


Boc-amino Acids

Boc-Aib-ol	
<p><i>N-t-Boc-2-amino-2-methyl-1-propanol</i> $C_9H_{19}NO_3$, M=189.25 CAS[102520-97-8] HS-code: 292419 00 90 Storage: 15-25 °C</p> <p>22810-2-14-25 for synthesis 100 g 22810-2-14-33 for synthesis 500 g 22810-2-14-43 for synthesis kg 22810-4-14-43 for synthesis kg</p>	<p>Specification Appearance white to off-white powder Identity (IR) passes test Assay (GC) min. 98.0% Melting range 57.0-62.0 °C Residue on ignition (SO₄) max. 0.2% Water (KF) max. 0.5% Potential residual solvents to be reported</p>
Boc-Ala-OSu	
<p><i>N-α-t-Boc-L-alanine N-hydroxysuccinimid ester</i> $C_{12}H_{18}N_2O_6$, M=286.28 CAS[3392-05-0] HS-code: 292429 98 99 Storage: below 10 °C</p> <p>22850-2-14-25 for synthesis 100 g 22850-2-14-33 for synthesis 500 g 22850-2-14-43 for synthesis kg</p>	<p>Specification Appearance white to off-white powder Identity (IR) passes test Assay (N) 97.0-103.0% Melting range 159.0-163.0 °C $[\alpha]_D^{25}$ (c=2, dioxane) -50.0° ~ -54.0° Residue on ignition (SO₄) max. 0.2% Water (KF) max. 1.0% Chromatographic purity (HPLC) min. 97.0% Boc-Ala-OH (HPLC) max. 2.0% D-enantiomer max. 0.5% Potential residual solvents to be reported</p>
Boc-Arg(NO ₂)-OH	
<p><i>N-α-t-Boc-N-ω-nitro-L-arginine</i> $C_{11}H_{21}N_5O_6$, M=319.31 CAS[2188-18-3], EINECS:[218-580-0] HS-code: 292419 00 90  R: 36/37/38, S: 2-26-36 Storage: below 10 °C</p> <p>23300-2-14-25 for synthesis 100 g 23300-2-14-33 for synthesis 500 g 23300-2-14-43 for synthesis kg</p>	<p>Specification Appearance white to yellowish powder Identity (IR) passes test Assay (T, EtOAc-free) 98.0-102.0% $[\alpha]_D^{25}$ (c=1; pyridine, EtOAc-free) -22.0° ~ -26.0° Residue on ignition (SO₄) max. 0.2% Water (KF) max. 1.0% Chromatographic purity (TLC) (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 99% Chromatographic purity (HPLC) min. 98.0% D-enantiomer max. 0.5% Ethyl acetate (GC) max. 15.0%</p>
Boc-Asn-ONp	
<p><i>N-α-t-Boc-L-asparagine 4-nitrophenyl ester</i> $C_{15}H_{19}N_3O_7$, M=353.33 CAS[4587-33-1] HS-code: 292249 85 90 Storage: below 10 °C</p> <p>22870-2-14-25 for synthesis 100 g 22870-2-14-33 for synthesis 500 g 22870-2-14-43 for synthesis kg</p>	<p>Specification Appearance white to off-white powder Identity (IR) passes test Assay (N) 97.0-103.0% Melting range 148.0-154.0 °C $[\alpha]_D^{25}$ (c=1; DMF) -34.0° ~ -38.0° Residue on ignition (SO₄) max. 0.2% Water (KF) max. 1.0% Chromatographic purity (HPLC) min. 98.0% Boc-Asn-OH (HPLC) max. 0.1 area% D-enantiomer max. 0.3% Other amino acids max. 0.2% (n/n) Potential residual solvents to be reported</p>
Boc-Asp(OBzl)-OSu	
<p><i>N-α-t-Boc-L-aspartic acid-β-benzyl ester α-N-hydroxysuccinimid ester</i> $C_{20}H_{24}N_2O_8$, M=420.42 CAS[13798-75-9] HS-code: 292429 98 99 Storage: below 0 °C</p> <p>42020-2-14-25 for synthesis 100 g 42020-2-14-33 for synthesis 500 g 42020-2-14-43 for synthesis kg</p>	<p>Specification Appearance white to off-white Identity (IR) passes test Assay (N) 97.0-103.0% $[\alpha]_D^{25}$ (c=1; DMF) -28.0° ~ 32.0° Residue on ignition (SO₄) max. 0.2% Water (KF) max. 1.0% Chromatographic purity (HPLC) min. 97.0% Boc-Asp(OBzl)-OH (HPLC) max. 2.0% D-enantiomer max. 0.3% Potential residual solvents to be reported</p>
Boc-Hyp-OH	
<p><i>N-α-t-Boc-L-trans-4-hydroxyproline</i> $C_{10}H_{17}NO_5$, M=231.25 CAS[13726-69-7] HS-code: 292249 85 90 Storage: 15-25 °C</p> <p>23050-2-14-25 for synthesis 100 g 23050-2-14-33 for synthesis 500 g 23050-2-14-43 for synthesis kg</p>	<p>Specification Appearance white to off-white powder Identity (IR) passes test Assay (T) 98.0-102.0% Melting range 122.0-128.0 °C $[\alpha]_D^{25}$ (c=1; DMF) -51.5° ~ -55.5° Residue on ignition (SO₄) max. 0.2% Water (KF) max. 1.0% Chromatographic purity (TLC) (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 99% Chromatographic purity (HPLC) min. 98.0% D-enantiomer max. 0.5% Potential residual solvents to be reported</p>

Boc-Phe(4-NO₂)-OH

N-t-Boc-4-nitro-L-phenylalanine

C₁₄H₁₈N₂O₆, M=310.30

CAS[33305-77-0]

HS-code: 292429 98 99

Storage: 15-25 °C

35660-2-14-25 for synthesis 100 g
35660-2-14-33 for synthesis 500 g
35660-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 99.0-101.0%
 Melting range 104.0-108.0 °C
 [α]_D²⁰ (c=1; MeOH) +7.0° ~ +9.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 0.5%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 99.0%
 Boc-Phe(2-NO₂)-OH (HPLC) max. 0.1%
 Boc-Phe(3-NO₂)-OH (HPLC) max. 0.1%
 D-enantiomer max. 0.3%
 Potential residual solvents to be reported

Boc-Thr-OH

N-α-t-Boc-L-threonine

C₉H₁₇NO₅, M=219.23

CAS[2592-18-9], EINECS:[219-987-6]

HS-code: 292419 00 90

S: 22-24/25

Storage: 15-25 °C

23180-2-14-25 for synthesis 100 g
23180-2-14-33 for synthesis 500 g
23180-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 Melting range 76.0-83.0 °C
 [α]_D²⁰ (c=1; AcOH) -8.0° ~ -9.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)MeCN:CHCl₃:AcOH=8:1:1 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 98.0%
 D-Thr+D-allo-Thr+L-allo-Thr max. 0.5%
 Potential residual solvents to be reported

Fmoc-Amino Acids

Fmoc-Aib-OH

N-α-Fmoc-α-aminoisobutyric acid

C₁₉H₁₉NO₄, M=325.36

CAS[94744-50-0]

HS-code: 292429 98 99

Storage: 15-25 °C

22620-2-14-25	..... for synthesis	..... 100 g
22620-2-14-33	..... for synthesis	..... 500 g
22620-2-14-43	..... for synthesis	..... kg

Specification

Appearance	.....	white to off-white powder
Identity (IR)	.....	passes test
Assay (T)	.....	98.0-102.0%
Melting range	.....	180.0-186.0 °C
Residue on ignition (SO ₄)	.....	max. 0.2%
Water (KF)	.....	max. 1.0%
Chromatographic purity (TLC)	.....
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	.....	min. 99%
H-Aib-OH (TLC)	.....	max. 0.25%
Chromatographic purity (HPLC)	.....	min. 98.5%
Fmoc-β-Ala-OH (HPLC)	.....	max. 0.1%
Fmoc-β-Ala-Aib-OH (HPLC)	.....	max. 0.1%
Any other impurity (HPLC)	.....	max. 0.2%
Potential residual solvents	.....	to be reported

Fmoc-Ala-OH·H₂O

N-α-Fmoc-L-alanine monohydrate

C₁₈H₁₇NO₄·H₂O, M=329.36

CAS[35661-39-3], EINECS:[252-660-6]

HS-code: 292429 98 99

S: 22-24/25

Storage: 15-25 °C

22615-2-14-25	..... for synthesis	..... 100 g
22615-2-14-33	..... for synthesis	..... 500 g
22615-2-14-43	..... for synthesis	..... kg

Specification

Appearance	.....	white to off-white powder
Identity (IR)	.....	passes test
Assay (T, anhydrous substance)	.....	98.0-102.0%
Solubility (0.5 mmol/ml DMF)	.....	clear, max. 150 Hazen
Melting range	.....	146.0-160.0 °C
[α] _D ²⁰ (c=1; DMF, anhydrous substance)	.....	-18.6° ~ -21.2°
Residue on ignition (SO ₄)	.....	max. 0.2%
Water (KF)	.....	5.0-7.0%
Chromatographic purity (TLC)	.....
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	.....	min. 99%
H-Ala-OH (TLC)	.....	max. 0.2%
Chromatographic purity (HPLC)	.....	min. 98.5%
Fmoc-β-Ala-OH (HPLC)	.....	max. 0.05%
Fmoc-β-Ala-Ala-OH (HPLC)	.....	max. 0.05%
Fmoc-Ala-Ala-OH (HPLC)	.....	max. 0.1%
D-enantiomer	.....	max. 0.5%
Other amino acids	.....	max. 0.2% (n/n)
Potential residual solvents	.....	to be reported

Fmoc-Arg(Pbf)-OH

N-α-Fmoc-N-ω-Pbf-L-arginine

C₃₄H₄₀N₄O₇S, M=648.78

CAS[154445-77-9]

HS-code: 292429 98 99



R: 36/37/38, S: 2-22-24/25

Storage: below 0 °C

22780-2-14-25	..... for synthesis	..... 100 g
22780-2-14-33	..... for synthesis	..... 500 g
22780-2-14-43	..... for synthesis	..... kg

Specification

Appearance	.....	white to off-white powder
Identity (IR)	.....	passes test
Assay (T, solvent free substance)	.....	98.0-102.0%
Solubility (0.5 mmol/ml DMF)	.....	clear, max. 100 Hazen
[α] _D ²⁰ (c=1; DMF, solvent free substance)	.....	-4.8° ~ -6.2°
Residue on ignition (SO ₄)	.....	max. 0.2%
Water (KF)	.....	max. 1.0%
Chromatographic purity (TLC)	.....
(1)MeCN:CHCl ₃ :AcOH=8:1:1 (V/V)	.....	min. 98%
Chromatographic purity (HPLC)	.....	min. 98.5%
Fmoc-β-Ala-OH (HPLC)	.....	max. 0.1%
Fmoc-β-Ala-Arg(Pbf)-OH (HPLC)	.....	max. 0.1%
D-enantiomer	.....	max. 0.3%
Other amino acids	.....	max. 0.2% (n/n)
Diisopropyl ether (GC)	.....	to be reported
Dichloromethane (GC)	.....	to be reported
Total residual solvent (GC)	.....	max. 8.0%

Fmoc-Gly-OH

N-α-Fmoc-glycine

C₁₇H₁₅NO₄, M=297.32

CAS[29022-11-5], EINECS:[249-373-3]

HS-code: 292429 98 99

R: 41, S: 22-24/25

Storage: below 10 °C

43675-2-14-25	..... for synthesis	..... 100 g
43675-2-14-33	..... for synthesis	..... 500 g
43675-2-14-43	..... for synthesis	..... kg

Specification

Appearance	.....	white to off-white powder
Identity (IR)	.....	passes test
Assay (T)	.....	98.0-102.0%
Solubility (0.5 mmol/ml DMF)	.....	clear, max. 150 Hazen
Melting range	.....	173.0-177.0 °C
Residue on ignition (SO ₄)	.....	max. 0.2%
Water (KF)	.....	max. 0.5%
Chromatographic purity (TLC)	.....
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	.....	min. 99%
H-Gly-OH (TLC)	.....	max. 0.1%
Chromatographic purity (HPLC)	.....	min. 99.0%
Fmoc-β-Ala-OH (HPLC)	.....	max. 0.05%
Fmoc-β-Ala-Gly-OH (HPLC)	.....	max. 0.05%
Fmoc-Gly-Gly-OH (HPLC)	.....	max. 0.1%
Other amino acids	.....	max. 0.2% (n/n)
Potential residual solvents	.....	to be reported

Fmoc-His(Trt)-OH

N-α-Fmoc-N-(im)-trityl-L-histidine

C₄₀H₃₃N₃O₄, M=619.72

CAS[109425-51-6]

HS-code: 292429 98 99

Storage: below 10 °C

49330-2-14-25	..... for synthesis	..... 100 g
49330-2-14-33	..... for synthesis	..... 500 g
49330-2-14-43	..... for synthesis	..... kg

Specification

Appearance	.....	white to off-white powder
Identity (IR)	.....	passes test
Assay (T)	.....	95.0-102.0%
Solubility (0.5 mmol/ml DMF)	.....	clear, max. 100 Hazen
Melting range	.....	>150 °C
[α] _D ²⁰ (c=1; CHCl ₃)	.....	+80.5° ~ +89.0°
Residue on ignition (SO ₄)	.....	max. 0.2%
Water (KF)	.....	max. 1.0%
Chromatographic purity (TLC)	.....
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	.....	min. 99%
Chromatographic purity (HPLC)	.....	min. 98.5%
H-His(Trt)-OH (HPLC)	.....	max. 0.25%
Fmoc-β-Ala-OH (HPLC)	.....	max. 0.1%
Fmoc-β-Ala-His(Trt)-OH (HPLC)	.....	max. 0.1%
D-enantiomer	.....	max. 0.2%
Potential residual solvents	.....	to be reported

Fmoc-Ile-OH*N*- α -Fmoc-L-isoleucineC₂₁H₂₃NO₄, M=353.43

CAS[71989-23-6], EINECS:[276-255-9]

HS-code: 292429 98 99

S: 22-24/25

Storage: below 10 °C

43665-2-14-25 for synthesis 100 g
 43665-2-14-33 for synthesis 500 g
 43665-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 Solubility (0.5 mmol/ml DMF) clear, max. 150 Hazen
 Melting range 138.0-150.0 °C
 $[\alpha]_D^{20}$ (c=1; DMF) -10.5° ~ -12.5 °C
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 98.5%
 Fmoc- β -Ala-OH (HPLC) max. 0.05%
 Fmoc- β -Ala-Ile-OH (HPLC) max. 0.05%
 Fmoc-Ile-Ile-OH (HPLC) max. 0.1%
 H-D-Ile-OH max. 0.1%
 H-D-allo-Ile-OH max. 0.1%
 H-allo-Ile-OH max. 0.1%
 Other amino acids max. 0.2% (n/n)
 Potential residual solvents to be reported

Fmoc-Met(O)-OH*N*- α -Fmoc-methionine-DL-sulfoxideC₂₀H₂₁NO₅S, M=387.46

CAS[76265-70-8]

HS-code: 292429 98 99

Storage: 15-25 °C

45030-2-14-25 for synthesis 100 g
 45030-2-14-33 for synthesis 500 g
 45030-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 $[\alpha]_D^{20}$ (c=1; DMF) to be reported
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)MeCN:CHCl₃:AcOH=8:1:1 (V/V) min. 98%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Potential residual solvents to be reported

Fmoc-Met-OH*N*- α -Fmoc-L-methionineC₂₀H₂₁NO₄S, M=371.46

CAS[71989-28-1], EINECS:[276-258-5]

HS-code: 292429 98 99

S: 22-24/25

Storage: below 10 °C

44985-2-14-25 for synthesis 100 g
 44985-2-14-33 for synthesis 500 g
 44985-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 Solubility (0.5 mmol/ml DMF) clear, max. 300 Hazen
 Melting range 119.0-144.0 °C
 $[\alpha]_D^{20}$ (c=1; DMF) -28.0° ~ -31.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 98.5%
 Fmoc- β -Ala-OH (HPLC) max. 0.05%
 Fmoc- β -Ala-Met-OH (HPLC) max. 0.05%
 Fmoc-Met-Met-OH (HPLC) max. 0.1%
 D-enantiomer max. 0.2%
 Other amino acids max. 0.2% (n/n)
 Potential residual solvents to be reported

Fmoc-Phe(4-NO₂)-OH*N*-Fmoc-4-nitro-L-phenylalanineC₂₄H₂₀N₂O₆, M=432.43

CAS[95753-55-2]

HS-code: 292429 98 99

Storage: 15-25 °C

22700-2-14-25 for synthesis 100 g
 22700-2-14-33 for synthesis 500 g
 22700-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 99.0-101.0%
 Melting range 215.0-225.0 °C
 $[\alpha]_D^{20}$ (c=1; DMF) -39.0° ~ -43.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 0.5%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 99.0%
 Fmoc-Phe(2-NO₂)-OH (HPLC) max. 0.1%
 Fmoc-Phe(3-NO₂)-OH (HPLC) max. 0.1%
 Fmoc- β -Ala-OH (HPLC) max. 0.1%
 Fmoc- β -Ala-Phe(4-NO₂)-OH (HPLC) max. 0.1%
 D-enantiomer max. 0.3%
 Potential residual solvents to be reported

Fmoc-Phe-OH*N*- α -Fmoc-L-phenylalanineC₂₄H₂₁NO₄, M=387.45

CAS[35661-40-6], EINECS:[252-661-1]

HS-code: 292429 98 99

S: 22-24/25

Storage: 15-25 °C

22645-2-14-25 for synthesis 100 g
 22645-2-14-33 for synthesis 500 g
 22645-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 99.0-101.0%
 Solubility (0.5 mmol/ml DMF) clear, max. 150 Hazen
 Melting range 180.0-190.0 °C
 $[\alpha]_D^{20}$ (c=1; DMF) -38.0° ~ -40.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 H-Phe-OH (TLC) max. 0.1%
 Chromatographic purity (HPLC) min. 99.0%
 Fmoc- β -Ala-OH (HPLC) max. 0.05%
 Fmoc- β -Ala-Phe-OH (HPLC) max. 0.05%
 Fmoc-Phe-Phe-OH (HPLC) max. 0.1%
 D-enantiomer max. 0.2%
 Other amino acids max. 0.2% (n/n)
 Potential residual solvents to be reported

Fmoc-Pro-OH·xH₂O*N*-α-Fmoc-L-proline hydrate

C₂₀H₁₉NO₄·xH₂O, M=337.37·xH₂O
 CAS[71989-31-6], EINECS:[276-259-0]
 HS-code: 292429 98 99
 S: 22-24/25

Storage: below 10 °C

22681-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 93.0-102.0%
 Solubility (0.5 mmol/ml DMF) clear
 A (450-600 nm, 0.5 M, DMF, 1 cm) max. 0.030
 [α]_D²⁰ (c=1; DMF) -29.5° ~ -34.5°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 6.0%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Acetic acid (GC) max. 0.1%
 Ethyl acetate (GC) max. 0.5%
 Diisopropyl ether (GC) to be reported
 n-Hexane (GC) to be reported
 Total residual solvent (GC) max. 2.0%

Fmoc-Val-OH*N*-α-Fmoc-L-valine

C₂₀H₂₁NO₄
 CAS[68858-20-8], EINECS:[272-515-0]
 HS-code: 292429 98 99
 S: 22-24/25

Storage: 15-25 °C

22725-2-14-25 for synthesis 100 g
 22725-2-14-33 for synthesis 500 g
 22725-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 99.0-101.0%
 Solubility (0.5 mmol/ml DMF) clear, max. 150 hazen
 Melting range 140.0-150.0 °C
 [α]_D²⁰ (c=1; DMF) -16.5° ~ -18.5°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 H-Val-OH (TLC) max. 0.1%
 Chromatographic purity (HPLC) min. 99.0%
 Fmoc-β-Ala-OH (HPLC) max. 0.05%
 Fmoc-β-Ala-Val-OH (HPLC) max. 0.05%
 Fmoc-Val-Val-OH (HPLC) max. 0.1%
 D-enantiomer max. 0.2%
 Other amino acids max. 0.2% (n/n)
 Potential residual solvents to be reported

Z-amino acids**Z-Asn-OH***N*-α-Cbz-L-asparagine

C₁₂H₁₄N₂O₅, M=266.25
 CAS[2304-96-3], EINECS:[218-969-5]
 HS-code: 292429 98 99

Storage: 15-25 °C

22080-2-14-25 for synthesis 100 g
 22080-2-14-33 for synthesis 500 g
 22080-2-14-43 for synthesis kg

Specification

Appearance white off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 Melting range 162.0-167.0 °C
 [α]_D²⁰ (c=2; AcOH) +5.8° ~ +6.8°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)MeCN:CHCl₃:AcOH=8:1:1 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Potential residual solvents to be reported

Z-Gly-OH*N*-α-Cbz-glycine

C₁₀H₁₁NO₄, M=209.20
 CAS[1138-80-3], EINECS:[214-516-0]
 HS-code: 292249 85 90

Storage: 15-25 °C

22560-2-14-25 for synthesis 100 g
 22560-2-14-33 for synthesis 500 g
 22560-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 Melting range 115.0-125.0 °C
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98%
 Chromatographic purity (HPLC) min. 98.0%
 Potential residual solvents to be reported

Z-Ile-OH · DCHA*N*-α-Cbz-L-isoleucine dicyclohexylammonium salt

C₁₄H₁₉NO₄·C₁₂H₂₃N, M=446.62
 CAS[26699-00-3], EINECS:[247-910-6]
 HS-code: 292249 85 90
 S: 22-24/25

Storage: below 10 °C

44030-2-14-25 for synthesis 100 g
 44030-2-14-33 for synthesis 500 g
 44030-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 Melting range 150.0-160.0 °C
 [α]_D²⁰ (c=1; EtOH) +4.0 ~ +5.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)CHCl₃:MeOH:AcOH=90:8:2 (V/V) min. 99%
 Chromatographic purity (HPLC) min. 98.0%
 H-allo-Ile-OH max. 0.5%
 H-D-allo-Ile-OH max. 0.5%
 H-D-Ile-OH max. 0.5%
 Potential residual solvents to be reported

Z-Lys(Z)-OH*N-α-Cbz-N-ε-Cbz-L-lysine*C₂₂H₂₆N₂O₆, M=414.45

CAS[405-39-0]

HS-code: 292249 85 90

Storage: 15-25 °C

22470-2-14-25	for synthesis	100 g
22470-2-14-33	for synthesis	500 g
22470-2-14-43	for synthesis	kg

Specification

Appearance	white off-white powder
Identity (IR)	passes test
Assay (T)	98.0-102.0%
[α] _D ²⁰ (c=2; DMF)	to be reported
Residue on ignition (SO ₄)	max. 0.2%
Water (KF)	max. 1.0%
Chromatographic purity (TLC)	
(1)MeCN:CHCl ₃ :AcOH=8:1:1 (V/V)	min. 98%
Chromatographic purity (HPLC)	min. 98.0%
Z-Lys-OH (HPLC)	max. 1.0%
H-Lys(Z)-OH (HPLC)	max. 1.0%
D-enantiomer	max. 0.3%
Potential residual solvents	to be reported

Z-Pro-OH*N-α-Cbz-L-proline*C₁₃H₁₅NO₄, M=249.26

CAS[1148-11-4], EINECS:[214-557-4]

HS-code: 292249 85 90

Storage: 15-25 °C

22350-2-14-25	for synthesis	100 g
22350-2-14-33	for synthesis	500 g
22350-2-14-43	for synthesis	kg

Specification

Appearance	white to off-white powder
Identity (IR)	passes test
Assay (T)	98.0-102.0%
Melting range	73.0-78.0 °C
[α] _D ²⁰ (c=2; AcOH)	-58.5° ~ -61.5°
Residue on ignition (SO ₄)	max. 0.2%
Water (KF)	max. 1.0%
Chromatographic purity (TLC)	
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	min. 99%
Chromatographic purity (HPLC)	min. 98.0%
D-enantiomer	max. 0.5%
Potential residual solvents	to be reported

Z-Ser-OH*N-α-Cbz-L-serine*C₁₁H₁₃NO₅, M=239.22

CAS[1145-80-8], EINECS:[214-546-4]

HS-code: 292429 98 99

Storage: 15-25 °C

40740-2-14-25	for synthesis	100 g
40740-2-14-33	for synthesis	500 g
40740-2-14-43	for synthesis	kg

Specification

Appearance	white to off-white powder
Identity (IR)	passes test
Assay (T)	98.0-102.0%
Melting range	114.0-120.0 °C
[α] _D ²⁰ (c=7; AcOH)	+5.5° ~ +6.5°
Residue on ignition (SO ₄)	max. 0.2%
Water (KF)	max. 1.0%
Chromatographic purity (TLC)	
(1)CHCl ₃ :MeOH:AcOH=77.5:15:7.5 (V/V)	min. 99%
Chromatographic purity (HPLC)	min. 98.0%
D-enantiomer	max. 0.5%
Potential residual solvents	to be reported

Z-Ser(Bzl)-OH*N-α-Cbz-O-benzyl-L-serine*C₁₈H₁₉NO₅, M=329.35

CAS[20806-43-3]

HS-code: 292249 85 90

Storage: 15-25 °C

44090-2-14-25	for synthesis	100 g
44090-2-14-33	for synthesis	500 g
44090-2-14-43	for synthesis	kg

Specification

Appearance	white to off-white powder
Identity (IR)	passes test
Assay (T)	98.0-102.0%
[α] _D ²⁰ (c=2; MeOH)	+11.0° ~ 13.0°
Residue on ignition (SO ₄)	max. 0.2%
Water (KF)	max. 1.0%
Chromatographic purity (TLC)	
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	min. 99%
Chromatographic purity (HPLC)	min. 98.0%
D-enantiomer	max. 0.5%
Potential residual solvents	to be reported

Z-Trp-OH*N-α-Cbz-L-tryptophan*C₁₉H₁₈N₂O₄, M=338.36

CAS[7432-21-5], EINECS:[231-074-4]

HS-code: 292429 98 99

Storage: 15-25 °C

22430-2-14-25	for synthesis	100 g
22430-2-14-33	for synthesis	500 g
22430-2-14-43	for synthesis	kg

Specification

Appearance	white to off-white powder
Identity (IR)	passes test
Assay (T)	98.0-102.0%
Melting range	122.0-128.0 °C
[α] _D ²⁰ (c=1; MeOH)	-8.5° ~ -9.5°
Residue on ignition (SO ₄)	max. 0.2%
Water (KF)	max. 1.0%
Chromatographic purity (TLC)	
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	min. 99%
Chromatographic purity (HPLC)	min. 98.0%
D-enantiomer	max. 0.5%
Potential residual solvents	to be reported

Z-Tyr-OH·xH₂O*N-α-Cbz-L-tyrosine hydrate*C₁₇H₁₇NO₅·xH₂O, M=315.32

CAS[1164-16-5], EINECS:[214-609-6]

HS-code: 292429 98 99

S: 22-24/25

Storage: 15-25 °C

22390-2-14-25	for synthesis	100 g
22390-2-14-33	for synthesis	500 g
22390-2-14-43	for synthesis	kg

Specification

Appearance	white to off-white powder
Identity (IR)	passes test
Assay (T, anhydrous substance)	98.0-102.0%
[α] _D ²⁰ (c=2; AcOH, anhydrous substance)	+8.5° ~ +10.5°
Residue on ignition (SO ₄)	max. 0.2%
Water (KF)	max. 13.0%
Chromatographic purity (TLC)	
(1)CHCl ₃ :MeOH:AcOH=90:8:2 (V/V)	min. 98%
Chromatographic purity (HPLC)	min. 98.0%
D-enantiomer	max. 0.5%
Potential residual solvents	to be reported

N-protected derivatives

H-Ala-OBzl-pTosOH

L-Alanine benzyl ester toluene-4-sulfonate

C₁₀H₁₃NO₂·C₇H₈O₃S, M=351.42
 CAS[42854-62-6], EINECS:[255-969-4]
 HS-code: 292249 85 90

Storage: below 10 °C

18470-2-14-25 for synthesis 100 g
 18470-2-14-33 for synthesis 500 g
 18470-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-103.0%
 Melting range 108.0-118.0 °C
 [α]_D²⁰ (c=4; MeOH) -4.0° ~ -6.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98.0%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Acetic acid (GC) max. 0.1%
 Ethyl acetate (GC) max. 0.5%
 Diisopropyl ether (GC) to be reported
 Methanol (GC) to be reported
 Total residual solvent (GC) max. 2.0%

H-Ala-OMe · HCl

L-Alanine methyl ester hydrochloride

C₄H₉NO₂ · HCl, M=139.58
 CAS[2491-20-5]
 HS-code: 292249 85 90
 S: 22-24/25

Storage: below 10°C

18450-2-14-25 for synthesis 100 g
 18450-2-14-33 for synthesis 500 g
 18450-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (AT) 98.0-102.0%
 Melting range 105.0-111.0 °C
 [α]_D²⁰ (c=2; MeOH) +7.0° ~ +8.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 99%
 D-enantiomer max. 0.5%
 Potential residual solvents to be reported

H-Glu(OBzl)-OBzl · pTosOH

L-glutamic acid dibenzyl ester toluene-4-sulfonate

C₁₉H₂₁NO₄·C₇H₈O₃S, M=499.59
 CAS[2791-84-6]
 HS-code: 292249 85 90

Storage: 15-25 °C

18720-2-14-25 for synthesis 100 g
 18720-2-14-33 for synthesis 500 g
 18720-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-102.0%
 [α]_D²⁰ (c=1; MeOH) +7.0° ~ +9.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98%
 H-Glu-OH (TLC) max. 0.5%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Potential residual solvents to be reported

H-Gly-Tyr-OH · 2H₂O

Glycyl-L-tyrosine dihydrate

C₁₁H₁₄N₂O₄·2H₂O, M=274.27
 CAS[658-79-7], EINECS:[211-525-1]
 HS-code: 292249 85 90

Storage: below 10 °C

11430-2-14-43 for synthesis kg

Specification

Appearance white powder
 Identity (IR) passes test
 Assay (NT, anhydrous substance) 98.0-102.0%
 [α]_D²⁰ (c=1; H₂O, anhydrous) +46.0° ~ +50.0°
 Residue on ignition (SO₄) max. 0.5%
 Water (KF) 10.0-16.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98%

H-His(Trt)-OH

N-(im)-Trityl-L-histidine

C₂₅H₂₃N₃O₂, M=397.47
 CAS[35146-32-8]
 HS-code: 292249 85 90

Storage: below 10 °C

34790-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (NT, solvent free substance) 97.0-102.0%
 [α]_D²⁰ (c=1; AcOH) +25.5° ~ +29.5°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 2.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Ethyl acetate (GC) max. 0.5%
 Dichloromethane (GC) to be reported
 Methanol (GC) to be reported
 Tetrahydrofuran (GC) to be reported
 Total residual solvent (GC) max. 8.0%

H-Met-OMe · HCl

L-Methionine methyl ester hydrochloride

C₆H₁₃NO₂S·HCl, M=199.70
 CAS[2491-18-1], EINECS:[219-651-9]
 HS-code: 292249 85 90
 S: 22-24/25

Storage: below 10 °C

44180-2-14-25 for synthesis 100 g
 44180-2-14-33 for synthesis 500 g
 44180-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (AT) 98.0-102.0%
 [α]_D²⁰ (c=1; H₂O) +25.0° ~ +27.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98%
 D-enantiomer max. 0.5%
 Potential residual solvents to be reported

H-Phe-OBzl·HCl*L-Phenylalanine benzyl ester hydrochloride*C₁₆H₁₇NO₂·HCl, M=291.77

CAS[2462-32-0], EINECS:[219-558-3]

HS-code: 292249 85 90

S: 22-24/25

Storage: below 10 °C

43180-2-14-25 for synthesis 100 g
 43180-2-14-33 for synthesis 500 g
 43180-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (AT) 98.0-102.0%
 Melting range 185.0-195.0 °C
 [α]_D²⁰ (c=1; 80% AcOH) -10.5° ~ -12.5°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 1.0%
 Chromatographic purity (TLC)
 (2)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Potential residual solvents to be reported

H-D-Pro-OBzl · HCl*D-Proline benzylester hydrochloride*C₁₂H₁₅NO₂·HCl, M=241.71

CAS[53843-90-6]

HS-code: 292249 85 90

Storage: below 10 °C

43870-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 97.0-102.0%
 [α]_D²⁰ (c=1; MeOH) +42.0° ~ +46.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 2.0%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 99%
 H-D-Pro-OH (TLC) max. 1.0%
 Chromatographic purity (HPLC) min. 98.5%
 Any impurity (HPLC) max. 1.0%
 L-enantiomer max. 0.3%
 Hydrochloric acid content (T) to be reported
 Potential residual solvents to be reported

H-Thr(Bzl)-OBzl · ½ oxalate*O-Benzyl-L-threonine benzyl ester hemioxalate*C₁₈H₂₁NO₃·½C₂H₂O₄, M=389.41

CAS[15260-11-4]

HS-code: 292249 85 90

Storage: 15-25 °C

44470-2-14-25 for synthesis 100 g
 44470-2-14-33 for synthesis 500 g
 44470-2-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (N) 97.0-103.0%
 [α]_D²⁰ (c=2; DMF) to be reported
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 2.0%
 Chromatographic purity (HPLC) min. 98.5%
 H-Thr(Bzl)-OH (HPLC) max. 0.8%
 Benzyl alcohol (HPLC) max. 0.5%
 Any other impurity (HPLC) max. 1.0%
 D-Thr+D-allo-Thr+L-allo-Thr max. 0.3%
 Potential residual solvents to be reported

H-Val-OBzl·pTosOH*L-Valine benzyl ester toluene-4-sulfonate*C₁₂H₁₇NO₂·C₇H₈O₃S, M=379.47

CAS[16652-76-9]

HS-code: 292249 85 90

Storage: below 10 °C

19140-2-14-25 for synthesis 100 g
 19140-2-14-33 for synthesis 500 g
 19140-2-14-43 for synthesis kg
 19140-4-14-43 for synthesis kg

Specification

Appearance white to off-white powder
 Identity (IR) passes test
 Assay (T) 98.0-103.0%
 Melting range 158.0-162.0 °C
 [α]_D²⁰ (c=3; MeOH) -3.0° ~ -4.0°
 Residue on ignition (SO₄) max. 0.2%
 Water (KF) max. 0.5%
 Chromatographic purity (TLC)
 (1)EtOAc:nBuOH:AcOH:H₂O=2:1:1:1 (V/V) min. 98%
 Chromatographic purity (HPLC) min. 98.0%
 D-enantiomer max. 0.5%
 Potential residual solvents to be reported