

HIGH PURITY INORGANIC Chemicals

7740-A

September, 1986
NEW

GE Catalog Number 111-30-61

DESCRIPTION:

40% Ammonium Fluoride is available to serve a need where high purity is required. Applications for 40% Ammonium Fluoride are found in the electronic and optical industry.

AVAILABILITY:

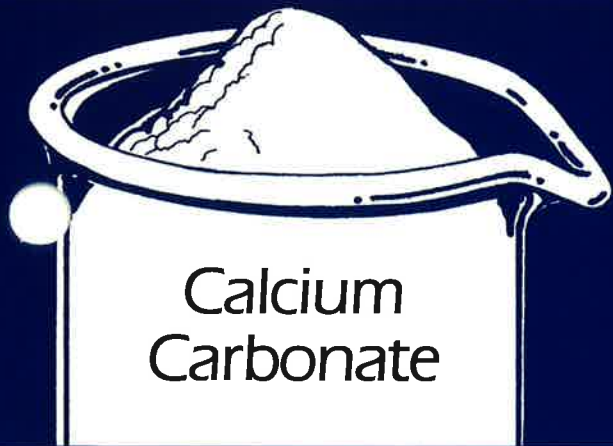
40% Ammonium Fluoride is supplied as a clear liquid in one or five gallon plastic containers. Special packaging is available upon request.

CHEMICAL PROPERTIES:

Assay as NH_4F	40% \pm 1%
pH of a 1% Solution	5.5 - 7.5
Aluminum as Al	0.0002% Maximum
Barium as Ba	0.0001% Maximum
Boron as B	0.0002% Maximum
Cadmium as Cd	0.00005% Maximum
Calcium as Ca	0.00005% Maximum
Cobalt as Co	0.00005% Maximum
Copper as Cu	0.00005% Maximum
Gallium as Ga	0.00005% Maximum
Germanium as Ge	0.00005% Maximum
Iron as Fe	0.0001% Maximum
Lithium as Li	0.0001% Maximum
Magnesium as Mg	0.00005% Maximum
Manganese as Mn	0.00005% Maximum
Nickel as Ni	0.0001% Maximum
Potassium as K	0.0002% Maximum
Silver as Ag	0.00005% Maximum
Sodium as Na	0.0006% Maximum
Strontium as Sr	0.0001% Maximum
Tin as Sn	0.00005% Maximum
Zinc as Zn	0.00005% Maximum

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.



HIGH PURITY INORGANIC Chemicals

7740-E

September, 1986

GE Catalog Number 111-30-26 & 27

DESCRIPTION:

Calcium Carbonate is available to serve a need where high purity and controlled particle size are required. Applications for Calcium Carbonate are found in the manufacture of halophosphate type phosphors and in the food and pharmaceutical industry.

AVAILABILITY:

Calcium Carbonate is supplied as a free flowing powder. Packaging is available in polyethylene lined fiber drums of 45.4 kilos (100 lbs.) each. Special packaging is available upon request.

CHEMICAL PROPERTIES:

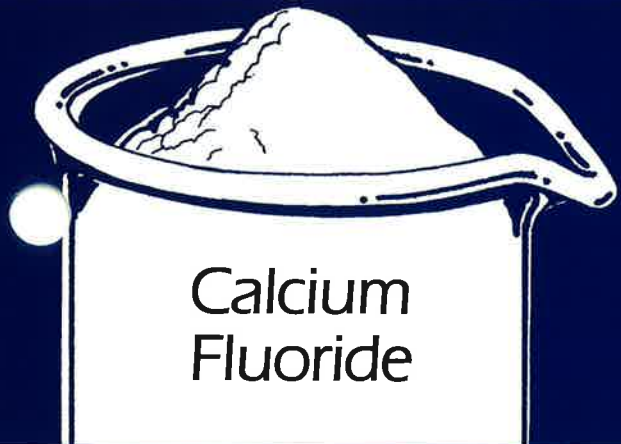
	111-30-26		111-30-27	
Calcium assay as CaCO ₃	99.5%	Minimum	99.5%	Minimum
Loss on Ignition at 1100°C	44.1%	Maximum	44.1%	Maximum
Chloride as Cl	0.005%	Maximum	0.001%	Maximum
Fluoride as F	0.001%	Maximum	0.001%	Maximum
Sulfate as SO ₄	0.005%	Maximum	0.005%	Maximum
Aluminum as Al	0.005%	Maximum	0.005%	Maximum
Barium as Ba	0.005%	Maximum	0.005%	Maximum
Chromium as Cr	0.001%	Maximum	0.001%	Maximum
Cobalt as Co	0.001%	Maximum	0.001%	Maximum
Copper as Cu	0.001%	Maximum	0.001%	Maximum
Iron as Fe	0.001%	Maximum	0.001%	Maximum
Lead as Pb	0.001%	Maximum	0.001%	Maximum
Magnesium as Mg	0.005%	Maximum	0.005%	Maximum
Manganese as Mn	0.001%	Maximum	0.001%	Maximum
Nickel as Ni	0.001%	Maximum	0.001%	Maximum
Potassium as K	0.001%	Maximum	0.001%	Maximum
Silicon as Si	0.001%	Maximum	0.001%	Maximum
Sodium as Na	0.0035%	Maximum	0.0035%	Maximum
Strontium as Sr	0.100%	Maximum	0.100%	Maximum
Tin as Sn	0.001%	Maximum	0.001%	Maximum
(Co, Cr, Cu, Fe, Mn, Ni and Pb are each typically < .0002%)				

Physical Properties:

Particle Size APD via FSSS* 7.5 (± 1.5) Microns

7.5 (± 1.5) Microns

*Average particle diameter using Fisher Sub Sieve Sizer for measurement.



HIGH PURITY INORGANIC Chemicals

7740-F

September, 1986

GE Catalog Number 111-30-3

DESCRIPTION:

Calcium Fluoride is available to serve a need where high purity and controlled particle size are required. Applications for Calcium Fluoride are found in the manufacture of halophosphate type phosphors and in the optics and specialty glass industry.

AVAILABILITY:

Calcium Fluoride is supplied as a free flowing powder. Packaging is available in polyethylene lined fiber drums of 27.2 kilos (60 lbs.) each. Special packaging available upon request.

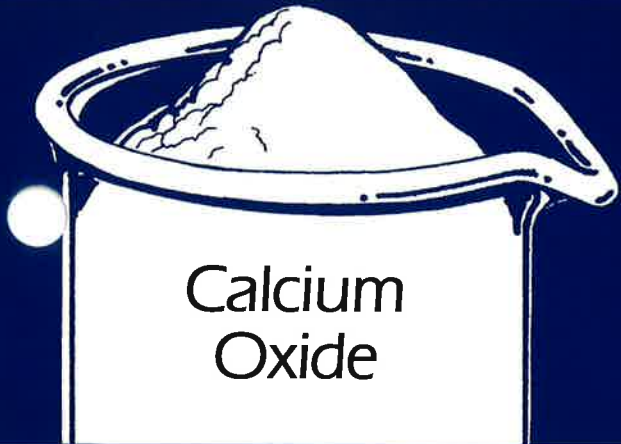
CHEMICAL PROPERTIES:

Calcium assay as Ca	50.7%	Minimum
Fluoride as F	47.5%	Minimum
Loss on Ignition at 400°C	0.25%	Maximum
Chloride as Cl	0.001%	Maximum
Sulfate as SO ₄	0.005%	Maximum
Aluminum as Al	0.010%	Maximum
Barium as Ba	0.010%	Maximum
Chromium as Cr	0.001%	Maximum
Cobalt as Co	0.001%	Maximum
Copper as Cu	0.0001%	Maximum
Iron as Fe	0.001%	Maximum
Lead as Pb	0.001%	Maximum
Magnesium as Mg	0.005%	Maximum
Manganese as Mn	0.010%	Maximum
Nickel as Ni	0.001%	Maximum
Potassium as K	0.010%	Maximum
Silicon as Si	0.010%	Maximum
Sodium as Na	0.035%	Maximum
Strontium as Sr	0.010%	Maximum

Physical Properties:
 Particle Size 1.6 (±.2) Microns

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.



HIGH PURITY INORGANIC Chemicals

7740-G

September, 1986
(Replaces 7780-P—September, 1982)

GE Catalog Number 117-12-1

DESCRIPTION:

Calcium Oxide is available to serve the market where a need for high purity and controlled particle size is needed. Applications are found in the oxide ceramics, pharmaceutical and plastic industries.

AVAILABILITY:

Calcium Oxide is supplied as a free flowing white powder. Packaging is available in tightly sealed, moisture resistant containers such as glass jars or polyethylene bags in pails or drums to serve your requirements.

CHEMICAL PROPERTIES:

Calcium assay as Ca	71.00%	Minimum
Loss on Ignition at 1000°C	1%	Maximum
Iron	0.0005%	Maximum
Heavy Metals as Lead	0.001%	Maximum
Copper	0.001%	Maximum
Chromium	0.001%	Maximum
Sodium	0.0030%	Maximum
Potassium	0.005%	Maximum
Strontium	0.0425%	Maximum
Magnesium	0.0040%	Maximum
Barium	0.0025%	Maximum
Chloride	0.005%	Maximum
Sulfate	0.02%	Maximum
Nitrate	0.01%	Maximum

Physical Properties:

Particle Size	3-5 Microns
Apparent Density	480 g/l

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.



(Dibasic)
Calcium
Phosphate



HIGH PURITY INORGANIC
Chemicals

7740-H

September, 1986

GE Catalog Number 111-30-28

DESCRIPTION:

Calcium Phosphate is available to serve a need where high purity and controlled particle size are required. Applications for Calcium Phosphate are found in the manufacture of halophosphate type phosphors, food, and beverages.

AVAILABILITY:

Calcium Phosphate is supplied as a free flowing powder. Packaging is available in polyethylene lined fiber drums of 90 kilos (200 lbs.) each. Special packaging is available upon request.

CHEMICAL PROPERTIES:

Calcium Phosphate	29.50% ($\pm 0.10\%$)	
Loss on Ignition at 1100°C	68.3% (+.1)	
Chloride as Cl	7.78% $\pm 0.15\%$	Maximum
Fluoride as F	0.01%	Maximum
Sulfate as SO ₄	0.001%	Maximum
Aluminum as Al	0.005%	Maximum
Barium as Ba	0.001%	Maximum
Chromium as Cr	0.001%	Maximum
Cobalt as Co	0.001%	Maximum
Copper as Cu	0.001%	Maximum
Iron as Fe	0.001%	Maximum
Lead as Pb	0.001%	Maximum
Magnesium as Mg	0.001%	Maximum
Manganese as Mn	0.005%	Maximum
Nickel as Ni	0.001%	Maximum
Potassium as K	0.001%	Maximum
Silicon as Si	0.001%	Maximum
Sodium as Na	0.010%	Maximum
Strontium as Sr	0.010%	Maximum
Tin as Sn	0.050%	Maximum
	0.001%	Maximum

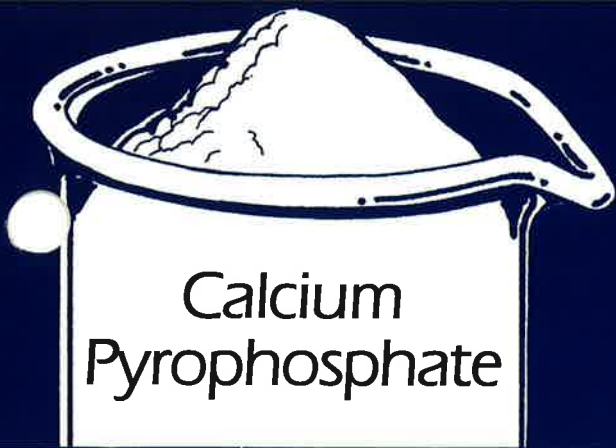
Physical Properties:

Particle Size APD via FSSS* 7.0 (± 0.6) Microns

*Average particle diameter using Fisher Sub Sieve Sizer for measurement.

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.



Calcium
Pyrophosphate



HIGH PURITY INORGANIC
Chemicals

7740-1

September, 1986
(Replaces 7780-P—September, 1982)

GE Catalog Number 117-12-5

DESCRIPTION:

Calcium Pyrophosphate is available to serve the market where a need for high purity and controlled particle size is required. Applications are found in the oxide ceramic, plastic, metal polishing and pharmaceutical industries.

AVAILABILITY:

Calcium Pyrophosphate is supplied as a free flowing white powder. Packaging is available to meet your needs. Typical packages are tightly sealed glass containers or polyethylene bags in steel or fiber containers.

CHEMICAL PROPERTIES:

Calcium assay as Ca	31.30%	Minimum
Hydroxy Apatite as $3\text{Ca}_3(\text{PO}_4)_2\text{Ca}(\text{OH})_2$	4%	
Iron	0.001%	Maximum
Heavy Metals as Pb	0.001%	Maximum
Copper	0.001%	Maximum
Chromium	0.001%	Maximum
Sodium	0.007%	Maximum
Potassium	0.001%	Maximum
Strontium	0.05%	Maximum
Magnesium	0.007%	Maximum
Barium	0.001%	Maximum
Chloride	0.01%	Maximum
Sulfate	0.01%	Maximum
Nitrate	0.01%	Maximum

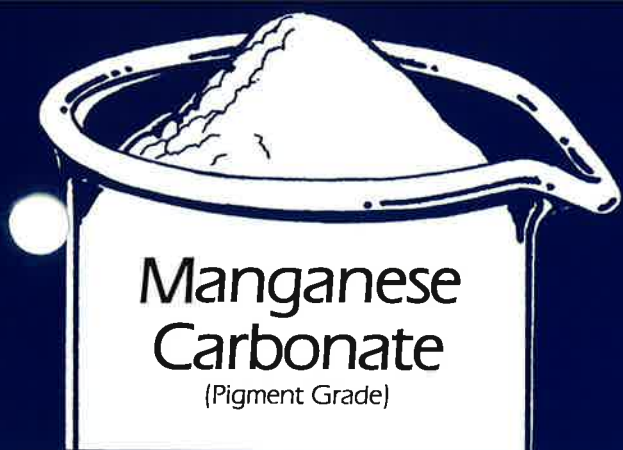
Physical Properties:

Particle Size

6-8 Microns

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.



HIGH PURITY INORGANIC Chemicals

7740-M

September, 1986

GE Catalog Number 117-12-13

DESCRIPTION:

Manganese Carbonate is available to serve a need where high purity and controlled particle size are required. Applications for Manganese Carbonate are found in the manufacture of halophosphate type phosphors and in the pigment industry.

AVAILABILITY:

Manganese Carbonate is supplied as a free flowing powder. Packaging is available in polyethylene lined fiber drums of 113.4 kilos (250 lbs.) each. Special packaging available upon request.

CHEMICAL PROPERTIES:

Manganese assay as Mn	43.5-46.5%
Insoluble in HCl	0.01% Maximum
Substances not ppt by (NH ₄) ₂ S	0.050% Maximum
Sulfate as SO ₄	0.005% Maximum
Aluminum as Al	0.01% Maximum
Barium as Ba	0.005% Maximum
Calcium as Ca	0.05% Maximum
Chromium as Cr	0.001% Maximum
Cobalt as Co	0.003% Maximum
Copper as Cu	0.001% Maximum
Iron as Fe	0.002% Maximum
Lead as Pb	0.002% Maximum
Magnesium as Mg	0.005% Maximum
Nickel as Ni	0.002% Maximum
Silicon as Si	0.01% Maximum
Sodium as Na	0.005% Maximum
Strontium as Sr	0.01% Maximum
Titanium as Ti	0.005% Maximum
Zinc as Zn	0.005% Maximum
(Co, Cr, Cu, Fe, Ni and Pb are each typically <.001%)	

Physical Properties:

This product is specially manufactured to produce an extra-fine particle size powder with a relatively narrow particle size distribution and a correspondingly high surface area.

APD via FSSS* 1.0 ± 0.3 Microns

Surface Area** via B.E.T. N₂ gas absorption 100 ± 30m²/gr.

* Average particle diameter measurement using a Fisher Sub Sieve Sizer unit.

** Surface area measurement using a Quantachrome Monosorb unit.



HIGH PURITY INORGANIC Chemicals

7740-N

September, 1986

GE Catalog Number 111-30-16

DESCRIPTION:

Strontium Carbonate is available to serve a need where high purity and controlled particle size are required. Applications for Strontium Carbonate are found in the electronic, glass and chemical industries.

AVAILABILITY:

Strontium Carbonate is supplied as a free flowing powder. Packaging is available in polyethylene lined fiber drums of 90 kilos (200 lbs.) each. Special packaging is available upon request.

CHEMICAL PROPERTIES:

Strontium	59.00%	Minimum
Nitrate	0.6%	Maximum
Barium	1.0%	Maximum
Calcium	1.0%	Maximum
Iron	0.0005%	Maximum
Magnesium	0.001%	Maximum
Sodium	0.050%	Maximum
Aluminum	0.001%	Maximum
Silicon	0.001%	Maximum

Physical Properties:

Particle Size APD via FSSS* 1.5 (± .6) Microns

*Average particle diameter using Fisher Sub Sieve Sizer for measurement.

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.



Strontium Fluoride



HIGH PURITY INORGANIC Chemicals

7740-O

September, 1986

GE Catalog Number 111-30-17

DESCRIPTION:

Strontium Fluoride is available to serve a need where high purity and controlled particle size are required. Applications for Strontium Fluoride are found in the glass, crystal growing and electronic industries.

AVAILABILITY:

Strontium Fluoride is supplied as a free flowing powder. Packaging is available in polyethylene lined fiber drums of 27.2 kilos (60 lbs.) each. Special packaging is available upon request.

CHEMICAL PROPERTIES:

Strontium	69.50%	Minimum
Loss on Ignition	0.2%	Maximum
Barium	0.2%	Maximum
Calcium	0.1%	Maximum
Iron	0.001%	Maximum
Magnesium	0.005%	Maximum
Sodium	0.01%	Maximum

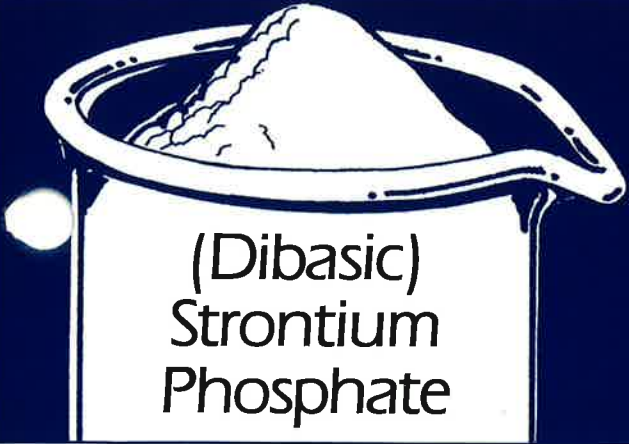
Physical Properties:

Particle Size APD via FSSS* 1.2 (\pm 0.2) Microns

*Average particle diameter using Fisher Sub Sieve Sizer for measurement.

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.



(Dibasic)
Strontium
Phosphate



HIGH PURITY INORGANIC Chemicals

7740-P

September, 1986

GE Catalog Number 111-30-15

DESCRIPTION:

Strontium Phosphate is available to serve a need where high purity and controlled particle size are required. Applications for Strontium Phosphate are found in the electronic industries along with its use as a chemical intermediate.

AVAILABILITY:

Strontium Phosphate is supplied as a free flowing powder. Packaging is available in polyethylene lined fiber drums of 45.4 kilos (100 lbs.) each. Special packaging is available upon request.

CHEMICAL PROPERTIES:

Strontium	47.0%	Minimum
Phosphate	51.0%	Minimum
Barium	1.0%	Maximum
Calcium	0.1%	Maximum
Iron	0.001%	Maximum
Magnesium	0.001%	Maximum
Sodium	0.010%	Maximum
Aluminum	0.005%	Maximum
Silicon	0.005%	Maximum

Physical Properties:
 Particle Size APD via FSSS* 0.9 (± .3) Microns

*Average particle diameter using Fisher Sub Sieve Sizer for measurement.

TOXICITY:

This chemical is offered for industrial use only and should not be used for drug, household or other uses. Additionally, a material safety data sheet for this chemical is available upon request and will accompany the material when shipped.

Material Safety Data

A material safety data sheet for this chemical is available upon request

Availability

Normal lead time for shipment is 8 weeks

Ordering

To order this and other high purity inorganic chemicals, contact your local GE sales representative or:

Domestic

GE Chemical Products Plant
1099 Ivanhoe Road
Cleveland, OH 44110
Phone: (216) 266-4611
FAX: (216) 266-4257

International

GE Lighting
Components Marketing & Sales Operation
1975 Noble Road
Nela Park, Cleveland, OH 44112-6300
Phone: (216) 266-3295
FAX: (216) 266-2306

GE Lighting Components Marketing & Sales Operation

In addition to lamp phosphors, GE Lighting Components Marketing & Sales Operation is the source for tungsten and molybdenum wire, glass, Lucalox^R ceramic, chemicals, Dumet and Cumet wire, EDM wire, leads, lamp bases and other components used the lamp, electronic, and other industries



GE Components
Marketing & Sales Operation
