MERCK MILLIPORE

Quality and purity where it matters most.

Ingredients that meet the highest demands of enteral nutrition and infant formula.

Merck Millipore is a division of MERCK

Nutrients you can rely on

Quality and purity are paramount in the production of both enteral nutrition products and infant formula. Here at Merck Millipore, we have created a comprehensive product portfolio to meet all your needs in both fields. When it comes to long-term enteral nutrition of hospital patients with compromised health, the nutrients they receive must not contain impurities that could weaken them further – especially as patients receive mineral salts and amino acids in relatively high amounts. Our mineral salts distinguish themselves by a low heavy-metal content. This also makes them especially suitable for producing high-end infant formula, as the raw materials used in their production are decisive to the quality of the end product. What's more, our regulatory expertise and EMPROVE® documentation can help you simplify supplier qualification and reduces costs.

Benefits:

- High-quality products
- Low heavy-metal content
- Most products come with EMPROVE® documentation
- Regulatory support

Speed up approval preparation with our EMPROVE® dossiers

Most of our nutrients are backed up by EMPROVE® dossiers, providing you with unparalleled regulatory support and ready-to-use documentation. EMPROVE® documentation lets you simplify your processes, so you can speed up approval preparation and get your products to market faster.

Visit www.merckmillipore.com/emprove for more information.

Tailored to your needs

All ingredients are available in standard packaging as well as pre-packs, ranging in size from grams up to tons. Packaging can also be customized according to your needs. Our portfolio, documentation, and flexibility make us a first-choice supplier of raw materials for the manufacture of enteral nutrition products. Further benefits to customers include optional pre-mixture production in GMP-compliant facilities and tailored raw material production using process-optimized quantities and container sizes.

Ord. No.	Product

Amino Acids

102836	**L-Cystine** extra pure FCC
102735	**L-Cysteine hydrochloride monohydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, USP
104352	**L-Histidine,** suitable for use as excipient EMPROVE® exp Ph Eur, USP
104354	**L-Histidine monohydrochloride monohydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP
105357	**L-Isoleucine,** suitable for use as excipient EMPROVE® exp Ph Eur, USP
105020	**L-Leucine,** suitable for use as excipient EMPROVE® exp Ph Eur, USP
105701	**L-Lysine monohydrochloride,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
107267	**L-Phenylalanine,** suitable for use as excipient EMPROVE® exp Ph Eur, USP
108396	**L-Tryptophan,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
108378	**L-Tyrosine,** suitable for use as excipient EMPROVE® exp Ph Eur, USP

Calcium

102304	**Calcium acetate hydrate** extra pure DAC, FCC
112120	**Calcium carbonate precipitated (≤ 0.0001 % Al),** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, JP, FCC, E 170
102064	**Calcium carbonate precipitated (≤ 0.002 % Fe)** EMPROVE® Ph Eur, BP, USP, JP, FCC
142000	**Calcium chloride dihydrate** EMPROVE® Ph Eur, BP, JP, USP, FCC, E 509
102092	**tri-Calcium dicitrate tetrahydrate,** suitable for use as excipient EMPROVE® exp DAC, USP, E 333, FCC
102094	**Calcium gluconate monohydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, FCC, E 578
104112	**Calcium glycerophosphate hydrate** extra pure EMPROVE® exp Ph Eur, FCC
102146	**Calcium hydrogen phosphate dihydrate extra fine powder,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, FCC, E 341
102304	**Calcium hydrogen phosphate anhydrous extra fine powder,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, FCC, E 341
102119	**Calcium hydroxide precipitated (≤ 0.0005 % Al),** suitable for use as excipient EMPROVE® exp USP, FCC, E 526
102102	**Calcium lactate pentahydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, E 327
102143	**Calcium phosphate dried,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, E 341
102148	**Calcium D-saccharate,** suitable for use as excipient EMPROVE® exp USP
102160	**Calcium sulfate dihydrate precipitated,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, E 516

Copper

102792	**Copper(II) sulfate anhydrous,** suitable for use as excipient EMPROVE® exp Ph Eur, BP
102787	**Copper(II) sulfate pentahydrate cryst.,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
202788	**Copper(II) sulfate pentahydrate cryst.,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP

Ord. No.	Product

Iodine

105040	**Potassium iodide,** suitable for use as active pharmaceutical ingredient EMPROVE® api Ph Eur, BP, JP, USP
105050	**Potassium iodate** extra pure FCC
106520	**Sodium iodide,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, USP

Iron

103761	**Ammonium iron(III) citrate** approx. 28 % Fe DAC
103815	**Iron** extra pure reduced particle size about 10 µm
103962	**Iron(II) fumarate** extra pure (ca. 33 % Fe) Ph Eur, BP, USP, FCC
103868	**Iron(II) gluconate dihydrate** Ph Eur, BP, USP, E 579
103963	**Iron(II) sulfate heptahydrate cryst.,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, FCC
103967	**Iron(II) sulfate hydrate (about 87 % $FeSO_4$)** extra pure Ph Eur, BP, USP

Magnesium

105832	**Magnesium chloride hexahydrate cryst.** EMPROVE® Ph Eur, BP, USP, FCC, E 511
105829	**Magnesium hydroxide carbonate heavy** extra pure Ph Eur, BP, USP, E 504
105828	**Magnesium hydroxide carbonate light** extra pure Ph Eur, BP, USP
105870	**Magnesium hydroxide** extra pure Ph Eur, BP, USP
105872	**Magnesium hydrogen phosphate trihydrate,** suitable for use as excipient EMPROVE® exp DAB
105867	**Magnesium oxide heavy,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
105862	**Magnesium oxide light** extra pure Ph Eur, BP, E 530
105882	**Magnesium sulfate heptahydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, JP
105885	**Magnesium sulfate hydrate,** suitable for use as excipient EMPROVE® exp DAC
102440	**Parteck® Mg DC (Magnesium hydroxide carbonate) heavy,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, E 504

Manganese

105999	**Manganese(II) sulfate monohydrate spray dried,** suitable for use as excipient EMPROVE® exp Ph Eur, USP, FCC

Potassium

104924	**Potassium carbonate,** suitable for use as excipient EMPROVE® exp Ph Eur, USP, E 501
104935	**Potassium chloride,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, FCC, E 508
104956	**tri-Potassium citrate monohydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, FCC, E 332
104871	**Potassium dihydrogen phosphate cryst.,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, NF, E 340
104852	**Potassium hydrogen carbonate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, FCC, E 501
105101	**di-Potassium hydrogen phosphate anhydrous,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, E 340

Ord. No.	*Product*
105032	**Potassium hydroxide pellets,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, NF, FCC, E 525
105050	**Potassium sulfate cryst.,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP
105051	**Potassium sulfate powder,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, E 515

Sodium

106281	**Sodium acetate anhydrous** extra pure USP, FCC, E 262
106265	**Sodium acetate trihydrate** extra pure Ph Eur, BP, JP, USP, FCC, E 262
106398	**Sodium carbonate anhydrous,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, NF
106384	**Sodium carbonate decahydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, E 500
106386	**Sodium carbonate monohydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, NF, E 500
106400	**Sodium chloride,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
116224	**Sodium chloride low in endotoxins,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, USP
106431	**tri-Sodium citrate 5,5-hydrate,** suitable for use as excipient EMPROVE® exp FU VIII, E 331
111037	**tri-Sodium citrate anhydrous,** suitable for use as excipient EMPROVE® exp USP, FCC, E 331
106432	**tri-Sodium citrate dihydrate cryst.,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, USP, E 331
106446	**tri-Sodium citrate dihydrate powder,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, USP, E 331
106345	**Sodium dihydrogen phosphate dihydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, JPE, FCC, E 339
106323	**Sodium hydrogen carbonate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, USP, FCC, E 500
106585	**di-Sodium hydrogen phosphate anhydrous,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP, E 339
106576	**di-Sodium hydrogen phosphate dihydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
106573	**di-Sodium hydrogen phosphate dodecahydrate cryst.,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, USP
106574	**di-Sodium hydrogen phosphate heptahydrate,** suitable for use as excipient EMPROVE® exp DAC, USP
106482	**Sodium hydroxide pellets,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, FCC, JP, NF, E 524
106522	**Sodium-(S)-lactate-solution about 50 %,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
106577	**tri-Sodium phosphate dodecahydrate,** suitable for use as excipient EMPROVE® exp NF, E 339
104646	**Sodium phosphinate monohydrate (sodium hypophosphite monohydrate),** suitable for use as excipient EMPROVE® exp DAC

Zinc

108800	**Zinc acetate dihydrate** extra pure Ph Eur, USP
108815	**Zinc chloride,** suitable for use as active pharmaceutical ingredient EMPROVE® api Ph Eur, BP, USP
108846	**Zinc oxide,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, USP
108881	**Zinc sulfate heptahydrate,** suitable for use as excipient EMPROVE® exp Ph Eur, BP, JP, USP, FCC
108882	**Zinc sulfate monohydrate,** suitable for use as excipient EMPROVE® exp USP

Samples in small package sizes available upon request.

The typical technical data above serve to generally characterize the product. These values are not meant as specifications and they do not have binding character. The product specification is available separately, from the website: www.merckmillipore.com

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