

**Powder Processing Equipment and Systems** 



### Feeding – At the centre of total process control



Controlled feed into a Gericke continuous mixer

## Proven designs with thousands of running applications.

**G**ericke volumetric feeders are designed for throughputs from 0.05 to 50,000 litres per hour for most dry solids and liquid applications.

Gericke's range of feeders are based upon a robust modular design which are used in almost all processing applications including:

- Chemical
- Foods
- Pharmaceutical
- Construction Minerals
- Plastics
- Detergents

## Gericke – Feeding of bulk material since 1894.

**G**ericke offer cost effective feeding solutions for most powders, granules, fibres. flavours, pigments and liquids.

#### **Added Benefit:**

Expert advice on correct selection and operation of the unit, prompt after sales support by specialist engineers, secure return on investment.



# Modular feeding equipment – designed for process flexibility

#### **Volumetric feeding**

The feed rate is measured by volume against time.

A reliable volumetric device is essential for a high accuracy gravimetric weigh feeder. Accurate metering of bulk solids is achieved using a spiral helix, rotary valve, rotating agitator, vibrating tray or cylindrical stator. Even in the volumetric mode, the metering rate remains constant under the condition of a repeatable fill level within of the selected feeding tool and an even bulk density of the powder.

#### **Gravimetric Feeding**



Batch feeding



Continuous feeding



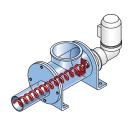
Using a gravimetric feeder with load cells, a batch weight can be accurately dispensed or the feed rate continuously controlled. The mode is dependent on the process requirements.

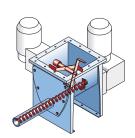
Gericke can upgrade most volumetric feeding models into Gravimetric devices.

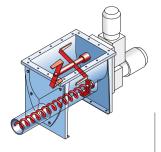
batch weight is regulated by the process controller.

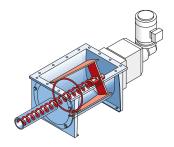
The feedrate or

## The right feeder for each specific application









#### **GPD**

#### Low cost, efficient feeder

#### Application:

Free flowing dry materials for lower feed rates

#### Advantages:

Quick and simple to dismantle for wet and dry cleaning, light weight unit (9 Kg)

#### Capacity range\*:

0,05-600 l/h

#### Type:

GPD 100

#### **GLD**

## Compact feeder with agitator for high accuracy feeding

#### Application:

Suitable for most dry solids, pilot plants, frequent product changes

#### Advantages:

Versatile, adaptable, compact, reliable, precise

#### Capacity range\*:

0,05-600 l/h

#### Type:

GLD 77 (mechanical agitator), GLD 87 (agitator with independent drive)

#### **GDU**

## Universal feeder, minimal product retention, used for poor flowing materials

#### Application:

Medium to high capacity feed rates, hygienic design, difficult products, high feeding accuracy, raisin and fruit feeders, (special applications)

#### Advantages:

Versatile, adaptable, complete emptying

#### Capacity range\*:

1,3–25.600 l/h (depending on model)

#### Type:

GDU 201, GDU 451, GDU 801 (with agitator), GDU 301, GDU 601 (without agitator)

#### **GAC**

#### Universal Feeder for highest accuracy, homogeneity and distribution of bulk materials

#### Application:

Medium to high feed rates, very difficult materials, highest feeding accuracy batch weighing & feeding station (GAC 233F)

#### Advantages:

Feeding tool and homogeniser are concentrically aligned with large product entry suitable for difficult products

#### Capacity range\*:

1,3-27.000 l/h

#### Type:

GAC 207, GAC 232; GAC 233 F (with separate helix for coarse and trickle feeding)



GPD 100



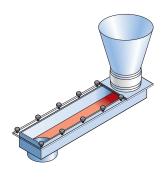
GLD 87

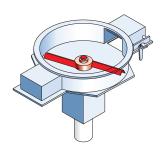


GDU 451



GAC 207





#### **VIBRO**

Vibro feeder for coarse and fragile products

Application: Large capacity range, fragile or abrasive products, light and coarse materials, fibres

Advantages: No rotating parts, gentle operation, easy cleaning, no component wear

Capacity range\*: 1–10000 l/h

#### **RA**

Discharge and feeding device for very poor flowing products. A rotating paddle sweeps the product towards the outlet valves. An adjustable valve regulates the feed rate

#### Application:

Discharge from silo's or hoppers, refilling loss-in-weight feeders, component feeding

#### Advantages:

Discharge without segregation, feed-distribution (1 – 4 outlets) and shut off valve combined into one device

Capacity range\*: 0,2-40.000 l/h

#### Type:

RA 500, RA 800, RA 1200, RAS (RAS Type for over/under pressures)







RA with 1 – 4 outlets

### Technical advantages of Gericke feeders:

Robust construction
High reliability for long
life cycle
Hygienic design (in accordance with EHEDG)
Large range of feed
tool lengths
No segregation

Large entry section Constant bulk density Crevice free surfaces

Continuous welding (option)
Range of drive options

+/- pressure rated options available



#### The benefits:

Easy cleaning
High feeding accuracy
Guaranteed recipe reliability
Versatile applications
Low maintenance costs
Simple to control
Adaptable (easily adaptable)



ISO 9001-2000 quality guarantee Gericke is a member of EHEDG

## Selecting the correct feeding tool

#### **Product Characteristics**

- free flowing (salt, corn, sugar)
- flushing (carbonates, fly ash, gypsum)
- fluidisable (cocoa)
- cohesive (TiO<sub>2</sub>, stearates)
- adhesive (carbon black, pigments)
- abrasive (quartz sand, silicon carbide)
- compressible (chalk)
- fragile (flakes, instant coffee)

#### Installation



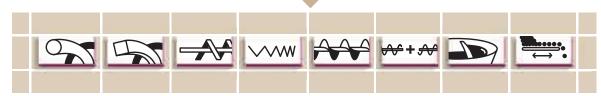
- Mounting (supported or hinged)
- Number of feeders
- Headroom
- Feed distance

#### **Process**



- Capacity
- Operation mode (batch/continuous)
- Pressure rating
- Accuracy
- Level of automation

#### Feeding tool selection



- Round spiral
- Square helix
- Helix with centre shaft and end bearing
- Variable pitch
- Full flight screw
- Vibro feeder

- Extended feed tool
- Fluidisation
- Rotating bin discharger

Accessories for high feed accuracy

Agitator

Homogeniser

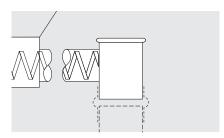
**Bridge breakers** 

- → consistent product flow
- repeatable bulk density for optimum feed accuracy
- Ensure difficult products discharge for the surge hopper into the feed chamber

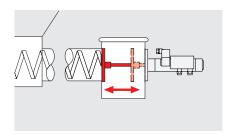
## Ancillary process equipment

Gericke feeders are designed using a modular system customised to the specific requirements of the application. The flexibility of the Gericke equipment range offers simplified system design and greater added value.

- Special designs for agitators and homogenisers
- Surface finish and coatings; EGPDFE, Bead blast, electropolished
- Variable feed tool lengths
- Shaft seals: stuffing box, PTFE lip seals, air purge glands
- AR outlet for vertical discharge
- ARFE outlet, flanged with end bearing
- ARFG outlet with "Granuflow" flow control
- AGP shut off valve with position indicator
- Hinged bottom door with safety switch
- FDA approved seals



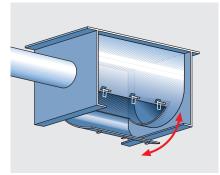
Type AR vertical outlet connection



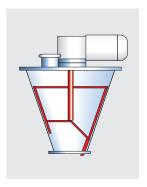
AGP outlet for instant product shut off (optional position indicator)



Semi-automated feeding station for accurate dosing into various sacks and boxes



GAC feeder with hinged door for quick cleaning



Hopper with vertical agitator

- Drive options
- Variable speed integrated frequency inverter
- Pressure tight design
- High temperature applications
- ATEX zones: 1, 2, 22, 21
- Special feeders for raisins and fruits
- Pneumatic conveying feeder refill systems



GDU 601 with extended feed screw

#### Selection of reference products

#### Density kg/l

A Activated Charcoal	0.21	Manganese Ore	1.8
Acrylic Resin (Fibres)	0.14	Marble Chips	1.5
Acrylic Resins (Granu Additives	0.2-0.4	Marble Dust Metallic Powder	1.2 3.04
Adipic Acid	0.62	Mica Flakes	0.16
Aerosil Aluminium Chloride	0.046 0.59	Milk Powder Molybdenum Oxide	0.58 1.82
Aluminium Flakes Aluminium Fluoride	1.30 1.22	N	
Aluminium Oxide	0.90	Nuts Nylon (Fibres)	0.41
Aluminium Powder Aluminium Silicate	1.30 0.54	Nylon (Flakes)	0.52
Aluminium Sulphate	0.90	Nylon (Granules) Nylon (Powder)	0.57 0.63
Ammonium Nitrate Ammonium Phospha	0.62 te 0.83	O	0.05
Antimony Oxide	0.69	Oat Cream Powder	0.57
Apple Pectin Ascorbic Acid	0.51 0.55	Oat Flakes Oat Flour	0.45
В		Onion (Chopped)	0.24
Barium Carbonate	0.17-1.4	Onion(Powder) Ores 1	0.41 4–2.6
Barium Stearate Barium Sulphate	0.23 1.45	Oxalic Acid	0.85
Barley Flour	0.63	P	0.27
Bauxite Borax	1.2 0.97	Peppercorn Perlite (Expanded)	0.27 0.12
Brick Dust	1.2	Perlite (Rock) Perlon Wool	1.17 0.25
C Cab=O=Sil	0.03	Pesticide 0	4-0.6
Calcium Carbonate	1.2	Phenol Resin (Powder) Pigments 0	0.54 2–1.0
Calcium Chloride Calcium Stearate	0.97–1.1 0.39	Polyethylene (Granules)	0.57
Calcium Sulphate	0.74	Polyethylene (Powder) Poly–Electrolyte 0	0.67 5–0.7
Carbon Black Casting Powder	0.4 0.69	Polyester Chips	0.15
Celite	0.25	Polyester Resin (Flakes) Polypropylene (Granules)	0.4
Celluslose Acetate Cement	0.13 1.2	Polypropylene (Powder)	0.54
Ceramic Mixture	1.4	Polystyrene ((Expanded) Polystyrene (Granules)	0.1
Charcoal Powder Chicory Powder	0.40 0.49	Polystyrene (Powder)	0.65
Chocolate Powder	0.65 0.74	Polyvinyl Chloride (Granule   0.62	25)
Cinnamon Sugar Citric Acid	0.74	Potash (Flakes)	0.5
Coal Dust Cocoa Beans	0.59 0.56	Potassium Permanganate Potassium Sulphate	1.1 2.25
Cocoa Powder	0.5	Potato Flour PTFE (Granules)	0.7 0.53
Coffee Beans Coffee Powder	0.39 0.18	PTFE Powder (Algoflow)	0.51
Corn	0.6	PVC Floor Covering Chips PVC Powder	0.6
Cornflour Corn Starch	0.74 0.48	Q	7.0
D	0.70	Quartz Powder	1.2
Dacron	0.51	Quartz Sand	1.5
Dextrose Detergents	0.57 0.3	R Rice	0.94
Diatomite	0.08-0.25	Rice Crispies	0.11
Dyestuffs E	0.25–0.75	Rubber (Chips) Rubber (Granules)	0.4
Egg Powder	0.35	S	
Electrode Carbon Epoxy Resin Powder	1.0 0.8	Salt Sand	1.18
F	0.0	Sawdust 0.29	-0.45
Feedstuffs (Animal)	0.49	Silica – Gel Silica	0.25 1.05
Ferric Chloride Ferric Oxide	1.6 0.87–1.3	Silica Acid (Powder)	0.23
Felspar	1.2–1.8	Sipernat Slag	0.22
Ferrasil Fibre–Glass Fibres	0.98 0.2	Slag Wool	0.09
Filtration Aids			
File C-l	0.23	Soap Flakes	0.47
Filter Cakes Fish Food	0.23 0.65 0.77	Soap Flakes Soap Powder Soda	0.58
Fish Food Flavourings	0.23 0.65 0.77 0.33	Soap Flakes Soap Powder	0.58
Fish Food Flavourings Flue Ash Flue Dust	0.23 0.65 0.77 0.33 1.06 1.30	Soap Flakes Soap Powder Soda Sodium Bicarbonate Sodium Chloride Sodium Nitrate	0.58 1.0 0.98 1.18 1.35
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes	0.23 0.65 0.77 0.33 1.06 1.30 0.011	Soap Flakes Soap Powder Soda Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Perborate Sodium Tripolyphosphate	0.58 1.0 0.98 1.18 1.35 0.78 0.78
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25	Soap Flakes Soap Powder Soda Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Perborate Sodium Tripolyphosphate Spice Mixture	0.58 1.0 0.98 1.18 1.35 0.78 0.78
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41	Soap Flakes Soap Powder Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Perborate Sodium Tipolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers	0.58 1.0 0.98 1.18 1.35 0.78 0.78 0.75 0.42
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25	Soap Flakes Soap Powder Soda Bicarbonate Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Perborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules	0.58 1.0 0.98 1.18 1.35 0.78 0.78 0.42 0.42
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth <b>G</b> Garlic Powder	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35-0.6	Soap Flakes Soap Powder Sodi Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Powder Stearic Acid	0.58 1.0 0.98 1.18 1.35 0.78 0.75 0.42 0.42 0.67 0.67
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth <b>G</b>	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6	Soap Flakes Soap Powder Soda Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Perborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Fowder	0.58 1.0 0.98 1.18 1.35 0.78 0.75 0.42 0.42 0.75
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth <b>G</b> Garlic Powder Gelatine Glass (Ground) Glass (Ground)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35-0.6	Soap Flakes Soal m Bicarbonate Sodium Bicarbonate Sodium Chloride Sodium Perborate Sodium Perborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose (Crystalline)	0.58 1.0 0.98 1.18 1.35 0.78 0.75 0.42 0.42 0.67 0.55 0.58 0.54
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Shavings Fungicide Fullers Earth <b>G</b> Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Fibres)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6	Soap Flakes Soap Powder Sodium Bicarbonate Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Perborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Crystalline) Sugar (Crystalline)	0.58 1.00 0.98 1.18 1.35 0.78 0.75 0.42 0.44 0.75 0.67 0.55 0.58 0.54 0.61
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth <b>G</b> Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Firit) Glass (Firit) Glass (Firit) Glass (Firit)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.2 1.95	Soap Flakes Soap Powder Sodia Bicarbonate Sodium Chloride Sodium Nitrate Sodium Poborate Sodium Poborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Growder Stearic Acid Surrope Pellets Sucrose Sucrose (Crystalline) Sugar (Powder) Sugar (Powder) Sugar (Powder) Sugar (Powder) Sugar (Powder)	0.58 1.00 0.98 1.18 1.35 0.78 0.75 0.42 0.44 0.75 0.58 0.54 0.54 0.62 0.62 0.62 0.62
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth <b>G</b> Gaflic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Frit) Glass (Beads) Glass (Beads) Glass (Beads)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.2 1.95 0.4	Soap Flakes Soap Powder Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Polyphosphate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Fowder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Royder) Sugar (Royder) Synthetic Wax Powder Synthetic Resin Granules	0.58 1.00 0.98 1.18 1.35 0.78 0.75 0.42 0.44 0.75 0.67 0.55 0.58 0.54 0.61
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth G Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Frit) Glass (Brites) Glass (Brites) Graphite (Granules)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 1.77 1.65 0.2 1.95 0.4 1.7 1.6 0.2 0.2 0.2 0.2 0.3 0.3 0.0 0.3 0.0 0.3 0.0 0.3 0.0 0.0	Soap Flakes Soap Powder Sodi Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sodium Propost Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Fowder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Powder) Sugar (Raw) Sugar (Raw) Synthetic Wax Powder Synthetic Resin Granules O.55—0.65	0.58 1.00 0.98 1.18 1.35 0.78 0.75 0.42 0.44 0.75 0.58 0.54 0.54 0.62 0.62 0.62 0.62
Fish Food Havourings Flue Ash Flue Dust Floam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Firit) Glass (Firit) Glass (Beads) Glazing Mixture Glue Powder Graphite (Granules) Graphite (Granules) Graphite (Granules) Graphite (Granules) Graphite (Satt)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.35 0.41 0.35 0.4 1.7 1.65 0.2 0.4 1.7 1.65 0.2 0.66 0.2 0.66 0.3 0.7 0.4 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Soap Flakes Soap Powder Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Polyphosphate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Fowder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Royder) Sugar (Royder) Synthetic Wax Powder Synthetic Resin Granules	0.58 1.00 0.98 1.18 1.35 0.78 0.75 0.42 0.44 0.75 0.58 0.54 0.54 0.62 0.62 0.62 0.62
Fish Food Flavourings Flue Dust Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth G Garlic Powder Gelatine Glass (Ground) Glass (Fibres) Glass (Fibres) Graphite (Granules) Graphite (Gartules) Graphite (Gartules)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6 0.33 0.74 1.77 1.65 0.2 1.95 0.4 0.66 1.112 0.58 0.5	Soap Flakes Soap Powder Sodi Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sodium Perborate Sodium Tipolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Poxtalline) Sugar (Powder) Sugar (Raw) Synthetic Wax Powder Synthetic Resin Granules 0.55–0.65 Synthetic Resin Powder 0.65–0.75	0.58 1.00 0.98 1.18 1.35 0.78 0.78 0.42 0.44 0.55 0.54 0.62 0.62 0.81 0.42
Fish Food Flavourings Flue Dust Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth G Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Glass (Fibres) Graphite (Granules) Graphite (Granules) Graphite (Granules) Grass Seed Grinding Powder Grypsum	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.35-0.6 0.33 0.74 1.77 1.65 0.2 2.5 0.40 0.66 1.12 0.58 0.58 0.58 0.58	Soap Flakes Soap Powder Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Polyphosphate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Fowder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Royder) Sugar (Royder) Synthetic Wax Powder Synthetic Resin Granules 0.55-0.65 Synthetic Resin Fowder 0.65-0.75 T Talcum	0.58 1.00 0.98 1.18 1.35 0.78 0.78 0.42 0.44 0.75 0.67 0.67 0.67 0.62 0.62 0.81 0.42
Fish Food Havourings Flue Ash Flue Dust Floam Plastic Flakes Foam Plastic Flakes Foam Shavings Fungicide Fullers Earth  Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Glass (Fribres) Graphite (Growder)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.62 0.62 0.66 1.12 0.58 0.62 0.63 0.62 0.63 0.64 0.65 0.65 0.75 0.	Soap Flakes Soap Powder Sodium Bicarbonate Sodium Bicarbonate Sodium Intrate Sodium Nitrate Sodium Perborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Crystalline) Sugar (Rowder) Sugar (Rowder) Sugar (Rowder) Sugar (Raw) Synthetic Wax Powder Synthetic Resin Granules 0.55–0.65  T Talcum Tea Teffon Fibres	0.58 1.0 0.98 1.18 0.78 0.75 0.42 0.45 0.55 0.54 0.62 0.81 0.42
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth Garlie Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Frit) Glass (Frit) Glass (Frit) Glass (Frit) Glass (Ground) Glass (Ground) Glass (Ground) Glass (Ground) Glass (Ground) Glass (Ground) Glass (Ground) Glass (Ground) Glass (Ground) Graphite (Granules) Graphite (Satly) Grass Seed Grinding Powder Gypsum Gypsum Calcined Gravel	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.35-0.6 0.33 0.74 1.77 1.65 0.2 2.5 0.40 0.66 1.12 0.58 0.58 0.58 0.58	Soap Flakes Soap Powder Sodis Sodium Bicarbonate Sodium Orloride Sodium Nitrate Sodium Nitrate Sodium Proborate Sodium Proborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Poytalline) Sugar (Powder) Sugar (Royuder) Sugar (Royuder) Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.75 T Talcum Tea Talcum Tea Terephtalic Acid	0.58 1.0 0.98 1.18 0.78 0.75 0.67 0.55 0.54 0.81 0.62 0.81 0.42
Fish Food Havourings Flue Ash Flue Dust Floam Plastic Flakes Foam Plastic Flakes Foam Shavings Fungicide Fullers Earth  Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Glass (Fribres) Graphite (Growder)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.62 0.62 0.66 1.12 0.58 0.62 0.63 0.62 0.63 0.64 0.65 0.65 0.75 0.	Soap Flakes Soap Powder Sodis Sodium Bicarbonate Sodium Orloride Sodium Nitrate Sodium Perborate Sodium Perborate Sodium Propolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Fowder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Poyder) Sugar (Royder) Sugar (Royder) Sugar (Royder) Synthetic Max Powder Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.75 T Talcum Tea Teifon Fibres Terephtalic Acid Textile Fibres Titanium Dioxide (White)	0.58 1.00 0.98 0.75 0.42 0.44 0.75 0.67 0.58 0.64 0.62 0.62 0.62 0.62 0.62 0.63 0.42
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Firit) Gla	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.35 0.41 0.35-0.6 0.33 0.74 1.7 1.65 0.2 0.62 0.66 0.12 0.58 0.59 0.40 0.6	Soap Flakes Soap Powder Sodis Sodium Bicarbonate Sodium Chloride Sodium Nitrate Sodium Nitrate Sodium Poborate Sodium Poborate Sodium Proborate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Granules Starch Granules Starch Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Royder) Sugar	0.58 1.0 0.9 0.75 0.42 0.44 0.75 0.65 0.62 0.81 0.42 0.44 0.79 0.49 0.49 0.14
Fish Food Flavourings Flue Dust Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Glazing Mixture Glue Powder Graphite (Ganules) Graphite (Founder) Graphite (Ganules) Graphite (Ganules) Graphite Granules) Graphite Granules Graphite Gra	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.41 0.35–0.6 0.25 0.41 1.7 1.65 0.2 1.95 0.4 0.6 1.12 0.5 0.5 0.6 1.12 0.5 0.5 0.5 0.5 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Soap Flakes Soap Powder Soda Sodium Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sodium Perborate Sodium Perborate Sodium Tippolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Rystalline) Sugar (Rystalline) Sugar (Raw) Synthetic Wax Powder Synthetic Resin Granules 0.55–0.65 Synthetic Resin Powder 0.65–0.75 Talcum Tea Tea Teflon Fibres Terephtalic Acid Textile Fibres Tranium Dioxide (White) Tobacco (Leaf) Tobacco (Leaf) Tobacco (Leaf) Tin-Calcium Phosphate	0.58 1.00 1.18 1.35 0.78 0.42 0.40 0.55 0.58 0.58 1.02 0.62 0.81 0.42 0.49 0.49 0.49 0.19 0.19 0.19
Fish Food Havourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Firit) Gla	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.35 0.41 0.35-0.6 0.33 0.74 1.7 1.65 0.2 0.62 0.66 0.12 0.58 0.59 0.40 0.6	Soap Flakes Soap Powder Soda Soap Powder Sodium Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Perborate Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Fowder Stearic Aciel Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Powder) Sugar (Powder) Sugar (Rowder) Sugar (Rowder	0.58 1.00 0.98 1.18 1.35 0.78 0.75 0.67 0.55 0.67 0.62 0.42 0.44 0.42 0.49 0.14 0.49 0.19 0.75 0.75 0.75
Fish Food Flavourings Flue Dust Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Graphite (Ganules) Graphite (Granules) Graphite (Gran	0.23 0.65 0.67 0.33 1.06 1.30 0.011 0.05 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.5 0.4 0.6 1.12 0.5 0.4 0.6 1.12 0.5 0.4 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Soap Flakes Soap Powder Sodi Soap Powder Sodi Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sodium Perborate Sodium Perborate Sodium Tipolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Postalline) Sugar (Powder) Sugar (Raw) Sugar (Powder) Sugar (Raw) Sugar (Powder) Sugar (Raw) The Sugar (Powder) Sugar (Crystalline) Sugar	0.58 1.0 0.98 1.18 1.35 0.78 0.75 0.67 0.55 0.54 0.67 0.62 0.81 0.42 0.49 0.49 0.19 0.19 0.19 0.49
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Gribers) Glass (Fibres) Gla	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.25 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.2 0.62 0.62 0.62 0.62 0.66 1.12 0.55 0.16 0.25 0.16 0.25 0.16 0.25 0.17 0.17 0.17 0.19 0.1	Soap Flakes Soap Powder Sodiu Bicarbonate Sodium Ricarbonate Sodium Nitrate Sodium Nitrate Sodium Poporate Sodium Poporate Sodium Poporate Sodium Poporate Sodium Poporate Sodium Poporate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Granules Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Royd Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.65 Synthetic Resin Fowder 0.65–0.75 T Talcum Tea Teflon Fibres Terephtalic Acid Textile Fibres Tiranium Dioxide (White) Tobacco (Cigarettes) Tobacco (Ligarettes)	0.58 1.09 1.18 1.39 0.78 0.75 0.62 0.55 0.54 0.62 0.62 0.62 0.63 0.42 0.49 0.49 0.79 0.14 0.79 0.49 0.79 0.79 0.49
Fish Food Havourings Flue Ash Flue Dust Floam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Firit) Gl	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.35 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.25 0.41 0.35–0.6 0.62 0.66 1.12 0.58 0.59 0.41 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Soap Flakes Soap Powder Sodia Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Nitrate Sodium Poporate Sodium Poporate Sodium Poporate Sodium Propolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Granules Starch Granules Starch Granules Starch Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Rowd) Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.65 Synthetic Resin Fowder 0.65–0.75 T Talcum Tea Telfon Fibres Terephtalic Acid Textile Fibres Titanium Dioxide (White) Tobacco (Cigarettes)	0.58 1.00 0.98 1.18 1.35 0.78 0.75 0.42 0.40 0.55 0.81 1.02 0.42 0.49 0.49 0.79 0.75 0.79 0.49 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.7
Fish Food Flavourings Flue Ash Flue Dust Floam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Grimer) Glass (Fibres) Gla	0.23 0.655 0.777 0.33 1.06 1.30 0.0111 0.055 0.41 0.35-0.6 0.33 0.74 1.77 1.65 0.25 0.40 0.62 0.66 1.12 0.58 0.59 0.16 2.33 0.99 1.4-1.7 0.4-0.6 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6	Soap Flakes Soap Powder Soda Sodium Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sodium Perborate Sodium Perborate Sodium Tipolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Sucrose Sucrose (Crystalline) Sugar (Powder) Sugar (Powder) Sugar (Rowder) Sugar	0.58 1.09 1.18 1.35 0.78 0.75 0.42 0.40 0.55 0.54 0.42 0.42 0.49 0.19 0.19 0.75 0.55 3.28
Fish Food Flavourings Flue Dust Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Grimen) Glass (Fibres) Graphite (Ganules) Graphite (Ganules) Graphite (Fowder) Graphite (Ganules)	0.23 0.655 0.777 0.33 1.06 1.30 0.0111 0.055 0.41 0.35-0.6 0.33 0.74 1.77 1.65 0.25 0.40 0.62 0.66 1.12 0.58 0.59 0.16 2.33 0.99 1.4-1.7 0.4-0.6 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6 0.4-1.7 0.4-0.6	Soap Flakes Soap Powder Soda Soap Powder Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Pobroate Sodium Pobroate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Granules Starch Granules Starch Granules Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Rowd Sugar (Royder) Sugar (Rowd Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.65 Synthetic Resin Fowder 0.65–0.75 T Talcum Tea Teeflon Fibres Terephtalic Acid Textile Fibres Tiranium Dioxide (White) Tobacco (Cigarettes) Tobacco (Cigarettes) Tobacco (Cigarettes) Tobacco (Granules) Tir-Calcium Phosphate Tir-Sodium Resin Powder Vinyl Resin Fowder Vinyl Resin Fowder Vitamins 0.4	0.58 1.09 0.98 1.18 1.35 0.78 0.75 0.67 0.67 0.67 0.67 0.62 0.62 0.42 0.42 0.42 0.42 0.42 0.43 0.75 0.53 0.49 0.75 0.75 0.75 0.42
Fish Food Flavourings Flue Ash Flue Dust Floam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Splinters) Glass (Fibres)	0.23 0.65 0.77 0.33 1.06 1.30 0.011 0.05 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.2 1.95 0.4 0.62 0.66 1.12 0.58 0.59 0.4 0.62 0.63 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Soap Flakes Soap Powder Soda Soap Powder Sodium Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Perborate Sodium Perborate Sodium Perborate Sodium Tipolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Granules Starch Granules Starch Granules Sucrose Sucrose (Crystalline) Sugar (Powder) Sugar (Powder) Sugar (Rowder) Sugar (Rowd	0.58 1.098 1.188 1.35 0.78 0.78 0.78 0.40 0.67 0.50 0.50 0.62 0.62 0.63 0.62 0.63 0.78 0.79 0.79 0.75
Fish Food Flavourings Flue Dust Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Grimen) Glass (Fibres) Glazing Mixture Glue Powder Graphite (Ganules) Graphite (Garnules) Graphite (Fowder) Graphite (Graphite) Lime (Glaked) Limestone (Crushed) Limestone (Flour) M Magnesium Carbona	0.23 0.65 0.67 0.33 1.06 1.30 0.011 0.05 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.5 0.4 0.6 1.12 0.5 0.4 0.6 1.12 0.5 0.4 0.6 1.7 0.4 0.6 1.7 0.4 0.6 1.7 0.7 0.7 0.8 0.9 1.7 0.9 1.7 0.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1	Soap Flakes Soap Powder Soda Soap Powder Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Pobroate Sodium Pobroate Sodium Tripolyphosphate Spice Mixture Spinach Powder (Dry) Stabilisers Starch Granules Starch Granules Starch Granules Starch Granules Starch Granules Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Rowd Sugar (Royder) Sugar (Rowd Synthetic Resin Granules 0.55–0.65 Synthetic Resin Granules 0.55–0.65 Synthetic Resin Fowder 0.65–0.75 T Talcum Tea Teeflon Fibres Terephtalic Acid Textile Fibres Tiranium Dioxide (White) Tobacco (Cigarettes) Tobacco (Cigarettes) Tobacco (Cigarettes) Tobacco (Granules) Tir-Calcium Phosphate Tir-Sodium Resin Powder Vinyl Resin Fowder Vinyl Resin Fowder Vitamins 0.4	0.58 1.09 1.18 1.35 0.78 0.78 0.42 0.40 0.55 0.54 0.62 0.62 0.81 0.42 0.42 0.49 0.49 0.19 0.75 0.55 0.54 0.75 0.55 0.52 0.62 0.62 0.75 0.62 0.62 0.62 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75
Fish Food Flavourings Flavourings Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Glazing Mixture Glue Powder Graphite (Garnules) Graphite (Granules) Graphite (Granules) Graphite (Foath) Graphite (Foath) Graphite (Foath) Graphite (Foath) Herbicide I Insecticide Iron Sulphate K Kaolin (dry) L L Lime (Quick) Limes (Glaked) Limestone (Flour) M Magnesium Carbona Magnesium Carbona Magnesium Stearate	0.23 0.65 0.67 0.33 1.06 1.30 0.011 0.05 0.41 0.35–0.6 0.25 0.4 1.7 1.65 0.5 0.6 1.12 0.5 0.4 0.6 1.12 0.5 0.5 0.6 1.12 0.5 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.6 1.12 0.7 0.8 0.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Soap Flakes Soap Powder Soda Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sizench Granules Starch Granules Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Powder) Sugar (Roywder) Sugar (Roywder) Sugar (Roywder) Sugar (Roywder) Sugar (Roywder) Sugar (Rowder) Suga	0.58 1.18 0.78 0.78 0.75 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67
Fish Food Flavourings Flue Ash Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Graphite (Founder) Graphite (Founder) Graphite (Founder) H Herbicide I Insecticide Iron Powder Iron Sulphate K Kaolin (dry) L L Lime (Ouick) Lime (Slaked) Limestone (Crushed) Limestone (Flour) M Magnesium Carbona Magnesium Stearate Malt Flour	0.23 0.655 0.677 0.333 1.06 1.30 0.0111 0.055 0.41 0.35-0.6 0.33 0.74 1.77 1.655 0.22 1.95 0.62 0.66 1.12 0.58 0.58 0.59 0.15 0.16 1.12 0.59 0.16 1.12 0.59 0.15 0	Soap Flakes Soap Powder Soda Soap Powder Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Powder Sodium Powder Sodium Powder Sodium Powder Sodium Powder Sodium Powder Stach Granules Starch Powder Starch Fowder Starch Granules Starch Granules Starch Granules Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Rowd) Synthetic Resin Granules O.55-0.65 Synthetic Resin Granules O.55-0.65 Synthetic Resin Fowder O.65-0.75 T Talcum Tea Teflon Fibres Terephtalic Acid Textile Fibres Tirephtalic Acid Textile Fibres Tiranium Dioxide (White) Tobacco (Cigarettes) Tobacco (Ligarettes) Tobacco (Granules) Vanish Powder Vanish Powder (Course) Vinyl Resin Fowder Vitamins O.4 W Washing Powder Wheat Flour Wood Shavings Z Zinc Granules	0.586 0.75 0.75 0.75 0.67 0.75 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67
Fish Food Flavourings Flavourings Flue Dust Foam Plastic Flakes Foam Rubber Foam Shavings Fungicide Fullers Earth  G Garlic Powder Gelatine Glass (Ground) Glass (Ground) Glass (Fibres) Glazing Mixture Glue Powder Graphite (Garnules) Graphite (Granules) Graphite (Granules) Graphite (Foath) Graphite (Foath) Graphite (Foath) Graphite (Foath) Herbicide I Insecticide Iron Sulphate K Kaolin (dry) L L Lime (Quick) Limes (Glaked) Limestone (Flour) M Magnesium Carbona Magnesium Carbona Magnesium Stearate	0.23 0.65 0.67 0.33 1.06 1.30 0.011 0.05 0.41 0.35–0.6 0.33 0.74 1.7 1.65 0.5 0.4 0.62 1.95 0.4 0.62 1.95 0.4 0.62 1.35 0.62 1.35 0.62 1.35 0.62 1.35 0.62 1.35 0.62 1.35 0.62 1.35 0.62 1.35 0.62 0.62 1.35 0.62 0.62 0.63 0.63 0.63 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Soap Flakes Soap Powder Soda Bicarbonate Sodium Bicarbonate Sodium Nitrate Sodium Nitrate Sodium Perborate Sizench Granules Starch Granules Starch Granules Starch Powder Stearic Acid Styropor Pellets Sucrose Sucrose (Crystalline) Sugar (Powder) Sugar (Roywder) Sugar (Roywder) Sugar (Roywder) Sugar (Roywder) Sugar (Roywder) Sugar (Rowder) Suga	0.58 1.18 0.78 0.78 0.75 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67

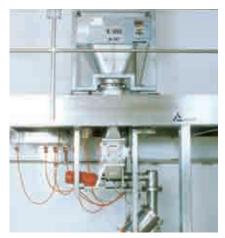
### **World-wide Service Support**

#### Material reference chart:

The stated values are for indicative purposes only and are subject to confirmation after receipt of all application details. Planning drawings are available in dxf format from the Gericke web-site www.gericke.net.

Туре	Feed capacity range	Drive	Weight	Height, Width, Length	Specials
	l/h*	kW	kg	(including drive and	
				feed device) mm	
GPD 100	0,05 – 600	0,12	9	270, 150, 480	without agitator
GLD 77	0,05 – 600	0,12	12	350, 200, 540	mechanical agitator
GLD 87	0,05 – 600	0,12	18	350, 350, 540	with independent drive
GAC 207	1,3 – 4.800	0,55	75	500, 290, 1110	homogenising
GAC 232	1,3 – 27.000	0,55	90	540, 390, 1260	homogenising
GAC 233 F	batch operation	0,55	140	450, 400, 1400	2 feedworms
GDU 201	1,3 – 800	0,55	50	340, 420, 1000	minimal product
					retention
GDU 301	1,3 – 11.200	0,55	40	280, 290, 1100	without agitator
GDU 451	10 – 11.200	0,55	100	680, 390, 1200	minimal product
					retention
GDU 601	10 – 25.000	0,55	50	360, 390, 1400	sack tipping
GDU 801	500 – 50.000	3,0	450	910, 1150, 2000	difficult powder
Vibro	0,5 - 10.000				
KAD150	batch operation	0,37	40	900, 510 diameter	conditioning
RA 500	400 – 40.000	3,0	100	ca. 600 diameter	1–4 outlets
RA 800	400 – 80.000	5,5	150	ca. 900 diameter	1–4 outlets
RA1200	400 – 100.000		200	ca. 1300 diameter	1–4 outlets

<sup>\*</sup>Approximate throughput values based on Semolina. Minimum value using smallest helix diameter at 5% of speed range and maximum value with largest helix at 100%



Feeding and sifting station for Pharmaceutical powders

For further information about gravimetric feeders and controllers please request the Gericke leaflets No 624 **Easydos** and No 625 Gravimetric feeders.

We will be pleased to forward copies or alternatively they can be downloaded for our website **www.gericke.net** 

**G**ericke feeders are used in a vast variety of production applications including: ice tea, syrups, spices, mustard, milk powder, cereal bars, pizza toppings, gypsum boards, salt, ceramics, metal coatings, PVC powder and many more.

#### **Powder Processing Equipment and Systems**

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