



CLEVELAND-CLIFFS INC.

Cliffs Steel Inc.

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April 25, 2023

Subject: Restriction of Hazardous Substances 2002 / 95 / EC (January 27, 2003)  
Recast Directive 2011 / 65 / EU aka RoHS 2 (June 8, 2011)  
Revision to Annex II 2015 / 863 aka RoHS 3 (March 31, 2015)  
European End-of-Life Vehicle Directive, 2000/53/EC (ELVD)

To Whom It May Concern:

The European Union has issued various directives that control substances of concern. One such directive is the Restriction of Hazardous Substances in electrical and electronic equipment. There have been two main revisions to this directive (RoHS 2) Recast Directive 2011 / 65 / EU and the Revision to Annex II 2015 / 863. This informational letter addresses ten (10) substances restricted under one or more of those directives.

#### Substance – Threshold

1. Lead – 0.1%
2. Mercury – 0.1%
3. Cadmium – 0.01%
4. Hexavalent Chromium (Cr6+) – 0.1%
5. Polybrominated biphenyls (PBB) – 0.1%
6. Polybrominated Diphenyl ethers (PBDE) – 0.1%
7. Bis(2-ethylhexyl) phthalate (DEHP) – 0.1%
8. Butyl Benzyl phthalate (BBP) – 0.1%
9. Dibutyl phthalate (DBP) – 0.1%
10. Diisobutyl phthalate (DIBP) – 0.1

We do not routinely analyze for the presence of these hazardous substances because they are not a part of the manufacturing process, add no inherent quality to the product, and are typically, if present, below threshold considerations:

1. Lead and cadmium are inherent in steel as a residual material. Lead may be present below the 0.1% max (1000 ppm). Lead in a galvanized coating may be present below the 0.1% max (1000 ppm). Cadmium may be present below the 0.01% max (100 ppm). Cadmium may be present in a galvanized coating below the 0.01% max (100 ppm). Mercury, if present, would be below the 0.1% max (1000 ppm). Chromium is routinely added to certain steel products, but our manufacturing process prevents the formation of chromium+6 phase in the final product, with the exceptions noted below.

The information in this letter is provided by Cliffs Steel Inc. for itself and, if applicable, for its subsidiaries, Cleveland-Cliffs Steel Corporation and Cleveland-Cliffs Steel LLC, for the general information of customers and does not imply any warranty. The interpretation or use of this information is the sole responsibility of the user. This information is provided to you on the following conditions: (1) Cliffs makes no representations or warranties as to any tests used in preparing this letter or correctness of its contents; (2) Cliffs shall not be liable to you or any other person for the performance, merchantability, suitability or fitness for any purpose of any material or item tested or investigated in the preparation of this letter, whether such liability is asserted on the basis of express or implied representations, warranties or conditions, in contract or tort, by statute or common law, or on any other basis; and, (3) you agree to hold Cliffs harmless against any liability that may be imposed on it in connection with this letter, the manufacture of any item in reliance on it, the use of any item so manufactured or the breach of any of these conditions.

2. Environmentally persistent transformer fluids / flame retardants are not a part of the steel making process.
3. The last four (4) chemicals are phthalates. Phthalates are a family of chemicals used to soften and increase the flexibility of plastic and vinyl and are not a part of the steel making process.

This letter applies to Cliffs Steel Inc. ("Cliffs") flat rolled products.

We are currently compliant in our following products:

1. Hot Rolled and Cold Rolled Steel Sheet (dry or oiled)
2. Hot Dipped Galvanized Steel Sheet (dry, oiled, or passivated / chem treated with RoHS compliant trivalent chromium)
3. Hot Dipped Galvanneal Steel Sheet (dry, oiled, or passivated / chem treated with RoHS compliant trivalent chromium)
4. Galvalume® Steel Sheet (dry or oiled)
5. Aluminized Steel Sheet (dry, oiled, or passivated / chem treated with RoHS compliant trivalent chromium)
6. Electro-galvanized Steel Sheet (oiled)
7. Black Plate Sheet (dry or oiled)
8. Tinplate and Tin Free Steel Sheet (TFS also known as ECCS – Electrolytic Chromium Coated Steel) – both contain very light coatings of trivalent chromium compounds and metallic chromium but no detectable level of hexavalent chromium
9. Plate Steels
10. Non-Oriented Electrical Steels (NOES), bare or coated

Products which are non-compliant under current standard operating practices with hexavalent chromium requirements are:

- A. Passivated / chem-treated Hot Dipped Galvanized / Galvanneal, Electro-galvanized, and Galvalume® steel sheet.
- B. Hot Dipped Galvanized / Galvanneal and Galvalume® steel sheet that gets paintable passivation sold for post painting applications, this includes Hot Dipped Galvanized and Galvanneal treated with Paint Grip®
- C. Painted steel sheet that is toll-painted at coil coaters under single bill that have not been qualified to an alternative pretreat system.
- D. Acrylic coated Galvalume® or acrylic coated Hot Dipped Galvanize steel sheets.

These products cannot be used where EU RoHS or ELV directives apply.

Should you have any questions or require further information, please contact the undersigned at [evelyn.hoffman@clevelandcliffs.com](mailto:evelyn.hoffman@clevelandcliffs.com).

Sincerely,



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Evelyn Hoffman  
Director, Central Quality