

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

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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:



ALCHEMY SYMBOL FOR OIL INVERTED



ALCHEMY SYMBOL FOR MOON-JUPITER



ALCHEMY 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 wide-spread use of the simple X-shaped *hora* symbol (in previous version proposed as **ALCHEMY SYMBOL FOR HORA-2**) are demonstrated.

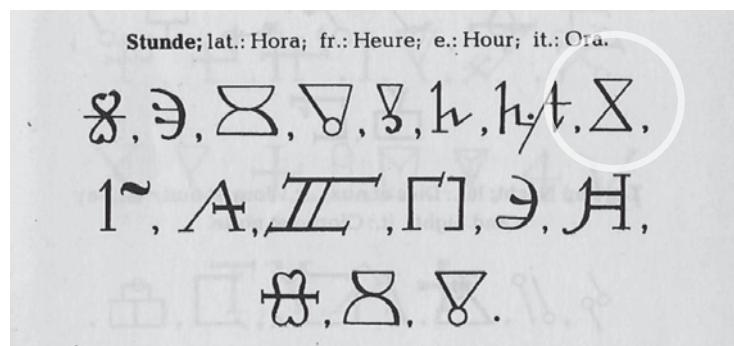
C H E M I S T R Y.		Plate CXXXII.
Chemical Characters or Symbols.		
△ Fir.	△ Regulus of Antimony.	△ A Powder.
△ Fir.	△ Potash.	△ Ashes.
▽ Water.	△ Sulphur.	△ Bath.
▽ Earth.	△ Viniger.	BM, MB, Water bath.
△ Flexible Air.	△, □ Cobalt.	AB Sand bath.
m. △ Mephitis Air.	N. Nickel.	VB Vapor bath.
▽ Clay.	SM. Metallic Substances.	△. Ac. Hor.
▽ Gypsum.	C. Coltr.	△. A Day.
▽, □ Calcareous Earth.	Op. Oprement.	△. A Night.
▽, □ Quicklime.	△ Cannabin.	△. A Month.
▽, □ Vitreous, or Siliceous Earths.	Li. Lapis Calaminaria.	△△△△ Anadigrm.
▽, □ Fluorescent Earths.	△ Talc.	△. Spirit Distill.
▽, □ Fissile Earths.	△ Vermul.	△△△△ Sublime.
△. □ Lalk.	△, □ Sea Salt.	△△△△ Precipitate.
M. □ Magnetite.	△, □ Sal Gem.	△△△△ A Retort.
AV. □ Earth of Alum.	△, □ Nitr.	XX. An Almleic.
△. Sand.	S.S. Sedative Salt.	△△△△ A Crucible.
○. Gold.	* Sal Ammoniac.	SSS. Stratum Super Stratum.
△, □ Silver.	△, □ Alum.	CC. Corvus Corvi Hornbills.
○. Copper.	△ Tartar.	△△△△ A Bottle.
△. Tin.	△, □ Alkali.	△△△△ A Grin.
△. Lead.	△, □ Fixed Alkali.	△△△△ A Scruple.
○. Mercury.	△, □ Variable Alkali.	△△△△ A Dram.
○. Iron.	m. □ Mild fixed Alkali.	△△△△ An Ounce.
○. Zinc.	c. □ Caustic Soda.	△△△△ A Pound.
B. □ Bismuth.	Alkali.	dwts. A Pennyweight.
○. Antimony.	m. □ Mild vol. Alkali.	dwts. A Shap.

ols.	
vol Alkali.	♀ A Powder.
lcids.	Ἑ Ashes.
r.	Β A Bath.
nicolic Acid.	B.M, MB; Waterbath.
rous Acid.	AB Sand bath.
rine Acid.	VB Vapor bath.
rifortis.	Σ An Hour.
u Regia.	Ω A Day.
ureous Acid.	Ϙ A Night.
	☒ A Month.

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>)

Acembicus	XXII 4 3	Elegma	¶	Sulphur Philosophorum	¶
Alumnen	○ □ 1	Flucre	△	Sulphur nigrum	●
Amaluma	aaa E #	Gumima	¶ b p	Tartar	⊕ 8 2 8 A
Aunus	○	Hora	XX 3 V	Calx tartans	⊕
Astirianum	○ △	Jems	△	Sal tartars	⊕
Aqua	△ w w	Jynsrofe	△ ⊖	Talcum	×
Aqua Fortis	V	Lapis etiammaru	V	Terra	△
Aqua Regis	VR			Tigillium	T
Aqua Vita	△ V			Tuna	⊖
Arena	... o o o				
Arsenicum	o o g g o C				
	o o g g o C				

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)

Vornehmste chemische Zeichen			
♀ Erde	△ Feuer	III. Metalle	○ Natur
♀ Stein	♀ Brennbarer Waren	III. Hafnerstalle	○ Vorlage
♀ Sand	♀ Schwefel	○ Gold (Sonne)	○ Kolbe (Hahn)
♀ Kalz. p. reinergrauw. (Kalk)	♀ Leuchtstein (Phosphor)	○ Plakira	X. Tiegel (Hahn)
♀ Kalz. p. untrütb. kalk. glanz. (Kalk)	♀ Luftkunder (Pyrophor)	○ Silber (Monez)	... re. Abdampfverminderung
♀ Schwererde	♀ Kalk	♀ Quecksilber (Mercur)	... re. Dampfverminderung
♀ Magnesia (Bittererde)	♀ Kalk	○ Blei (Saturn)	... re. Kerzen Seiden
♀ Sumpf Thon	♀ Kalk	♀ Kupfer (Venus)	○ re. Destilliren
♀ & X. Kieselerde	♀ Kalk	○ Eisen (Mars)	○ re. Lösungen
XXX. Kristall	♀ brennbares Oel	○ Zinn (Jupiter)	♀ re. Verkohlen
XXX. Glas	♀ brennbares Oel	♀ Wermuth	... re. Sublimiren & Sublimat.
♀ Glagalle	○ Zinn	○ Nickel	♀ re. Pulvern & Pulvergitter
... Erde	♀ Weinigentl. & geschichtl. redigist. & Aogenik	○ Bauxstein	... re. Aufkochen & die Auflösung
... m. Metallkalk	○ Phosphorit & Lungenkalk	○ Kobalt	... re. füllen & Maderessi lagern
... m. Metallkalk	○ Lungen & leigtes Schwefelkalk	○ Zink	○ re. Schmelzen & Schmelzung
... m. Bittererde	○ Kalkkohle	○ Spiegelz.	○ Zurückbleibsel. Tadeln usw.
... Magnesia	○ Seife	○ Bauxstein	aaa Amalgama
... Metall	○ Zucker	○ Mering	○ Monat
... Asche	○ Harz	○ Stahl	○ Tag & Nacht & Pfecht. & Tag
... Horn	♀ Gummi		§ Stunde & Woche
... Wachs			○ med Pfund = 3.12 = 3.96 = 3.26
... Luft, n. freie			3.12 = 3.96 = 3.26 = 480.
			1. 26. Handelsgew: Pfund = 321
			1. Loth: 4 Quant. 276 1/2 qfl = 214,751
			1. Gran 1,2875 qfl; 1 qfl 0,7767 G

Table from Karl Gottfried Hagen, Grundriß der Experimentalchemie (1786); after Schneider 1964.

○ re. Schmelzen ○ io, Schmelzung
 ○ Zurückbleibsel. Todten
 aaa Amalgama
 ☐ Monat
 ○ Tag ○ Nacht ○ Nach, Nacht
 § Stunde Σ Woche
 68. med Pfund = 3.12 = 3.96 = 3.26
 3.12 = 3.96 = 3.26 = 480.
 1. 26. Handelsgew: Pfund = 321
 1. Loth: 4 Quant. 276 1/2 qfl = 214,751
 1. Gran 1,2875 qfl; 1 qfl 0,7767 G

Gutta, guttae.	G. g. g. - - - Ein Tropfen; Tropfen.
Herba.	H, H. - - - Ein Kraut.
Hermetice sigillata-	H. S. - - - Hermetisch sigillirt, zugeschmolz.
Hora.	X, I, A, II, Eine Stunde.
	Γ, Ζ, Η, Ζ, Ζ
Hiems.	Π, Α - - - Der Winter.
Hydrargyrum, siehe	

From: Medicinisch-Chymisches und Alchemistisches Oraculum (Ulm 1755); after Schneider 1964.

B. Balneum, Bäd.	II. Eminentia, Ebenz.
NB. Balneum Mariae, f. Maris.	Ξ Faeces vini, Weinhefen.
VB. Balneum vaporis, f. Roris.	○ Farina, Meel.
↙ Borax, Borras.	Farinalaterum, Ziegel-Meel.
⤒ Caementiren.	♂ Ferrum, Eisen.
⌚ Calciniren.	33 Filtrare, durchseigen.
C. Calx, Kalk.	⤒ Fluere, fliessen.
♀ Calx viva, ungelöschter Kalk.	✚ Fuligo, Ruß.
⤒ yr. Camphora, Campher.	♀ Fumus, Rauch.
⌚ Cancer, Krebs, Sign. coel.	Π Gemini, Zwilling, Sign. coel.
⌚ Caput mortuum, Todtenkopff.	gr. Gran. ☀ Gummi,
⌚ Caper, Steinbock, Sign. coel.	G. g. Gutta, ein Tropfstein.
⌚ Cera, Wachs.	✗ Hora, Stund.
⌚ Cerussa, Bleiweiss.	△ Ignis, Feuer.
♂ Chalybs, Stahl.	✚ R. Ignis reverbereus, reverberir Feuer

The simple hora symbol in sole position, from Ernesti 1733.

5. Figures and explanations

Con l'occasione del rammollire del ferro, communicherò à V. S. Ill. una cosa assai curiosa comunicata al Sr Bodenhausen d'un Signore Curioso che si è dimandato Francesco Miniti. Intorno all'Ammollir il [:vetro:] *R* latte di Capra, aceto forte, $\frac{1}{2}$ di uliva, Aloë Epatico, $\frac{1}{2}$ lairino, 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.

Ѡ 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.

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Con l'occasione del rammollire del ferro, comunicherò à V. S. M. una cosa assai curiosa comunicata al S^o. Bodenhausen d'un Signor Curioso che si è dimandato Francesco Nimitz, intorno all'Ammolire il V. K^o Ry. latte d'^{la} capra; acuto forte, olio di uliva, Aloë Epatica, curino, orina di ragazzi: una fia bollire in un vaso invecchiato nuovo il V. K^o, lasciato nell'infusione caldo in detto mestruo per 8 notte e la mattina opera. Si è fatta la prova in Parma d'uno chiamato Ottici con

○○ 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

Chemische Zeichen.		Tab. I.	
I. Gefäße.			
○ Röhrchen.	○ König.		
○ Vorlage.	○ Mähtur.		
○ Kolben.	○ Ductur.		
○ Schmelziegel.	○ Villenmäst.		
○ Helm.	○ Essenz.		
○ B. M. Wasserbad.	○ E. Quintessenz.		
○ B. V. Dampfbad.			
II. Operationen.		VII. Natürliche Körper und deren Produkte.	
○ Abampfen.	○ Find.		
○ Digestir.	○ Ure.		
○ Kochen.	○ Dracke. Quentzen.		
○ Schmelzen.	○ Scupel.		
○ Aufkochen.	○ Gran.		
○ Niederschlagen. Niederschlag.	○ h. hals.		
○ Verfalschen. Kalch.	○ Tropfen.		
○ Endstern. Käste.	M. was man zwischen 4 Finger fasst.		
○ S. S. S. Schichten über einander.	P. was man zwischen 3 Finger fasst.		
○ Destilliren.	aa. p. t. g. gleiche Theile.		
○ Sublimiren. Sublimat.	q. v. so viel gesättig.		
III. Produkte überhaupt.			
△ abholz.	V. Stelen.		
▽ für.	○ Stunde.		
○ Glast.	○ Tag.		
○ Zedernholz.	○ Nacht.		
○ Glas.	○ Woche.		
○ Pulver.	○ Monat.		
○ Präparat.			
○ Amalgama.			
VI. Uranfälle und Urstoffe.		VIII. brennbares Wesen.	
△ Feuer.	△ Feuer.		
△ Luft.	△ Luft.		
△ Wasser.	△ Erde.		
V. Uranfälle und Urstoffe.		IX. Metallische Körper und deren Produkte.	
△ Feuer.	△ Feuer.		
△ Luft.	△ Luft.		
△ Wasser.	△ Erde.		
VI. Uranfälle und Urstoffe.		X. Metalle.	
△ Feuer.	△ Feuer.		
△ Luft.	△ Luft.		
△ Wasser.	△ Erde.		
VII. Natürliche Körper und deren Produkte.		XI. Metalle.	
1. Erden und Steine.			
△ Stein.	○ Sand.		
○ Stein.	○ lebendiger Kalz.		
		12. Salze und deren Produkte.	
2. Salze und deren Produkte.			
○ Salz.	○ Salz.		
○ Säure.	○ Säure. Essig.		
○ Vitrol.	○ Vitrol.		
○ Alum.	○ Alum.		
○ Langenfalg.	○ Langenfalg.		
○ Potassche.	○ Potassche.		
○ Mittelsalz.	○ Mittelsalz.		
○ Salpeter.	○ Salpeter.		
○ Kehlsalz.	○ Kehlsalz.		
○ Salnit.	○ Salnit.		
○ Horn.	○ Horn.		
○ Weinsteine.	○ Weinsteine.		
○ Zucker.	○ Zucker.		
○ Seife.	○ Seife.		
○ Spangrän.	○ Spangrän.		
○ verwitterte Ullig.	○ verwitterte Ullig.		
○ grünliches Spangrän.	○ grünliches Spangrän.		
○ Porz.	○ Porz.		
3. brennbares Körper und deren Produkte.		XII. Quecksilber. Sublimat.	
○ Öl.	○ Öl. Bestechliches Öl.		
		XIII. Quecksilber. Präcipitat.	

○○ 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 \mathbb{V} geschicht in \mathbb{V} purificatiss. in ein weiswullen zeug gebunden wirdt, alß ein knopff, daran man ein faden last, thut den \mathbb{V} in ein Zuckerglaß hanget dan daß \mathbb{V} in eine linein, so solviret die phlegma 5 daß \mathbb{V} , vnd fält gleichsam tropffenweiß wie ein regen auf den boden v. wirdt also der \mathbb{V} 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 gebrauchlich 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 \mathbb{V} welcher von 10 dem soluto nicht totaliter kan geschieden werden, sondern es ist sal \mathbb{V} purificatiss. wie Willis in tractatu de fermentatione dessen operation klarlich mit dem \mathbb{V} entdecket, aber daß \mathbb{V} verschweiget. N° 10 Lilium Paracelsi verum wirdt allein aus \mathbb{V} , oder auch mit Zusetzung anderer metallen alß \mathbb{V} so ist es universal, oder mit \mathbb{V} , \mathbb{V} , \mathbb{V} , etc. so ist eß particular vnd gewissen membris vnd kranckheit appropriret, 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 praeципitiren ist gantz leicht, wan man nur erst daß glaß hat
15 woran daß gantze secret hānget. 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 lässt, 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 schadlich, aber doch 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

24 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

And being penetrat. Ias sic invadit. sed aufwendig. Et prob. ist. And. Dose ist. Form. Cophel, alas. Prostrophe in medias. ist. Trotta. Proprata. And. von. ~~7~~ ⁷ invadit. mose. No. 32. Ias. Pal. metall. so. O. dealbat, ~~exp. 24~~. No. 34. eas. O. ex. Plantis. In. major. And. an. End. mose. I. Loro. lait. And. gressit. op. in. mijo. distillation; alios. ex. piso. herbariori; vnde. a. a. p. d. Cen. seu. Communi. i. e. re. vni. hi. mijo. Domo. on. right. But. mijo. ap. d. c. i. n. And. dom. ex. g. h. y. al. m. s. i. f. and. dom. h. m.

Another example from the same text. Source: LBr 496 fol. 3v

rectificatione curva Logarithmica ex supposita ieiunis constructione.

σ ALCHEMICAL SYMBOL FOR RETORT (variation sequence)

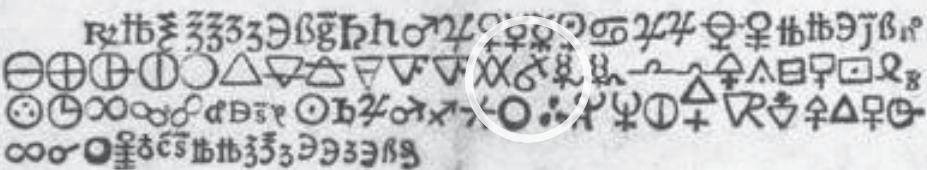
LBr 79 fol. 90v (top, middle), 100r (below). *This MS has not yet been edited in print.*

103
vix potest, qd' iuratores in iuris iugis sive qd' iuris iugis
dnu. vle. o. & c. legi. concedendo, utrue vnde iuris iugis
yanq' qd' minorem iuris iugis, d. propria iuris iugis sive iuris
dnu. o. & c. ducem v. g. qd' iuris iugis, de iure in iuris iugis
yanq' & iuris iugis d. in iuris iugis sive iuris iugis, & vnu per

N.º 42. Cicero Calender-Zeichen.



№ 46. Medecinische und Chymische Zeichen.



griffsten / sampt noch vielen anderen / welche wegen Einge
Sterners Hebräische / Griechische / und Lateinische Schrif
als: Arabisch / Syrisch / und Samaritanisch ; Desgleichen

σ^+ ALCHEMICAL SYMBOL FOR RETORT (variation sequence)

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

Source: Goethe-University Frankfurt

auff nachdem ihr gesessen seyd, die ihr das mühselige Brod esset.

Cicero Schwabacher & Co

Wann Er seinen Geliebten den Schlaff geben wird : siehe, da ist das Erb dess HErren, die Kinder und die Leibs- Frucht ist seine Belohnung . Wie die Pfeil in der Hand des Gewaltigen : also seynd die Kinder der Auftestossenen. Seelig ist der Mensch, der seine Begierd mit-

Große Garmonde Fractur a Cl.

Seze all dein Zuversicht auf den HErrn. Er sey dein Forcht und dein Lieb. Er wird für dichantworten, und alles nach dem allerbesten ausrichten. Du hast hier kein bleibende Statt, du bist ein Trembder und Pilgram, sey wo du wollest, du wirst nimmer Ruhe finden, du sevest dann mit Christo innerlich vereinget. Was siehest du hie um dich? Ist doch dieses nicht die Statt deiner Ruhe, In den Himmlichen Dingen soltest du dich aufthalten und Wohnung haben, und alle irdische und zeitliche Ding, gleich als im vorüber gehen

Cicero Calenderzeiden

Mittel Calenitzschen

an der Oder, allen und jeden Verlegern und Buchdruckern mit was ihre Werke gejüret zur Nachricht abgedruckt

ବିଜ୍ଞାନାତ୍ମକ ପରିବାରର ପରିବାରର ପରିବାରର ପରିବାରର

Æ ALCHEMICAL SYMBOL FOR RETORT (variation sequence)

3 ALCHEMICAL SYMBOL FOR RETORT (variation sequence)
From a printer's specimen, by Philipp Glaser, Frankfurt/O. 1741

From a printer's specimen, by Philipp Glaser
Source: Universitätsbibliothek Frankfurt/M

6. Unicode Character Properties

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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 aca- demischer 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):	LUCP L-2532	
6. Choose one of the following:	This is a complete proposal: <input checked="" type="checkbox"/> Yes (or) More information will be provided later: <input type="checkbox"/> Yes	

B. Technical – General

1. Choose one of the following:	a. This proposal is for a new script (set of characters): <input type="checkbox"/> No Proposed name of script: <input type="text"/>	
	b. The proposal is for addition of character(s) to an existing block: <input checked="" type="checkbox"/> Yes Name of the existing block: <input type="text"/> 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 <input type="checkbox"/> B.1-Specialized (small collection) <input checked="" type="checkbox"/> Yes 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? <input checked="" type="checkbox"/> Yes b. Are the character shapes attached in a legible form suitable for review? <input checked="" type="checkbox"/> Yes	
5. Fonts related:	a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard? <input type="text"/> Andreas Stötzner b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.): <input type="text"/> 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? <input checked="" type="checkbox"/> Yes b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? <input checked="" type="checkbox"/> 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)? <input type="checkbox"/> 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)	
3. If YES, available relevant documents:	L-2409, L-2410
4. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	Yes
Reference:	
5. The context of use for the proposed characters (type of use; common or rare)	Common
Reference: mainly specialist usage, scholarly, worldwide	
6. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference: mainly Europe, Americas; other countries	
7. 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:	
8. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	No
9. 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:	
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:	