

**Eurofer position paper proposing a common Substance Identification Exchange Forum (so-called SIEF) for Iron and Pig Iron (= iron, furnace)**

**Background**

The steel industry is the major manufacturer of metallic iron.

The producers of steel and iron using the integrated steel route (i.e. production of iron, furnace from the blast furnace) and importers will register iron by the December 2010 deadline, as they convert iron ores (iron oxides) into the form of metallic iron. The steel producers using the recycling route (use of steel scrap<sup>1</sup>) will not register iron, except if they import some specific source of iron (e.g. Pig iron, Direct Reduced Iron, Ferro-Alloys).

**Scientific reasoning**

Iron coming from the blast furnace contains around 93-94% of pure iron, 3% of carbon coming from the coke used for the reduction reaction and other impurities coming from the iron ores (e.g. manganese, phosphorus, silicon and sulphur). Carbon at this stage is an impurity, as the following process is dedicated to remove carbon by introducing oxygen in the converter<sup>2</sup>.

As such, the physico-chemical and (eco)toxicological properties of ‘pure iron’ and ‘iron, furnace’ are sufficiently similar to fulfill criteria for the ‘sameness’ (same identity, same substance)<sup>3</sup> and as a consequence to use the same data. Any differences occurring via the use will be covered by specific exposure scenarios.

**Conclusion**

**Iron and pig iron should be dealt with in the same SIEF. The two forms of iron will be registered in one iron dossier (via read across of pig iron with iron that will be registered).** *It is to be expected that the data gap analysis for iron and iron compounds will provide evidence that these substances are sufficiently similar to proceed with the data sharing in one and the same SIEF.*

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1 see Eurofer position paper on scrap

2 see Eurofer position paper on carbon in steel

3 see ECHA Guidance on data sharing pages 35 - 37

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