

## Annex 5. End uses, NACE2 sectors assignment

Material	Application	Share	NACE sector	VA
Aggregates	Construction	100%	C23 - Manufacture of other non-metallic mineral products	57,255
Aluminium	Construction	23%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Aluminium	Mobility (Transport and Automotive)	21%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Aluminium	Mobility (Transport and Automotive)	21%	C30 - Manufacture of other transport equipment	44,304
Aluminium	Packaging	17%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Aluminium	High Tech Engineering	12%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Aluminium	Consumer Durables	6%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Antimony	Flame retardants	43%	C20 - Manufacture of chemicals and chemical products	105,514
Antimony	Lead-acid batteries	32%	C27 - Manufacture of electrical equipment	80,745
Antimony	Lead alloys	14%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Antimony	Plastics (catalysts and stabilisers)	6%	C20 - Manufacture of chemicals and chemical products	105,514
Antimony	Glass and ceramics	5%	C23 - Manufacture of other non-metallic mineral products	57,255
Arsenic	Zinc production	71%	C24 - Manufacture of basic metals	55,426
Arsenic	Glassmaking	18%	C23 - Manufacture of other non-metallic mineral products	57,255
Arsenic	Chemicals	7%	C20 - Manufacture of chemicals and chemical products	105,514
Arsenic	Alloys	5%	C24 - Manufacture of basic metals	55,426
Arsenic	Electronics	0%	C26 - Manufacture of computer, electronic and optical products	65,703
Baryte	Weighting agent in oil and gas well drilling fluids or "muds"	60%	C23 - Manufacture of other non-metallic mineral products	57,255
Baryte	Filler in rubbers, plastics, paints & paper	30%	C22 - Manufacture of rubber and plastic products	75,980
Baryte	Chemical industry	10%	C20 - Manufacture of chemicals and chemical products	105,514
Bauxite	Refining to alumina	90%	C24 - Manufacture of basic metals	55,426

Material	Application	Share	NACE sector	VA
Bauxite	Refractories	3%	C23 - Manufacture of other non-metallic mineral products	57,255
Bauxite	Cement	3%	C23 - Manufacture of other non-metallic mineral products	57,255
Bauxite	Abrasives	2%	C23 - Manufacture of other non-metallic mineral products	57,255
Bauxite	Chemicals	2%	C20 - Manufacture of chemicals and chemical products	105,514
Bentonite	Pet litter	34%	C23 - Manufacture of other non-metallic mineral products	57,255
Bentonite	Foundry molding sands	22%	C24 - Manufacture of basic metals	55,426
Bentonite	Civil engineering	13%	C23 - Manufacture of other non-metallic mineral products	57,255
Bentonite	Food and wine production	3%	C11 - Manufacture of beverages	32,505
Bentonite	Pelletizing of iron ore	8%	C24 - Manufacture of basic metals	55,426
Bentonite	Oil absorbents	8%	C20 - Manufacture of chemicals and chemical products	105,514
Bentonite	Paper	3%	C17 - Manufacture of paper and paper products	38,910
Bentonite	Specialties and drilling fluids	7%	B09 - Mining support service activities	3,400
Bentonite	Others	2%	C20 - Manufacture of chemicals and chemical products	105,514
Beryllium	Electronic and telecommunications equipments	42%	C26 - Manufacture of computer, electronic and optical products	65,703
Beryllium	Transport and Defence : Vehicle electronics	17%	C26 - Manufacture of computer, electronic and optical products	65,703
Beryllium	Transport and Defence : Auto components	17%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Beryllium	Transport and Defence : Aerospace components	10%	C30 - Manufacture of other transport equipment	44,304
Beryllium	Energy application	8%	C26 - Manufacture of computer, electronic and optical products	65,703
Beryllium	Industrial components : Moulds	3%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Beryllium	Industrial components : Metal	3%	C24 - Manufacture of basic metals	55,426
Beryllium	Others	0%	0	0
Bismuth	Chemicals	62%	C20 - Manufacture of chemicals and chemical products	105,514
Bismuth	Low-melting alloys	28%	C32 - Other manufacturing	39,160
Bismuth	Metallurgical additives	10%	C24 - Manufacture of basic metals	55,426
Borate	Glass	55%	C23 - Manufacture of other non-metallic mineral products	57,255

Material	Application	Share	NACE sector	VA
Borate	Frits and Ceramics	17%	C23 - Manufacture of other non-metallic mineral products	57,255
Borate	Fertilisers	15%	C20 - Manufacture of chemicals and chemical products	105,514
Borate	Chemicals manufacture	4%	C20 - Manufacture of chemicals and chemical products	105,514
Borate	Construction materials (flame retardants, plasters, wood preservatives)	4%	C20 - Manufacture of chemicals and chemical products	105,514
Borate	Metals	4%	C24 - Manufacture of basic metals	55,426
Borate	Other	0%	0	0
Cadmium	Batteries	80%	C27 - Manufacture of electrical equipment	80,745
Cadmium	Pigments	11%	C20 - Manufacture of chemicals and chemical products	105,514
Cadmium	Coatings	7%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Cadmium	Stabilizers	2%	C20 - Manufacture of chemicals and chemical products	105,514
Cadmium	Others	0%	0	0
Cerium	Autocatalysts	35%	C20 - Manufacture of chemicals and chemical products	105,514
Cerium	Glass&Ceramics	33%	C23 - Manufacture of other non-metallic mineral products	57,255
Cerium	Polishing powders	11%	C26 - Manufacture of computer, electronic and optical products	65,703
Cerium	Fluid Cracking Catalysts	8%	C19 - Manufacture of coke and refined petroleum products	17,289
Cerium	Metal (excl. Batteries)	6%	C24 - Manufacture of basic metals	55,426
Cerium	Batteries	6%	C27 - Manufacture of electrical equipment	80,745
Cerium	Lighting	1%	C27 - Manufacture of electrical equipment	80,745
Chromium	Products made of Stainless Steel	74%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Chromium	Products made of Alloy Steel	19%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Chromium	Casting Molds	3%	C24 - Manufacture of basic metals	55,426
Chromium	Products made of chromium chemicals	3%	C20 - Manufacture of chemicals and chemical products	105,514
Chromium	Refractory bricks and mortars	1%	C23 - Manufacture of other non-metallic mineral products	57,255

Material	Application	Share	NACE sector	VA
Chromium	Other uses	0%	0	0
Cobalt	Superalloys, hardfacing/HSS and other alloys	36%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Cobalt	Hard materials (carbides and diamond tools)	14%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Cobalt	Pigments and Inks	13%	C20 - Manufacture of chemicals and chemical products	105,514
Cobalt	Catalysts	12%	C20 - Manufacture of chemicals and chemical products	105,514
Cobalt	Tyre adhesives and paint dryers	11%	C20 - Manufacture of chemicals and chemical products	105,514
Cobalt	Magnets	7%	C27 - Manufacture of electrical equipment	80,745
Cobalt	Other – Biotech, Surface Treatment, etc	6%	C20 - Manufacture of chemicals and chemical products	105,514
Cobalt	Battery	3%	C27 - Manufacture of electrical equipment	80,745
Coking coal	Coke for steel production	82%	C24 - Manufacture of basic metals	55,426
Coking coal	Coke for other applications	9%	C23 - Manufacture of other non-metallic mineral products	57,255
Coking coal	Other uses (tar, benzole, electricity and heat)	8%	C20 - Manufacture of chemicals and chemical products	105,514
Copper	Automotive	6%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Copper	Digital appliances	14%	C26 - Manufacture of computer, electronic and optical products	65,703
Copper	Jewellery	5%	C32 - Other manufacturing	39,160
Copper	Ships, trucks and armored vehicles	10%	C20 - Manufacture of chemicals and chemical products	105,514
Copper	Subparts of interior	2%	C31 - Manufacture of furniture	26,171
Copper	Oxides and dopants	3%	C20 - Manufacture of chemicals and chemical products	105,514
Copper	Electrolytic refined copper	2%	C24 - Manufacture of basic metals	55,426
Copper	Components and household	22%	C27 - Manufacture of electrical equipment	80,745
Copper	Tubes, plates, wire	21%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Copper	Machinery	15%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Diatomite	Food industry	48%	C11 - Manufacture of beverages	32,505

Material	Application	Share	NACE sector	VA
Diatomite	Pellettizing iron ore	23%	C23 - Manufacture of other non-metallic mineral products	57,255
Diatomite	Activated raw granules	13%	C23 - Manufacture of other non-metallic mineral products	57,255
Diatomite	Pet litter	7%	C23 - Manufacture of other non-metallic mineral products	57,255
Diatomite	Civil engineering	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Diatomite	Drilling fluids	2%	B09 - Mining support service activities	3,400
Diatomite	Foundry molding sands	1%	C24 - Manufacture of basic metals	55,426
Dysprosium	Magnets	100%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Erbium	Glass - Optical applications	74%	C23 - Manufacture of other non-metallic mineral products	57,255
Erbium	Lighting	26%	C27 - Manufacture of electrical equipment	80,745
Europium	Lighting	100%	C27 - Manufacture of electrical equipment	80,745
Feldspar	Ceramics (tiles, sanitaryware, tableware, glazes)	45%	C23 - Manufacture of other non-metallic mineral products	57,255
Feldspar	Glass (container, float, fiberglass, specialties)	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Feldspar	Constructions, brick, tiles	46%	C23 - Manufacture of other non-metallic mineral products	57,255
Feldspar	Others	3%	0	0
Fluorspar	Steel and iron making	36%	C24 - Manufacture of basic metals	55,426
Fluorspar	Refrigeration and air conditioning	9%	C27 - Manufacture of electrical equipment	80,745
Fluorspar	Refrigeration and air conditioning	9%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Fluorspar	Aluminium making and other metallurgy	15%	C24 - Manufacture of basic metals	55,426
Fluorspar	Solid fluoropolymers for cookware coating and cable insulation	11%	C27 - Manufacture of electrical equipment	80,745
Fluorspar	Fluorochemicals	10%	C20 - Manufacture of chemicals and chemical products	105,514
Fluorspar	UF6 in nuclear uranium fuel	6%	C24 - Manufacture of basic metals	55,426
Fluorspar	HF in alkylation process for oil refining	3%	C19 - Manufacture of coke and refined petroleum products	17,289
Gadolinium	Magnets	38%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Gadolinium	Metal (excl. Batteries)	30%	C24 - Manufacture of basic metals	55,426

Material	Application	Share	NACE sector	VA
Gadolinium	Lighting	25%	C27 - Manufacture of electrical equipment	80,745
Gadolinium	Magnetic Resonance Imaging - MRI	8%	C21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	80,180
Gadolinium	Other	0%	0	0
Gallium	Integrated circuits	70%	C26 - Manufacture of computer, electronic and optical products	65,703
Gallium	Lighting	25%	C27 - Manufacture of electrical equipment	80,745
Gallium	CIGS solar cells	5%	C26 - Manufacture of computer, electronic and optical products	65,703
Germanium	Infrared optics	47%	C26 - Manufacture of computer, electronic and optical products	65,703
Germanium	Optical fibres	40%	C27 - Manufacture of electrical equipment	80,745
Germanium	Satellite solar cells	13%	C26 - Manufacture of computer, electronic and optical products	65,703
Germanium	Others	0%	0	0
Gold	Jewellery	86%	C32 - Other manufacturing	39,160
Gold	Electronics	11%	C26 - Manufacture of computer, electronic and optical products	65,703
Gold	Other industrial applications	2%	C32 - Other manufacturing	39,160
Gold	Dental	1%	C32 - Other manufacturing	39,160
Gypsum	Plasterboard and Wallboard	51%	C23 - Manufacture of other non-metallic mineral products	57,255
Gypsum	Building plaster	26%	C23 - Manufacture of other non-metallic mineral products	57,255
Gypsum	Cement production	17%	C23 - Manufacture of other non-metallic mineral products	57,255
Gypsum	Agriculture	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Hafnium	Superalloy	61%	C24 - Manufacture of basic metals	55,426
Hafnium	Catalyst precursor	7%	C20 - Manufacture of chemicals and chemical products	105,514
Hafnium	Plasma cutting tips	15%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Hafnium	Nuclear control rod	11%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Hafnium	Oxide for Optical	3%	C26 - Manufacture of computer, electronic and optical products	65,703
Hafnium	Semiconductors	3%	C26 - Manufacture of computer, electronic and optical products	65,703

Material	Application	Share	NACE sector	VA
Hafnium	Others	0%	0	0
Helium	Controlled atmospheres	23%	C24 - Manufacture of basic metals	55,426
Helium	Cryogenics	22%	C32 - Other manufacturing	39,160
Helium	Balloons	14%	C32 - Other manufacturing	39,160
Helium	Pressurisation and purging	9%	C32 - Other manufacturing	39,160
Helium	Analysis	9%	C32 - Other manufacturing	39,160
Helium	Welding	8%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Helium	Semiconductors, optic fibres	8%	C26 - Manufacture of computer, electronic and optical products	65,703
Helium	Leak detection	7%	C33 - Repair and installation of machinery and equipment	52,332
Ho, Tm, Lu, Yb	Glass - Optical applications	100%	C26 - Manufacture of computer, electronic and optical products	65,703
Hydrogen	Ammonia production	50%	C20 - Manufacture of chemicals and chemical products	105,514
Hydrogen	Refineries	30%	C19 - Manufacture of coke and refined petroleum products	17,289
Hydrogen	Methanol production	13%	C20 - Manufacture of chemicals and chemical products	105,514
Hydrogen	Metal processing	6%	C24 - Manufacture of basic metals	55,426
Hydrogen	Others	1%	C32 - Other manufacturing	39,160
Indium	Flat panel displays	60%	C26 - Manufacture of computer, electronic and optical products	65,703
Indium	Solders	11%	C26 - Manufacture of computer, electronic and optical products	65,703
Indium	PV cells	9%	C26 - Manufacture of computer, electronic and optical products	65,703
Indium	Thermal interface material	7%	C26 - Manufacture of computer, electronic and optical products	65,703
Indium	Batteries	5%	C27 - Manufacture of electrical equipment	80,745
Indium	Alloys/compounds	4%	C24 - Manufacture of basic metals	55,426
Indium	Semiconductors & LEDs	3%	C26 - Manufacture of computer, electronic and optical products	65,703
Indium	Other	0%	0	0
Iridium	Electrochemical	48%	C20 - Manufacture of chemicals and chemical products	105,514
Iridium	Other	0%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603



Material	Application	Share	NACE sector	VA
Iridium	Electronics	39%	C26 - Manufacture of computer, electronic and optical products	65,703
Iridium	Chemical	13%	C20 - Manufacture of chemicals and chemical products	105,514
Iron ore	Steel in Construction	35%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Iron ore	Steel in Automotive	20%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Iron ore	Steel in Mechanical engineering	15%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Iron ore	Steel in Metalware	14%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Iron ore	Steel in Tubes	11%	C24 - Manufacture of basic metals	55,426
Iron ore	Steel in Domestic appliances	2%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Iron ore	Steel in Other transport	2%	C30 - Manufacture of other transport equipment	44,304
Iron ore	Other	0%	0	0
Kaolin clay	Ceramics	47%	C23 - Manufacture of other non-metallic mineral products	57,255
Kaolin clay	Paper	29%	C17 - Manufacture of paper and paper products	38,910
Kaolin clay	Fiberglass	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Kaolin clay	Refractories	5%	C23 - Manufacture of other non-metallic mineral products	57,255
Kaolin clay	Catalysts	4%	C19 - Manufacture of coke and refined petroleum products	17,289
Kaolin clay	Others	4%	0	0
Kaolin clay	Paints and adhesives	4%	C20 - Manufacture of chemicals and chemical products	105,514
Kaolin clay	Rubber and plastics	1%	C22 - Manufacture of rubber and plastic products	75,980
Kaolin clay	Cement	1%	C23 - Manufacture of other non-metallic mineral products	57,255
Lanthanum	Fluid Cracking Catalysts	67%	C19 - Manufacture of coke and refined petroleum products	17,289
Lanthanum	Glass&Ceramics	13%	C23 - Manufacture of other non-metallic mineral products	57,255
Lanthanum	Batteries	10%	C27 - Manufacture of electrical equipment	80,745
Lanthanum	Polishing powders	5%	C26 - Manufacture of	65,703



Material	Application	Share	NACE sector	VA
			computer, electronic and optical products	
Lanthanum	Metal (excl.Batteries)	3%	C24 - Manufacture of basic metals	55,426
Lanthanum	Lighting	2%	C27 - Manufacture of electrical equipment	80,745
Lead	Batteries	84%	C27 - Manufacture of electrical equipment	80,745
Lead	Rolled and extruded products	6%	C24 - Manufacture of basic metals	55,426
Lead	Lead compounds	4%	C20 - Manufacture of chemicals and chemical products	105,514
Lead	Shot/ammunition	4%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Lead	Cable sheathing	1%	C27 - Manufacture of electrical equipment	80,745
Lead	Alloys and solders	1%	C24 - Manufacture of basic metals	55,426
Limestone	Cement & concrete, plaster & mortar, roadworks	31%	C23 - Manufacture of other non-metallic mineral products	57,255
Limestone	Manufacture of basic metals	8%	C24 - Manufacture of basic metals	55,426
Limestone	Paper, plastics and rubber	31%	C20 - Manufacture of chemicals and chemical products	105,514
Limestone	Agriculture	5%	C20 - Manufacture of chemicals and chemical products	105,514
Limestone	Others (Glass & ceramics, chemicals, water treatment)	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Limestone	Paint, coating, adhesives	6%	C20 - Manufacture of chemicals and chemical products	105,514
Limestone	Flue Gas Desulfurisation	9%	E39 - Remediation activities and other waste management services	1,301
Limestone	Feed	4%	C10 - Manufacture of food products	155,880
Lithium	Glass and ceramics	66%	C23 - Manufacture of other non-metallic mineral products	57,255
Lithium	Lubricating greases	9%	C20 - Manufacture of chemicals and chemical products	105,514
Lithium	Cement production	9%	C23 - Manufacture of other non-metallic mineral products	57,255
Lithium	Steel casting	5%	C24 - Manufacture of basic metals	55,426
Lithium	Pharmaceutical products	4%	C21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	80,180
Lithium	Rubber and plastics production	4%	C22 - Manufacture of rubber and plastic products	75,980
Lithium	Al-Li alloys	2%	C25 - Manufacture of fabricated metal products,	148,351

Material	Application	Share	NACE sector	VA
			except machinery and equipment	
Lithium	Batteries and products containing batteries	1%	C27 - Manufacture of electrical equipment	80,745
Magnesite	Steel making	57%	C24 - Manufacture of basic metals	55,426
Magnesite	Paper industry	12%	C17 - Manufacture of paper and paper products	38,910
Magnesite	Cement making	9%	C23 - Manufacture of other non-metallic mineral products	57,255
Magnesite	Agriculture (1 of 2)	7%	C20 - Manufacture of chemicals and chemical products	105,514
Magnesite	Agriculture (2 of 2)	7%	C10 - Manufacture of food products	155,880
Magnesite	Ceramics	5%	C23 - Manufacture of other non-metallic mineral products	57,255
Magnesite	Glass making	3%	C23 - Manufacture of other non-metallic mineral products	57,255
Magnesite	Others	0%	0	0
Magnesium	Transportation (Automotive)	50%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Magnesium	Packaging	21%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Magnesium	Desulfurisation agent	12%	C24 - Manufacture of basic metals	55,426
Magnesium	Construction	13%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Magnesium	Transportation (Air, Marine, Train)	4%	C30 - Manufacture of other transport equipment	44,304
Magnesium	Other applications	0%	0	0
Manganese	Steel (construction)	25%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Manganese	Steel (automotive)	14%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Manganese	Steel (mechanical engineering)	13%	C24 - Manufacture of basic metals	55,426
Manganese	Steel (structural steelworks)	11%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Manganese	Steel (tubes)	10%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351

Material	Application	Share	NACE sector	VA
Manganese	Steel (metalware)	10%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Manganese	Non-steel alloys	6%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Manganese	Chemical manufacture	5%	C20 - Manufacture of chemicals and chemical products	105,514
Manganese	Steel (domestic appliances)	4%	C27 - Manufacture of electrical equipment	80,745
Manganese	Batteries (cathodes)	2%	C27 - Manufacture of electrical equipment	80,745
Molybdenum	Engineering steels	40%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Molybdenum	Stainless steels	23%	C19 - Manufacture of coke and refined petroleum products	17,289
Molybdenum	Chemicals	13%	C20 - Manufacture of chemicals and chemical products	105,514
Molybdenum	Foundries	8%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Molybdenum	Tool steels	8%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Molybdenum	Mo-Metals	6%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Molybdenum	Nickel alloys	2%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Natural cork	Wine corks	70%	C11 - Manufacture of beverages	32,505
Natural cork	Insulation, building materials	20%	C16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	27,967
Natural cork	General furniture	5%	C31 - Manufacture of furniture	26,171
Natural cork	Leisure	2%	C32 - Other manufacturing	39,160
Natural cork	Gaskets, expansion	1%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Natural cork	Gaskets, expansion	1%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Natural cork	Gaskets, expansion	1%	C30 - Manufacture of other transport equipment	44,304
Natural graphite	Refractories for steelmaking	53%	C24 - Manufacture of basic metals	55,426
Natural graphite	Foundries	15%	C23 - Manufacture of other non-metallic mineral products	57,255

Material	Application	Share	NACE sector	VA
Natural graphite	Graphite shapes	2%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Natural graphite	Batteries	9%	C27 - Manufacture of electrical equipment	80,745
Natural graphite	Lubricants	6%	C20 - Manufacture of chemicals and chemical products	105,514
Natural graphite	Recarburising	5%	C24 - Manufacture of basic metals	55,426
Natural graphite	Pencils	5%	C23 - Manufacture of other non-metallic mineral products	57,255
Natural graphite	Friction products	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Natural Rubber	Automotive	75%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Natural Rubber	Other transport equipment	14%	C30 - Manufacture of other transport equipment	44,304
Natural Rubber	Machinery and offshore	6%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Natural Rubber	Furniture	2%	C31 - Manufacture of furniture	26,171
Natural Rubber	Packaging	1%	C22 - Manufacture of rubber and plastic products	75,980
Natural Rubber	Household appliances	1%	C27 - Manufacture of electrical equipment	80,745
Natural Rubber	Sportswear	1%	C32 - Other manufacturing	39,160
Natural Teak wood	Yachts, sailing boats	90%	C30 - Manufacture of other transport equipment	44,304
Natural Teak wood	High end furniture	10%	C31 - Manufacture of furniture	26,171
Neodymium	Magnets	41%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Neodymium	Batteries	14%	C27 - Manufacture of electrical equipment	80,745
Neodymium	Metal (excl. Batteries)	13%	C24 - Manufacture of basic metals	55,426
Neodymium	Ceramics	12%	C23 - Manufacture of other non-metallic mineral products	57,255
Neodymium	Glass	9%	C23 - Manufacture of other non-metallic mineral products	57,255
Neodymium	Catalysts	7%	C20 - Manufacture of chemicals and chemical products	105,514
Neodymium	Lasers	3%	C26 - Manufacture of computer, electronic and optical products	65,703
Neodymium	Other	0%	0	0
Nickel	Engineering (Steel)	39%	C28 - Manufacture of machinery and equipment n.e.c.	182,589

Material	Application	Share	NACE sector	VA
Nickel	Metal goods (Steel)	21%	C24 - Manufacture of basic metals	55,426
Nickel	Transport (Steel)	19%	C30 - Manufacture of other transport equipment	44,304
Nickel	Electrical and Electronics (Steel)	11%	C27 - Manufacture of electrical equipment	80,745
Nickel	Building and construction (Steel)	10%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Niobium	Automotive (Steel)	23%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Niobium	Construction (Steel)	45%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Niobium	Stainless Steel	10%	C24 - Manufacture of basic metals	55,426
Niobium	Oil & Gas	17%	C24 - Manufacture of basic metals	55,426
Niobium	Special Steel	3%	C30 - Manufacture of other transport equipment	44,304
Palladium	Autocatalyst	87%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Palladium	Electronics	4%	C26 - Manufacture of computer, electronic and optical products	65,703
Palladium	Chemical	4%	C20 - Manufacture of chemicals and chemical products	105,514
Palladium	Dental	2%	C32 - Other manufacturing	39,160
Palladium	Jewellery	2%	C32 - Other manufacturing	39,160
Palladium	Other	0%	0	0
Palladium	Investment	0%	0	0
Perlite	Building construction products	59%	C23 - Manufacture of other non-metallic mineral products	57,255
Perlite	Filter aid	24%	C11 - Manufacture of beverages	32,505
Perlite	Horticultural aggregate	11%	C23 - Manufacture of other non-metallic mineral products	57,255
Perlite	Fillers	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Phosphate rock	Mineral fertilizer	86%	C20 - Manufacture of chemicals and chemical products	105,514
Phosphate rock	Animal feed	10%	C10 - Manufacture of food products	155,880
Phosphate rock	Detergents, chemicals, food additives	4%	C20 - Manufacture of chemicals and chemical products	105,514
Phosphorus	Chemicals	90%	C20 - Manufacture of chemicals and chemical products	105,514

Material	Application	Share	NACE sector	VA
Phosphorus	Metals	1%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Phosphorus	Electronics	5%	C26 - Manufacture of computer, electronic and optical products	65,703
Phosphorus	Agrochemicals	4%	C20 - Manufacture of chemicals and chemical products	105,514
Platinum	Autocatalyst	77%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Platinum	Jewellery	10%	C32 - Other manufacturing	39,160
Platinum	Chemical	6%	C20 - Manufacture of chemicals and chemical products	105,514
Platinum	Other	0%	0	0
Platinum	Medical and Biomedical	4%	C32 - Other manufacturing	39,160
Platinum	Investment	0%	0	0
Platinum	Petroleum	2%	C19 - Manufacture of coke and refined petroleum products	17,289
Platinum	Electronics	1%	C26 - Manufacture of computer, electronic and optical products	65,703
Platinum	Glass	1%	C23 - Manufacture of other non-metallic mineral products	57,255
Potash	Fertiliser	92%	C20 - Manufacture of chemicals and chemical products	105,514
Potash	Chemical manufacture	8%	C20 - Manufacture of chemicals and chemical products	105,514
Praseodymium	Magnets	27%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Praseodymium	Ceramics	17%	C23 - Manufacture of other non-metallic mineral products	57,255
Praseodymium	Batteries	13%	C27 - Manufacture of electrical equipment	80,745
Praseodymium	Metal (excl. Batteries)	12%	C24 - Manufacture of basic metals	55,426
Praseodymium	Catalysts	11%	C20 - Manufacture of chemicals and chemical products	105,514
Praseodymium	Polishing powders	11%	C26 - Manufacture of computer, electronic and optical products	65,703
Praseodymium	Glass	9%	C23 - Manufacture of other non-metallic mineral products	57,255
Praseodymium	Other	0%	0	0
Rhenium	Aerospace	83%	C30 - Manufacture of other transport equipment	44,304
Rhenium	Catalysts in petroleum industry	17%	C19 - Manufacture of coke and refined petroleum products	17,289

Material	Application	Share	NACE sector	VA
Rhenium	Others	0%	0	0
Rhodium	Autocatalyst	84%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Rhodium	Glass	10%	C23 - Manufacture of other non-metallic mineral products	57,255
Rhodium	Chemical	6%	C20 - Manufacture of chemicals and chemical products	105,514
Rhodium	Other	0%	0	0
Rhodium	Electronics	0%	C26 - Manufacture of computer, electronic and optical products	65,703
Ruthenium	Chemical	30%	C20 - Manufacture of chemicals and chemical products	105,514
Ruthenium	Electronics	48%	C26 - Manufacture of computer, electronic and optical products	65,703
Ruthenium	Electrochemical	22%	C20 - Manufacture of chemicals and chemical products	105,514
Ruthenium	Other	0%	0	0
Samarium	Magnets	97%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Samarium	Medical and optical applications	3%	C26 - Manufacture of computer, electronic and optical products	65,703
Sapele wood	Construction material	80%	C16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	27,967
Sapele wood	Furniture	10%	C31 - Manufacture of furniture	26,171
Sapele wood	Boats	10%	C30 - Manufacture of other transport equipment	44,304
Scandium	Solid Oxide Fuel Cells (SOFCs)	91%	C27 - Manufacture of electrical equipment	80,745
Scandium	Al-Sc alloys	9%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Scandium	Others	0%	0	0
Selenium	Metallurgy	40%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Selenium	Glass manufacturing	25%	C23 - Manufacture of other non-metallic mineral products	57,255
Selenium	Electronics	10%	C26 - Manufacture of computer, electronic and optical products	65,703
Selenium	Pigments	10%	C20 - Manufacture of chemicals and chemical products	105,514
Selenium	Agricultural/ biological products	10%	C20 - Manufacture of chemicals and chemical	105,514



Material	Application	Share	NACE sector	VA
			products	
Selenium	Other Applications	5%	C20 - Manufacture of chemicals and chemical products	105,514
Silica sand	Construction and Soil	37%	C23 - Manufacture of other non-metallic mineral products	57,255
Silica sand	Glass	31%	C23 - Manufacture of other non-metallic mineral products	57,255
Silica sand	Others	16%	C23 - Manufacture of other non-metallic mineral products	57,255
Silica sand	Foundry	13%	C24 - Manufacture of basic metals	55,426
Silica sand	Filler, extender and sealant	3%	C22 - Manufacture of rubber and plastic products	75,980
Silica sand	Oil field	0%	B06 - Extraction of crude petroleum and natural gas	19,750
Silicon metal	Chemical applications	54%	C20 - Manufacture of chemicals and chemical products	105,514
Silicon metal	Aluminium alloys	38%	C24 - Manufacture of basic metals	55,426
Silicon metal	Solar applications	6%	C26 - Manufacture of computer, electronic and optical products	65,703
Silicon metal	Electronic applications	2%	C26 - Manufacture of computer, electronic and optical products	65,703
Silver	Jewelery, Silverware, recreative products	31%	C32 - Other manufacturing	39,160
Silver	Paints, oxides, photograph	18%	C20 - Manufacture of chemicals and chemical products	105,514
Silver	Automotive	8%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Silver	Batteries	7%	C27 - Manufacture of electrical equipment	80,745
Silver	Industrial machinery	7%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Silver	Other transport equipment	7%	C30 - Manufacture of other transport equipment	44,304
Silver	Electronic parts	6%	C26 - Manufacture of computer, electronic and optical products	65,703
Silver	Glass	6%	C23 - Manufacture of other non-metallic mineral products	57,255
Silver	Parts like bearings	6%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Silver	Medicine	4%	C21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	80,180
Strontium	Drilling fluids	70%	C23 - Manufacture of other non-metallic mineral products	57,255

Material	Application	Share	NACE sector	VA
Strontium	Pyrotechnics and signals	9%	C20 - Manufacture of chemicals and chemical products	105,514
Strontium	Magnets	9%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Strontium	Master alloys	3%	C24 - Manufacture of basic metals	55,426
Strontium	Pigments and fillers	3%	C20 - Manufacture of chemicals and chemical products	105,514
Strontium	Zinc production	3%	C24 - Manufacture of basic metals	55,426
Strontium	Glass	3%	C23 - Manufacture of other non-metallic mineral products	57,255
Sulphur	Chemical applications	71%	C20 - Manufacture of chemicals and chemical products	105,514
Sulphur	Petroleum refining	24%	C19 - Manufacture of coke and refined petroleum products	17,289
Sulphur	Metallurgy	4%	C24 - Manufacture of basic metals	55,426
Sulphur	Paper production	1%	C17 - Manufacture of paper and paper products	38,910
Talc	Polymer for car industry	34%	C22 - Manufacture of rubber and plastic products	75,980
Talc	Paper	21%	C17 - Manufacture of paper and paper products	38,910
Talc	Paint and Coatings	18%	C20 - Manufacture of chemicals and chemical products	105,514
Talc	Feed	8%	C10 - Manufacture of food products	155,880
Talc	Building material	7%	C23 - Manufacture of other non-metallic mineral products	57,255
Talc	Fertilizers	4%	C20 - Manufacture of chemicals and chemical products	105,514
Talc	Others	4%	C21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	80,180
Talc	Rubber	2%	C22 - Manufacture of rubber and plastic products	75,980
Talc	Cosmetics	1%	C21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	80,180
Talc	Pharmaceuticals	1%	C21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	80,180
Tantalum	Capacitors	40%	C26 - Manufacture of computer, electronic and optical products	65,703
Tantalum	Sputtering targets	20%	C26 - Manufacture of computer, electronic and optical products	65,703
Tantalum	Superalloys	14%	C30 - Manufacture of other transport equipment	44,304

Material	Application	Share	NACE sector	VA
Tantalum	Chemicals	12%	C20 - Manufacture of chemicals and chemical products	105,514
Tantalum	Carbides	10%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Tantalum	Mill products	4%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Tellurium	Solar power	40%	C26 - Manufacture of computer, electronic and optical products	65,703
Tellurium	Thermo-electric devices	30%	C26 - Manufacture of computer, electronic and optical products	65,703
Tellurium	Metallurgy	15%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Tellurium	Chemical manufacture	10%	C20 - Manufacture of chemicals and chemical products	105,514
Tellurium	Rubber vulcanising	5%	C22 - Manufacture of rubber and plastic products	75,980
Terbium	Lighting	68%	C27 - Manufacture of electrical equipment	80,745
Terbium	Magnets	32%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Tin	Solders	47%	C26 - Manufacture of computer, electronic and optical products	65,703
Tin	Chemicals	18%	C20 - Manufacture of chemicals and chemical products	105,514
Tin	Tinplate	13%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Tin	Others	10%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Tin	Lead acid batteries	6%	C27 - Manufacture of electrical equipment	80,745
Tin	Copper alloys	6%	C24 - Manufacture of basic metals	55,426
Titanium	Paints	54%	C20 - Manufacture of chemicals and chemical products	105,514
Titanium	Polymers	24%	C22 - Manufacture of rubber and plastic products	75,980
Titanium	Aerospace	8%	C30 - Manufacture of other transport equipment	44,304
Titanium	Medical equipment	6%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Titanium	Automotive	3%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603

Material	Application	Share	NACE sector	VA
Titanium	Hand held objects	2%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Titanium	Alloys	2%	C24 - Manufacture of basic metals	55,426
Titanium	Various	1%	C21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	80,180
Tungsten	Mill and cutting tools	33%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Tungsten	Mining and construction tools	23%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Tungsten	Other wear tools	18%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Tungsten	Catalysts and pigments	8%	C20 - Manufacture of chemicals and chemical products	105,514
Tungsten	Lighting and electronic uses	6%	C26 - Manufacture of computer, electronic and optical products	65,703
Tungsten	High speed steels applications	6%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Tungsten	Aeronautics and energy uses	5%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Tungsten	others	0%	0	0
Vanadium	High-strength low-alloy steels (HSLA)	60%	C24 - Manufacture of basic metals	55,426
Vanadium	Special steel	30%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Vanadium	Super alloys for high-end uses	3%	C29 - Manufacture of motor vehicles, trailers and semi-trailers	160,603
Vanadium	Chemicals	3%	C20 - Manufacture of chemicals and chemical products	105,514
Vanadium	Cast Iron for rigid structures	2%	C30 - Manufacture of other transport equipment	44,304
Vanadium	Stainless steel	1%	C28 - Manufacture of machinery and equipment n.e.c.	182,589
Vanadium	Energy storage	1%	C27 - Manufacture of electrical equipment	80,745
Yttrium	Lighting	50%	C27 - Manufacture of electrical equipment	80,745
Yttrium	Ceramics	38%	C23 - Manufacture of other non-metallic mineral products	57,255
Yttrium	Alloys	8%	C24 - Manufacture of basic metals	55,426
Yttrium	Glass	4%	C23 - Manufacture of other non-metallic mineral products	57,255
Yttrium	Others	0%	0	0

Material	Application	Share	NACE sector	VA
Zinc	Galvanising	52%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Zinc	Zinc alloys	17%	C24 - Manufacture of basic metals	55,426
Zinc	Brass and bronze	15%	C24 - Manufacture of basic metals	55,426
Zinc	Zinc compounds (incl. dust and powder)	10%	C20 - Manufacture of chemicals and chemical products	105,514
Zinc	Zinc semi-manufactures	6%	C25 - Manufacture of fabricated metal products, except machinery and equipment	148,351
Zirconium	Ceramics	43%	C23 - Manufacture of other non-metallic mineral products	57,255
Zirconium	Refractories	15%	C23 - Manufacture of other non-metallic mineral products	57,255
Zirconium	Foundry	15%	C24 - Manufacture of basic metals	55,426
Zirconium	Chemicals	12%	C20 - Manufacture of chemicals and chemical products	105,514
Zirconium	Others	10%	C26 - Manufacture of computer, electronic and optical products	65,703
Zirconium	Pigments	3%	C20 - Manufacture of chemicals and chemical products	105,514
Zirconium	Superalloys, Nuclear	2%	C24 - Manufacture of basic metals	55,426