EUROFER position paper on zinc dross. 4th September 2009.

Zinc dross description and uses:

Zinc dross has the CAS n° 69011-50-3 and the EINECS n° 273-694-8.

Although zinc dross is listed in the UVCB section of the EINECS inventory, the typical composition range of the main constituents can be given as follows:

- Al: up to 2.0 %
- Fe: up to 3.5 %
- Mg: up to 2.0 %
- Zn: up to 99.5 %

Several uses of zinc dross, e.g.:

- Transformation into zinc oxides for various uses (e.g. pharmaceutical industry, cosmetics, ceramics, tyres).
- Transformation into zinc alloys (ZAMAC\(^1\)) e.g. for foundry under pressure, automotive industry, construction, packaging etc.

Discussion:

One could consider that zinc dross, having EINECS and CAS numbers, should be submitted for registration. This is not the case and this for the following reasons:

- Zinc dross can be considered either as non dangerous waste\(^2\) following Directive 2006/12/EC [and exempted from the scope of REACH according to Article 2(2)] or as a product (and also exempted from registration because the substances in zinc dross have not undergone intended chemical modification during the galvanising process; the formed metal oxides are impurities).

- As zinc dross will be taken into account in the uses and exposure scenarios (Chemical Safety Assessment) of zinc, iron, magnesium, aluminium and their oxides (being impurities), the registration of zinc dross would bring no additional information for human health neither for environmental exposure.

If ever a registration was required for recovered zinc, aluminium, magnesium, iron or zinc dross, the exemption for registration according to Article 2(7)d\(^3\) would apply.

CONCLUSION:

In order to benefit from the transitional registration periods but principally to make use of Article 2(7)d, ECHA advises recyclers to pre-register the zinc in the zinc dross if the latter is not a waste.

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1. Zinc Aluminium Magnesium and Copper alloy
2. EWC (European waste catalogue) number: 100501 - slags from primary and secondary production
3. The Article 2(7)d applies if the same substance has already been registered (no matter which supply chain) and the information relating to the substance (e.g. material safety data sheet) is available to the legal entity.
As it is sure that zinc and the other major components of zinc dross will be registered by at least one legal entity – which must not be in the same supply chain - no further registration is necessary according to Article 2(7)d.

The impurities, like ZnO (Zn that is oxidising to the air) are not intentionally being formed and as such do not require registration.

"Important Notice: This position paper is intended as a supplement to the REACH Regulation and the official REACH Technical Guidance Documents published by the European Chemicals Agency (ECHA). It is provided as an advisory document and, as such, has no legal standing. Therefore, in conjunction with this position paper, users are advised to consult Regulation EC 1907/2006 (for the legally binding requirements of REACH) and the official REACH Technical Guidance Documents (for detailed information on REACH implementation). It may also be appropriate to seek independent legal advice on matters related to pre-registration and registration. While every effort has been made to ensure the accuracy of this document, neither Eurofer nor the authors of this document accept liability for its content or for the use which might be made of the information herein."