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2-7-17

**RE: Restriction of Hazardous Substances (RoHS 3), In April of 2015, the EU Council approved amendment to the RoHS Directive –RoHS 3 Implementation in EU Countries is 31 Dec. 2016.**

To our valued customer:

For over fifty years, Steel Warehouse Company LLC has been a distributor of high quality carbon, alloy, and stainless steels produced by a number of mills worldwide. We sell these products in coil, sheet, plate, and tailored blank form. However, since we process purchased steel and do not melt it, we have relied on the statements of our vendors to help formulate our response to your inquiry. We understand the RoHS directive is applied to reducing the “hazardous” content of electrical and electronic equipment to minimize environmental issues related to their disposal.

RoHS 2 restricts the following substances, to be sold in European Union countries, to a maximum concentrated value tolerated by weight in homogeneous materials: lead (Pb) – 0.1%, mercury (Hg) – 0.1%, cadmium (Cd) – 0.01%, poly-brominated biphenyls (PBB) – 0.1%, and di-phenyl ethers (PBDE) – 0.01%.

**Phthalate restrictions becomes law from July 22, 2019:** The use of four phthalates will be restricted in electrical and Electronic Equipment (EEE) sold in the European Union, to a maximum concentrated value tolerated by weight in homogeneous materials: *Bis (2-ethylhexyl) phthalate (DEHP) – 0.1%, Butyl benzyl phthalate (BBP) – 0.1%, Dibutyl phthalate (DBP) - 1%, and Diisobutyl Phthalate (DIBP) – 1%.*

Regarding the above mentioned substances:

- None of the above restricted substances are intentionally added to steel and if present, they would have to come from the scrap used to make steel.
- The physics of the steel-making process make it unlikely that any of the substances will survive the melting operation.
- 100% scrap-fed mini-mills have advised us that 0-20 ppm Cd and 0-100 ppm Pb, both well within RoHS maximum concentration levels, have been found in finished product. No PBB, PBDE, Hg or phthalates have ever been detected.
- We are not aware of test results, from any source, indicating non-compliance.
- Though currently exempted, we do not distribute leaded steels.
- Based on the above, we believe our suppliers (and we) are in compliance with the directive.

Regarding hexavalent chromium (Cr+6):

Cr+6 is applied, at the mill, to both hot-dip galvanized and electrogalvanized steels as a passivation agent or “chemical treatment” to guard against formation of white rust. After application, it ultimately turns to trivalent chromium. The presence of chromates is detectable by application of diphenyl carbazide. Unfortunately, it is not technically feasible to determine the mass and therefore concentration of Cr+6.

We cannot absolutely guarantee that Cr+6 is not present, even when “chem. treat” is not ordered. This particularly applies to spot buys. It is possible, that other arrangements could be made via written agreement with our Sales management where a longer-term directed purchase can be made from a specific supplier. We suggest that you refrain from ordering galvanized steels from us, if this response is unsatisfactory. We are aware that various non-chromate passivation agents are both under development and in production, and that they reportedly perform well in laboratory conditions. We will monitor this development and revise our position as necessary.

Very Truly Yours,

Steel Warehouse Company LLC