

Semtech – Rare Earth Metals

Dear Customer, March 26, 2018

Semtech Corporation is aware of recent supply availability of rare earth metals as a result of key sourcing countries reducing their exporting quotas of such rare earth elements.

Semtech Corporation is committed to taking positive measures to ensure, to the extent reasonably practicable, that the products within our supply chain are not directly impacted by any reduction in supply availability of rare earth metals. Semtech product does not utilize any of the rare earth metals noted below.

<u>Z</u> ™	Symbol	Name	Selected Usages
21	Sc	<u>Scandium</u>	Light <u>Aluminium-scandium</u> alloy for aerospace components, additive in <u>Mercury-vapor lamps</u> .[3]
39	Υ	<u>Yttrium</u>	Yttrium-aluminum garnet (<u>YAG</u>) laser, <u>YBCO high-temperature</u> superconductors, yttrium iron garnet (<u>YIG)microwave</u> filters.[3]
57	La	<u>Lanthanum</u>	High <u>refractive index</u> glass, flint, hydrogen storage, battery-electrodes, <u>camera</u> lenses, <u>fluid catalytic cracking</u> catalyst for oil refineries
58	Ce	<u>Cerium</u>	Chemical <u>oxidizing agent</u> , polishing powder, yellow colors in glass and ceramics, catalyst for <u>self-cleaning ovens</u> , <u>fluid catalytic cracking</u> catalyst for oil refineries
59	Pr	<u>Praseodymium</u>	Rare-earth magnets, lasers, core material for <u>carbon arc</u> lighting, colourant in <u>glasses</u> and <u>enamels</u> , additive in <u>Didymium glass</u> used in <u>welding goggles</u> , [3] <u>ferrocerium firesteel</u> (flint) products.
60	Nd	<u>Neodymium</u>	Rare-earth magnets, lasers, violet colors in glass and ceramics, ceramic capacitors
61	Pm	<u>Promethium</u>	Nuclear batteries
62	Sm	<u>Samarium</u>	Rare-earth magnets, lasers, neutron capture, masers
63	Eu	<u>Europium</u>	Red and blue phosphors, lasers, mercury-vapor lamps
64	Gd	<u>Gadolinium</u>	Rare-earth magnets, high refractive index glass or garnets, lasers, x-ray tubes, computer memories, neutron capture
65	Tb	<u>Terbium</u>	Green phosphors, lasers, fluorescent lamps
66	Dy	<u>Dysprosium</u>	Rare-earth magnets, lasers
67	Но	<u>Holmium</u>	<u>Lasers</u>
68	Er	<u>Erbium</u>	Lasers, vanadium steel
69	Tm	<u>Thulium</u>	Portable X-ray machines
70	Yb	<u>Ytterbium</u>	Infrared <u>lasers</u> , chemical <u>reducing agent</u>
71	Lu	<u>Lutetium</u>	PET Scan detectors, high refractive index glass



The listing of "Rare Earth" metals above were identified by the International Union of Pure and Applied Chemistry, IUPAC, an international federation of National Adhering
Organizations that represents chemists in countries around the world.

Semtech Corporation will continue to undertake due diligence and continuously monitor the procurement activities of our suppliers as they relate to the fabrication and assembly of our product, to ensure minimal impact as a result of any adverse supply availability of these rare earth metals.

In addition, Semtech Corporation will continue to actively monitor and stay informed of relevant activities, reports, and proposals for supply chain improvements by organizations such as IUPAC, and others, as our industry continues to work toward a viable solution towards supply availability of these rare earth metals.

Semtech has relied on information provided by our suppliers in making this declaration and has taken and continues to take commercially reasonable steps to provide representative and accurate information. Semtech's standard Sales Terms and Conditions, including warranty and limitations of liability, apply to the declarations made herein unless otherwise provided by a written contract or other agreement signed by the parties.

Semtech Corporation thanks you for your inquiry and looks forward to a continued and successful business relationship.

If you have any questions, do not hesitate to give me a call.

Sincerely,

Pat Sanchez

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