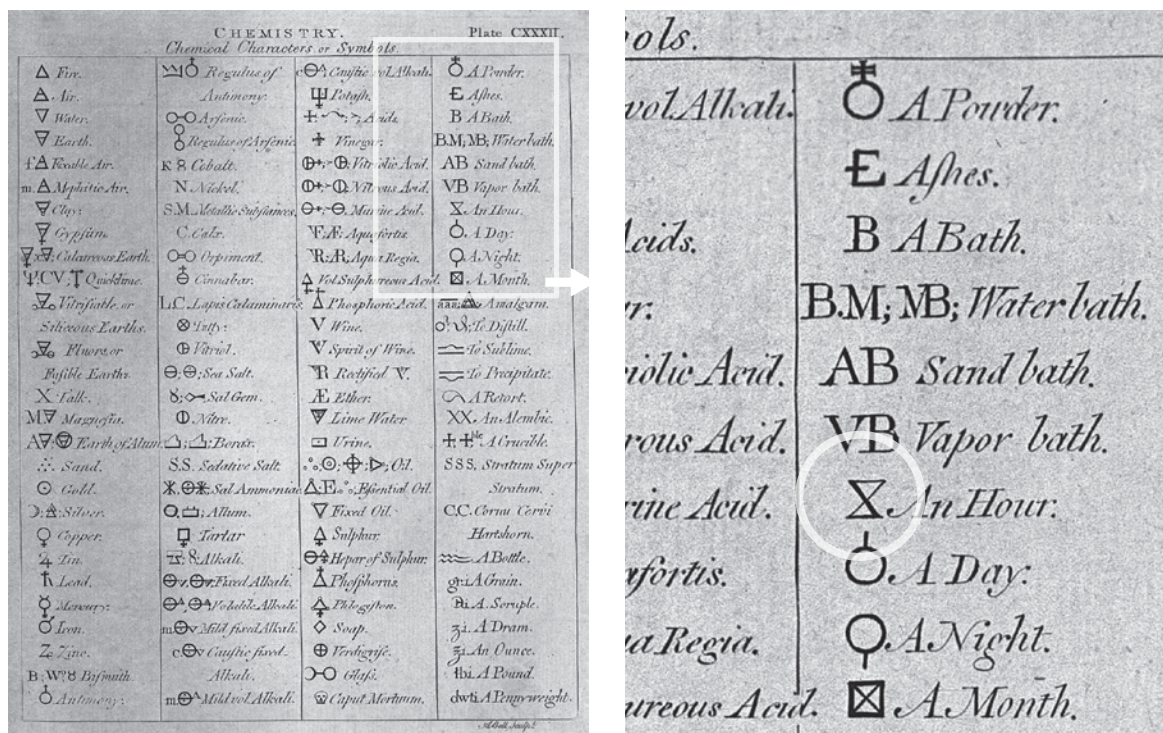
29D6 ☒ *WHITE HOURGLASS*
= vertical bowtie
= white framus
• **alchemical symbol for hour, simple form**
→ **1F76E alchemical symbol for hour**
→ 231B hourglass

4.3.

In the Alchemy block 1F700 the most widely used simple form of the alchemical *hora* symbol is neither represented nor reflected so far. The existing 1F76E is a calligraphically embellished variant form of the common simple alchemical *hora* sign which is testified in many sources and which is to be represented by 29D6. Therefore we request two additional annotations:

1F76E ☒ *ALCHEMICAL SYMBOL FOR HOUR*
• **simple form is 29D6**
→ **29D6 ☒ white hourglass**
→ 231B ☒ hourglass

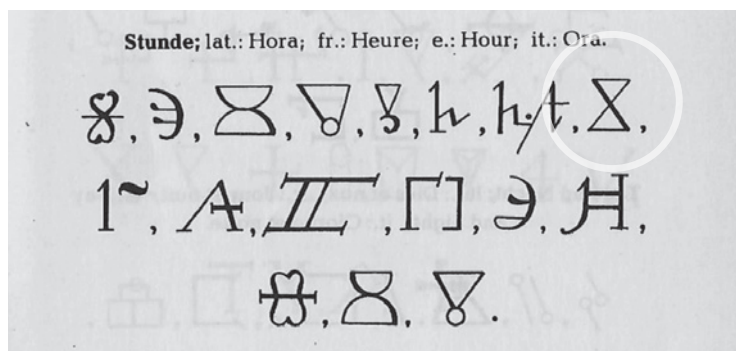
The proposed annotations will help to clarify the differences and best-practice use cases for 29D6 as well as for the other related characters. On this and the following page examples of the widespread use of the simple X-shaped *hora* symbol (in previous version proposed as \times *ALCHEMICAL SYMBOL FOR HORA-2*) are demonstrated.



Engraving of Andrew Bell (1726–1809). The straight hora symbol is listed here as the sole form.
Source: Wellcome collection (<https://wellcomecollection.org/works/s5vs9bfr>)



From a 1671 copperplate; showing the straight variant at 1st position. Basil Valentine: The Last Will and Testament of Basil Valentine. (Source: Newton N3584 Alchemy Unicode Proposal – March 31 2009.pdf)



From Geßmann's book (1964)

5. Figures and explanations

Con l'occasione del rammollire del ferro, comunicherò à V. S. Ill. una cosa assai curiosa comunicata al S^r Bodenhause d'un Signore Curioso che si è dimandato Francesco Miniti. Intorno all'Ammollir il |:vetro:| \mathcal{R} latte di Capra, aceto forte, $\circ\circ$ di uliva, Aloë Epatico, $\circ\circ$ laurino, orina di ragazzi ana. Fà bollire in un vaso invetriato nuovo il |:vetro:|, lascialo nell'infusione caldo in detto mestruo per 1 notte e la mattina opera. Si è fatta la prova in Parma d'uno chiamato Ottici con una Medaglia del Papa e dell'Imperatore in un |:vetro:| verde e riuscì pulitissimo, che poi rassoda come prima.

$\circ\circ$ ALCHEMICAL SYMBOL FOR OIL INVERTED. Graphically based on the glyph of the common oil symbol, which gets rotated 180 degrees. Here the meaning of the inverted character is "boiled oil" in contrast to "[just] oil", both characters do occur alongside each other here.

LAA III-8 p. 248

Con l'occasione del rammollire del ferro, comunicherò à V. S. Ill. una cosa assai curiosa comunicata al S^r Bodenhause d'un Signore Curioso che si è dimandato Francesco Miniti. Intorno all'Ammollir il $\mathcal{V}\mathcal{K}$ \mathcal{R} latte di Capra, aceto forte, $\circ\circ$ di uliva, Aloë Epatico \mathcal{L} laurino, orina di ragazzi ana. Fà bollire in un vaso invetriato nuovo il $\mathcal{V}\mathcal{K}$, lascialo nell'infusione caldo in detto mestruo per 1 notte e la mattina opera. Si è fatta la prova in Parma d'uno chiamato Ottici con

$\circ\circ$ ALCHEMICAL SYMBOL FOR OIL INVERTED.

The corresponding part of the original MS source, a letter from M. G. Block for Leibniz, 1699.

Source: LBr 75 fol. 30v

Tab. I.

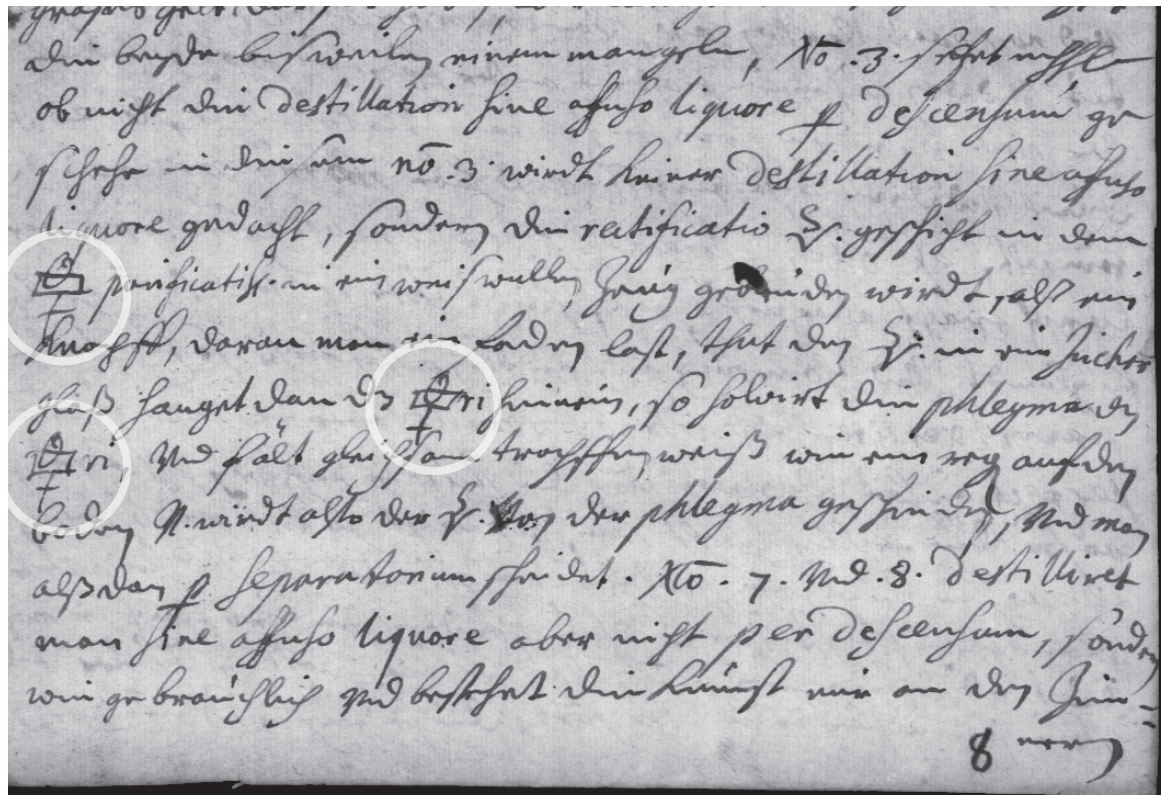
Chemische Zeichen.			
I. Gefäße.	\mathcal{R} Kloig.	\mathcal{A} brennbares Wesen,	\odot fettes, ausgepresstes Del.
\mathcal{D} Retorte.	\mathcal{M} Mictur.	VII. Natürliche Körper und deren Produkte insbesondere.	\odot gedachtes Del.
\mathcal{B} Morlag.	\mathcal{R} Zinctur.	1. Erden und Steine.	\mathcal{S} Schwefel.
\mathcal{K} Kolben.	\mathcal{M} Pillemasse.	\mathcal{V} Steine.	\mathcal{Z} Zinn.
\mathcal{X} Schmelzgefäß.	\mathcal{E} Essenz.	\mathcal{V} Thon.	\mathcal{O} Opium.
\mathcal{H} Helm.	\mathcal{Q} E. Quinzeffenz.	\mathcal{V} rectificirter W.	\mathcal{V} Weingeist.
\mathcal{N} B. M. Wasserbad.	IV. Gewicht und Maße.	\mathcal{V} rectificirter W.	\mathcal{V} mon höchst rectific. W.
\mathcal{B} B. V. Dampfbad.	\mathcal{H} Pfund.	\mathcal{V} Sand.	4. Metallische Körper und deren Produkte.
II. Operationen.	\mathcal{U} Ullage.	\mathcal{V} lebendiger Kalch.	\mathcal{M} Metalle.
\mathcal{M} Abdampfen.	\mathcal{D} Drogme. Drogen.	2. Salze und deren Produkte.	\mathcal{H} Halbmetalle.
\mathcal{D} Digeniren.	\mathcal{S} Scrupel.	\mathcal{S} Salz.	\mathcal{O} Gold.
\mathcal{R} Kochen.	\mathcal{G} Gran.	\mathcal{S} Säure. Esig.	\mathcal{S} Silber.
\mathcal{S} Schmelzen.	\mathcal{H} Halb.	\mathcal{S} Vitriol.	\mathcal{D} P. Platina.
\mathcal{A} Aufkochen.	\mathcal{R} Recept.	\mathcal{O} Alaun.	\mathcal{Z} Zinn.
\mathcal{N} Niederschlagen. Niederschlag.	\mathcal{M} was man zwischen 4 Finger faßt.	\mathcal{S} Laugenfalz.	\mathcal{H} Blei.
\mathcal{V} Verfallschen. Kalch.	\mathcal{P} was man zwischen 3 Finger faßt.	\mathcal{S} Potasche.	\mathcal{S} Kupfer.
\mathcal{E} Einkochen. Kise.	\mathcal{A} p. aqu. gleiche Theile.	\mathcal{S} Mirtelsalz.	\mathcal{S} Eisen.
\mathcal{S} S. S. S. Schichtweise über einander.	\mathcal{Q} v. so viel gefällig.	\mathcal{S} Salpeter.	\mathcal{S} Quecksilber.
\mathcal{D} Destilliren.	\mathcal{Q} l. so viel erforderlich.	\mathcal{S} Kochsalz.	\mathcal{V} V. Blausäure.
\mathcal{S} Sublimiren. Sublimat.	\mathcal{R} Rinn.	\mathcal{S} Salzmia.	\mathcal{S} Z. Zinn.
III. Producte überhaupt.	V. Zeilen.	\mathcal{S} Horn.	\mathcal{S} Spiegglas.
\mathcal{A} Adfalg.	\mathcal{Z} Stunde.	\mathcal{S} Weinslein.	\mathcal{O} Kristall.
\mathcal{V} fir.	\mathcal{S} Tag.	\mathcal{S} Zucker.	\mathcal{A} K. Kobalt.
\mathcal{N} Gift.	\mathcal{S} Nacht.	\mathcal{S} Seife.	\mathcal{S} N. Nickel.
\mathcal{O} Todtenlopf.	\mathcal{S} Mond.	\mathcal{S} Spangrün.	\mathcal{S} Mefing.
\mathcal{X} Glas.	VI. Urfänge und Urfstoffe.	\mathcal{S} verflüchteter Essig.	\mathcal{S} Staph.
\mathcal{S} Pulver.	\mathcal{A} Feuer.	\mathcal{S} gereinigtes Spangrün.	\mathcal{Z} Quecksilber. Sublimat.
\mathcal{P} Präparat.	\mathcal{A} Luft.	\mathcal{S} brennbares Wesen.	\mathcal{V} Quecksilber. Präcipitat.
\mathcal{A} Amalgama.	\mathcal{A} Wasser.	\mathcal{S} Del. Besenliches Del.	
	\mathcal{V} Erde.	\mathcal{S} brennbares Del.	

$\circ\circ$ ALCHEMICAL SYMBOL FOR OIL INVERTED. From: Weigel 1777 (source: [Google Books](#))

m. h. H. ob nicht die destillation sine affuso liquore per descensum geschehe in diesem n° 3 wirdt keiner destillation sine affuso liquore gedacht, sondern die rectificatio ♀ geschicht in dem ☿ purificatiss. in ein weiswullen zeug gebunden wirdt, alß ein knopff, daran man ein faden last, thut den ♀ in ein Zuckerglaß hanget dan daß ☿^{ri} hinein, so solvirt die phlegma 5 daß ☿^{ri}, vnd fällt gleichsam tropffenweiß wie ein regen auf den boden v. wirdt also der ♀ von der phlegma geschieden, vnd man alßdan per Separatorium scheidet. N° 7 vnd 8 destilliret man sine affuso liquore aber nicht per descensum, sondern wie gebräuchlich vnd bestehet die kunst nur an den Zinnern, kupffern, vnd gläsern gefäßen, ist sehr curios nutzlich vnd leicht. N° 9 Menstruum Willisii ist nicht spiritus Zwelfferi ☿^{is} welcher von 10 dem soluto nicht totaliter kan geschieden werden, sondern es ist sal ☿^{ri} purificatiss. wie Willis in tractatu de fermentatione dessen operation klärlich mit dem ☿^{re} entdecket, aber daß ☿^{ri} verschweiget. N° 10 Lilium Paracelsi verum wirdt allein aus ☿, oder auch mit Zusetzung anderer metalln alß ☉ so ist es universal, oder mit ♀, ♂, ♁, etc. so ist eß particular vnd gewissen membris vnd kranckheit appropriet, gemacht, habe eß auch gemacht aber 15 doch ohne den Alkaest, das aber Coagulum Victrioli hier lilium Paracelsi genandt, geschicht propter albedinem et similitudinem, solche coagulation wirdt auch ohne Zuthuung einiges salzes gemacht, sondern mit einer trucknen Erden so aus Italien kompt vnd

☿ ALCHEMICAL SYMBOL FOR TARTAR-SALT

LAA III-2 p. 512 – Volume 2 of LAA series III is currently not available in digitized form.



☿ ALCHEMICAL SYMBOL FOR TARTAR-SALT

The corresponding part of the original MS (a letter from J. H. Kornmann for Leibniz, 1678).

Source: LBr 496 fol. 3v

ohne diese Massa aber auf gemeine art weich vnd zu Kalck, dieses habe offters eigenhandig gemacht. N° 12. ☿ per se zu praecipitiren ist gantz leicht, wan man nur erst daß glaß hat
 15 woran daß gantze secret hænet. N° 24 bey der separation ☉ v. ☽ ex ☽ ist kein verlust
 sondern gewin, weil aber der ☽ ohne Arsenic vnd andere schädliche sachen nicht wohl zu
 zwingen oder sich capelliren läst ist es nicht für Curiose leute so ihr zeit vnd gesundheit
 besser anzuwenden wissen, doch wan man erst ☽ in cineres bringt vnd selbige wieder in
 ein Corpus redigieret, ist solche operation nicht so schädlich, aber doch bey beyden modis
 20 grose rüche vnd zeitversäumnüß also mehr für grobe arbeitsamme leut so es wie ein handt

☽ ALCHEMICAL SYMBOL FOR MOON-JUPITER denotes *silver-bearing tin* in this text.
 LAA III-2 p. 514

... ohne diese Massa aber auf gemeine art weich vnd zu Kalck, dieses habe offters eigenhandig gemacht. N° 12. ☿ per se zu praecipitiren ist gantz leicht, wan man nur erst daß glaß hat woran daß gantze secret hænet. N° 24 bey der separation ☉ v. ☽ ex ☽ ist kein verlust sondern gewin, weil aber der ☽ ohne Arsenic vnd andere schädliche sachen nicht wohl zu zwingen oder sich capelliren läst ist es nicht für Curiose leute so ihr zeit vnd gesundheit besser anzuwenden wissen, doch wan man erst ☽ in cineres bringt vnd selbige wieder in ein Corpus redigieret, ist solche operation nicht so schädlich, aber doch bey beyden modis grose rüche vnd zeitversäumnüß also mehr für grobe arbeitsamme leut so es wie ein handt

☽ ALCHEMICAL SYMBOL FOR MOON-JUPITER
 The corresponding part of the above sample, from the original MS (a letter from J. H. Kornmann for Leibniz, 1678). Source: [LBr 496 fol. 5r](#)

... und dinst penetriret das für inwendig und außwendig ☽ ist
 ist und das ist form bestet, als für inwendig inwendig
 ist Tutta Operata und von ☽ und andas mehr. N° 32.
 das sal metall. so ☽ dealbat, ☽ ☽. N° 34. das ☽ ex
 Plantis für mayen und an dinst mehr ist das laist und groß ist
 nimm Destillation, altes ex suo herbarum, wende es an
 Cereus Communis den weil in nimm dinst an
 die dinst in den dinst an dinst, an dinst

Another example from the same text. Source: [LBr 496 fol. 3v](#)

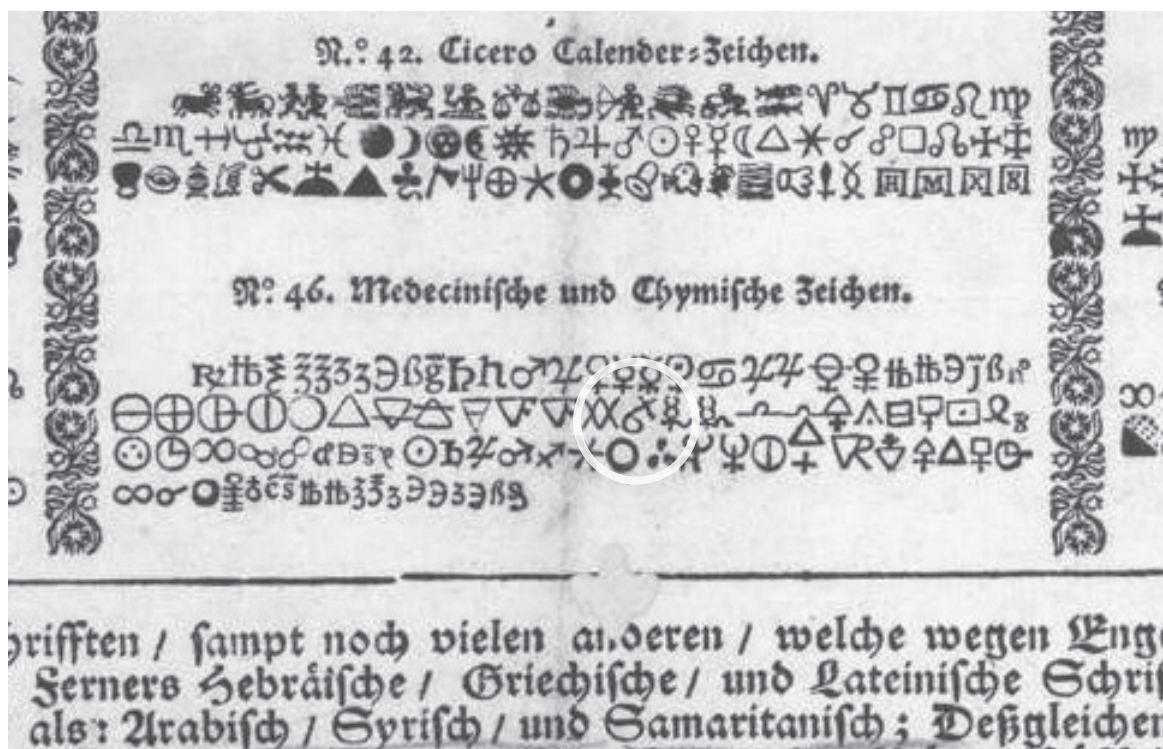
rectificationem curvae logarithmicae ex supposita ipsius
constructione.

glaube ich, und von Singalys da nicht magt, selbst
 heute; wie ich das selbst auf allerley Wege bei der
 Missionen H. Augustinus in der Dreyzehnten Bischofs
 hat; der Herr ist das man nicht weiß von diesem
 auf seine Art man, weiß er nicht, ob sie zu

σ^\dagger *ALCHEMICAL SYMBOL FOR RETORT (variation sequence)*

LB 79 fol. 90v (top, middle), 100r (below). *This MS has not yet been edited in print.*

Die $\frac{1}{2}$ des $\frac{1}{2}$ der Irrationales in unendlichen Ketten gegeben mag,
 sein als $\frac{1}{2}$ & etc. resp. concedendo, aber auch nur nicht
 genau zu einem bestimmten $\frac{1}{2}$ -proportionen $\frac{1}{2}$ sind, wenn wir
 dann $\frac{1}{2}$ der $\frac{1}{2}$ v. g. zu machen, da man in einem bei-
 weitem $\frac{1}{2}$ das $\frac{1}{2}$ in jedem Δ fließend läßt, & oben per



♁ ALCHEMICAL SYMBOL FOR RETORT (variation sequence)

From a type specimen print by Johannes Pistorius, Basel 1721.

Source: [Goethe-University Frankfurt](#)



♁ ALCHEMICAL SYMBOL FOR RETORT (variation sequence)

From a printer's specimen, by Philipp Glaser, Frankfurt/O., 1741.

Source: [Universitätsbibliothek Frankfurt/M.](#)

6. Unicode Character Properties

```
xe01;ALCHEMICAL INVERTED SYMBOL FOR OIL;So;0;ON;;;;N;;;;;
xe02;ALCHEMICAL SYMBOL FOR MOON-JUPITER;So;0;ON;;;;N;;;;;
xe03;ALCHEMICAL SYMBOL FOR TARTAR-SALT;So;0;ON;;;;N;;;;;
1F76D FE00; variant with crossbar; # ALCHEMICAL SYMBOL FOR RETORT
```

“x” stands for *unspecified codespace*. “e” refers to our internal characters classification, see N5277.

7. Bibliography

LAA – refers to: Leibniz, Gottfried Wilhelm: Sämtliche Schriften und Briefe. (‘Leibniz-Akademie-Ausgabe’, many volumes)

LBr – refers to: Leibniz’s original correspondence papers, GWLB Hanover

LH – refers to: Leibniz’s original manuscripts, GWLB Hanover

[Ernesti, J. H. G.], Die wol-eingerichtete Buchdruckerey. Nürnberg, J. A. Endter Erben 1733 (Reprint: Radebeul 1940)

Geßmann, G. W.: Die Geheimsymbole der Alchymie, Arzneikunde und Astrologie des Mittelalters. Ulm 1964

Pistorius, Johannes: [Schriftprobe], Basel 1721 (Goethe-Universität Frankfurt/Main)

Schneider, Wolfgang: Lexikon alchemistisch-pharmazeutischer Symbole. Weinheim/Bergstr. 1962

Weigel, Christian Ehrenfried: Grundriss der reinen und angewandten Chemie zum Gebrauch academischer Vorlesungen entworfen. Greifswald 1777

**ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646¹**

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

Please read Principles and Procedures Document (P & P) from <http://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 <http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

See also <http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest *Roadmaps*.

A. Administrative

1. Title:	Proposal to add historic scientific characters to the UCS		
2. Requester's name:	Uwe Mayer, Siegmund Probst, David Rabouin, Elisabeth Rinner, Andreas Stötzner, Achim Trunk, Charlotte Wahl		
3. Requester type (Member body/Liaison/Individual contribution):	Individual (work group)		
4. Submission date:	2025-11-25		
5. Requester's reference (if applicable):	LUCPL-2532		
6. Choose one of the following:			
This is a complete proposal:			Yes
(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):			No
Proposed name of script:			
b. The proposal is for addition of character(s) to an existing block:			Yes
Name of the existing block:	not yet specified [Alchemical Symbols Extension]		
2. Number of characters in proposal:			4
3. Proposed category (select one from below - see section 2.2 of P&P document):			
A-Contemporary	B.1-Specialized (small collection)	Yes	B.2-Specialized (large collection)
C-Major extinct	D-Attested extinct		E-Minor extinct
F-Archaic Hieroglyphic or Ideographic			G-Obscure or questionable usage symbols
4. Is a repertoire including character names provided?			Yes
a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?			Yes
b. Are the character shapes attached in a legible form suitable for review?			Yes
5. Fonts related:			
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?	Andreas Stötzner		
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):	Andreas Stötzner Gestaltung, Klaufügelweg 21, 88400 Biberach/R., Germany, as@signographie.de		
6. References:			
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?			Yes
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?			Yes
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)?			No

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 <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database (<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.

¹ 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?	Yes
If YES explain <i>N5332 (L-2517); L-2432 (L2/25-131)</i>	
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.)?	Yes
If YES, with whom?	
Leibniz-Archiv, Forschungsstelle der Leibniz-Edition, Niedersächsische Landesbibliothek (GWLb), Hanover, Göttingen Academy of Science and Humanities in Lower Saxony (DE), Philiumm research group of CNRS (UMR 7219, laboratoire SPHERE) / Université de Paris VII; general: scholars, researchers, authors and editors working in the field of science history and upon editions of historic text corpora (e.g. of G. W. Leibniz, but also many others)	
If YES, available relevant documents: L-2409, L-2410	
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	Yes
Reference:	
4. The context of use for the proposed characters (type of use; common or rare)	Common
Reference: mainly specialist usage, scholarly, worldwide	
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference: mainly Europe, Americas; other countries	
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?	No
If YES, is a rationale provided?	
If YES, reference:	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	No
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?	Yes
If YES, is a rationale for its inclusion provided?	
If YES, reference: 1 var. sequence; see explanations on p. 2, 8-9	
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?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	No
If YES, is a rationale for such use provided?	
If YES, reference:	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	
If YES, reference:	
12. Does the proposal contain characters with any special properties such as control function or similar semantics?	No
If YES, describe in detail (include attachment if necessary)	
13. Does the proposal contain any Ideographic compatibility characters?	No
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	