

2000  
2001

ALPHABETICAL  
LIST

BIOACTIVE  
PEPTIDES

IMMUNOCHEMICALS

MOLECULAR  
BIOLOGY

NEUROSCIENCE  
AND SIGNAL  
TRANSDUCTION

TISSUE CULTURE

OTHER PRODUCT  
GROUPS / USP

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AND SUPPLIES

DIAGNOSTIC KITS  
AND REAGENTS

PRODUCT INDEX

# Biochemicals and Reagents

FOR LIFE SCIENCE RESEARCH



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## The Sigma Creed

- Let No Non-Profit research organization anywhere in the world, suffer for lack of Sigma Reagents.
- Let No One have cause to say a Sigma Product was misrepresented.
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- Make Everyone feel that doing business with Sigma is a revelation and a pleasure! Even if you can't pay.
- As Long as we have the funds, no legitimate call for help will be disregarded.

THE ABOVE CREED WAS PUBLISHED MANY YEARS AGO WHEN RESEARCH WAS GENERALLY CARRIED OUT IN "RESEARCH ORGANIZATIONS." THE CURRENT TREND WITHIN PREPARATORY SCHOOLS, HOSPITALS, AND CLINICS TO DO "RESEARCH" AS A TEACHING FUNCTION OR AS A PART-TIME EXERCISE, HAS CREATED A DEMAND FOR SIGMA-FINANCING NOT INTENDED TO BE COVERED BY THIS CREED. HOWEVER, SPECIFIC INQUIRIES ARE INVITED.

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## COMPOUNDS

## ALPHABETICAL LIST OF COMPOUNDS

<b>t-BOC-N<sub>γ</sub>-XANTHYL- -ASPARAGINE</b>	5 g	47.40
55420-40-8] C <sub>22</sub> H <sub>24</sub> N <sub>2</sub> O <sub>6</sub> FW 412.4		
<b>t-BOC-N<sub>γ</sub>-XANTHYL- -GLUTAMINE</b>	5 g	41.40
55220-24-7] C <sub>23</sub> H <sub>26</sub> N <sub>2</sub> O <sub>6</sub> FW 426.5		
<b>LDINE</b>	1 g	10.90
Contains ≤1% isopropanol	5 g	42.10
476-70-0] C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub> FW 327.4		
R: 22-36/37/38 S: 26-36		

**ILTON-HUNTER REAGENT**  
See: 3-(p-Hydroxyphenyl)propionic Acid  
N-Hydroxysuccinimide Ester Page 546

**MBESIN**  
See: Bioactive Peptides Page 1050

**JNE MARROW MEDIA**  
See: Tissue Culture Media and Reagents Page 1778

## BOOKS

Over 400 technical reference works  
on a wide range of topics:

Amino Acids/Peptides  
Biotechnology/Molecular Biology  
Cell/Tissue Culture  
Chromatography  
Clinical Chemistry  
Computer Techniques  
Dyes and Stains  
Electrophoresis  
Enzymology  
General References  
Immunochromatography/Immunology  
Lipid Chemistry  
Microbiology  
Microscopy  
Neurobiology/Neurochemistry  
Organic Chemistry  
Pesticides  
Pharmacology/Toxicology  
Protein Chemistry/Isolation  
Safety & Hazard  
Selected Techniques  
Selected Topics  
Spectra

See the Techware Section Page 2182

**BOP REAGENT**  
See: Benzo[1,2,3-c:4,5-b']diazepine-10-yl-  
phosphonium Hexafluorophosphate Page 154

**9-BORABICYCLO[3.3.1]NONANE**  
See: 9-BBN Dimer Page 156

**BORAGE OIL** 100 g 46.00  
9 From *Borago officinalis* seeds  
Contains 20-25% γ-linolenic acid (as triglycerides).  
See also: Evening Primrose Oil Page 413  
Fungal Lipid Page 443  
[84012-16-8]

www.sigma-aldrich.com/techinfo

PRODUCT NUMBER	US \$	PRODUCT NUMBER	US \$
<b>BORAX</b> (Sodium tetraborate)		<b>BORIC ACID, Electrophoresis Reagent</b> See: Electrophoresis Reagents Page 1967	
<b>B 3545</b> Decahydrate 500 g 26.30 SigmaUltra 1 kg 34.60		<b>BORIC ACID GEL</b> See under: Affinity Chromatography Media Page 1950	
<b>99.5-105.0%</b> Solubility (0.1 M in water, 20°C): complete, colorless Insoluble matter: <0.1% Cl: <0.05% K: <0.005% SO <sub>4</sub> : <0.05% Mg: <0.0005% Al: <0.0005% NH <sub>4</sub> <sup>+</sup> : <0.05% Ca: <0.0005% P: <0.001% Cu: <0.0005% Pb: <0.001% Fe: <0.001% Zn: <0.0005%		<b>BORIC ACID, Molecular Biology Reagent</b> See: Molecular Biology Products Page 1624	
[1303-96-4] Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> • 10H <sub>2</sub> O FW 381.4 R: 63-62-36/37/38 S: 45-26-36/37/39-22		<b>BORIC ACID TABLETS</b> 100 tablets 26.90 <b>B 2645</b> Contains 1 g boric acid 1,000 tablets 149.30 per tablet. H <sub>3</sub> BO <sub>3</sub> FW 61.83 R: 63-62-36/37/38 S: 45-26-36/37/39-22	
<b>B 9876</b> Decahydrate 500 g 12.80 <b>99.5-105.0%</b> 1 kg 16.80 Widely used as a buffer. pH of a 5 g 46.40 solution is approx. 9.3 over a wide range of concentrations. [1303-96-4] Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> • 10H <sub>2</sub> O FW 381.4 R: 63-62-36/37/38 S: 45-26-36/37/39-22		<b>BORIC ACID TRIMETHYL ESTER</b> See: Trimethyl Borate Page 980	
<b>B 0127</b> Anhydrous 100 g 13.80 <b>Minimum 99.0%</b> 500 g 29.50 [1330-43-4] Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> FW 201.2 1 kg 50.00 R: 63-62-36/37/38 S: 45-26-36/37/39-22		<b>d-2,3-BORNANEDIONE</b> See: (1S)-(+)-Camphorquinone Page 200	
<b>BORDET GENGOU AGAR BASE</b> See: Microbiological Media and Components Page 2070		<b>BORNEOL</b> 100 g 36.00 <b>B 7888</b> Approx. 85% 500 g 133.60 [507-70-0] C <sub>10</sub> H <sub>18</sub> O FW 154.3 R: 11-20/21/22-43 S: 16-36	
<b>BORDET GENGOU AGAR BASE WITH 1.6% AGAR</b> See: Microbiological Media and Components Page 2070		<b>(-)-BORNYL ACETATE</b> 100 g 19.20 <b>B5,520-3</b> Approx. 97% (capillary GC) d = 0.98 g/ml Pheromone for <i>Periplaneta americana</i> . Aldrich Brand. Formerly Sigma Product B 6759. [5655-61-8]	
<b>BORDET GENGOU AGAR BASE WITHOUT PEPTONE</b> See: Microbiological Media and Components Page 2070		<b>BORON</b> 100 g 97.50 <b>B 3135</b> Practical Grade <b>Amorphous powder</b> [7440-42-8] B FW 10.81 R: 11-20/21/22-37 S: 16-36/37/9	
<b>BORIC ACID</b> [10043-35-3] H <sub>3</sub> BO <sub>3</sub> FW 61.83 R: 63-62-36/37/38 S: 45-26-36/37/39-22		<b>BORONIC ACID-AGAROSE</b> See: m-Aminophenylboronic Acid-Agarose under Affinity Chromatography Media Page 1949	
<b>B 7660</b> SigmaUltra 100 g 18.70 <b>Minimum 99.5%</b> 500 g 33.40 pH (1 M in water, 20°C): 3.5-6.0 1 kg 50.50 Solubility (1 M in water, 20°C): com- plete, colorless Insoluble matter: <0.1% Chloride (Cl): <0.05% Mg: <0.005% Sulfate (SO <sub>4</sub> ): <0.05% Na: <0.005% Al: <0.0005% NH <sub>4</sub> <sup>+</sup> : <0.05% Ca: <0.005% P: <0.0005% Cu: <0.0005% Pb: <0.001% Fe: <0.0005% Zn: <0.0005% K: <0.005%		<b>BORON TRICHLORIDE-METHANOL</b> 5 ml 18.30 <b>B 0877</b> 10% boron trichloride in methanol 10 ml 24.70 for preparing methyl esters of fatty 25 ml 38.20 acids and for transesterification of triglycerides. Sealed ampules. Shelf life is extended considerably in sealed ampules. [10294-34-5] R: 11-23/25-34 S: 7-16-24-45	
A <sub>260</sub> <0.05; A <sub>280</sub> <0.05 (1 M in water)		<b>BORON TRIFLUORIDE DIETHYL ETHERATE</b> d = 1.15 g/ml [109-63-7] C <sub>4</sub> H <sub>10</sub> BF <sub>3</sub> O FW 141.9 R: 10-34-23/24/25-14 S: 16-45-26-36/37/39	
<b>B 0252</b> Minimum 99.5% 100 g 9.40 See also: Plant Cell Culture 500 g 16.70 Reagents Page 1866 1 kg 25.20 2.5 kg 47.70 5 kg 85.90 10 kg 134.10		<b>B 6261</b> Brown liquid 100 ml 17.50 250 ml 21.20 [2-8°C]	
<b>B 0394</b> ACS Reagent 500 g 27.10 <b>Assay: ≥99.5%</b> 1 kg 48.80 <b>Insoluble in methanol: ≤0.005%</b> 5 kg 159.40 <b>Nonvolatile with methanol:</b> ≤0.05% Chloride (Cl): ≤0.001% Phosphate (PO <sub>4</sub> ): ≤0.001% Sulfate (SO <sub>4</sub> ): ≤0.01% Calcium (Ca): ≤0.005% Heavy metals (as Pb): ≤0.001% Iron (Fe): ≤0.001%		<b>21,660-7</b> Redistilled 100 ml 36.20 [2-8°C] Light yellow liquid. Aldrich Brand. Formerly Sigma Product B 8764.	

<b>BORON TRIFLUORIDE-METHANOL</b> 14% boron trifluoride in methanol is useful for preparing methyl esters of fatty acids and for transesterification of triglycerides.	
<b>B 1127</b> 14% solution in sealed ampule. 5 ml 16.30 Shelf life is extended 25 ml 29.80 considerably in sealed ampules. 10 × 5 ml 106.10 [373-57-9] R: 11-23/25-34 S: 7-16-24-45	
<b>B 1252</b> 14% solution in bottle with screw- 5 ml 15.40 cap closure. 100 ml 20.80 [373-57-9] 250 ml 28.40 R: 11-23/25-34 S: 7-16-24-45 500 ml 48.20 1 liter 79.70	

(Continued)

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