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## CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS (COSHH)

- 1. Identification of Substance and Company:** Zinc coated steel products, supplied by Metsec plc
- 2. Composition/Information on Ingredients:** Mild steel, zinc coated by electrolytic or hot dip processes, includes zinc-iron alloy. Hot dip coatings contain 0.002% lead or up to 0.12% antimony. The section may have a thin coating of coolant.
- 3. Hazard Identification:** When subject to elevated temperatures (welding or burning) irritant fumes may be evolved which can cause metal fume fever.
- 4. First Aid Measures:** in the event of injury to skin or eyes seek immediate medical attention
- 5. Fire Fighting Measures:** Non-flammable material
- 6. Accidental Release Measures:** Not applicable
- 7. Handling and Storage:** Banding/strapping securing products is not to be used for lifting. Products have sharp edges that may cause laceration. Caution is to be taken when releasing/removing banding or strapping as tension is released. Suitable protective clothing should be worn, such as face protector shields and cut resistant gloves and a safe system of work for removing strapping/banding and handling of products with sharp edges.
- 8. Exposure Control and Personal Protection:** If fume or dust is generated provide adequate ventilation ensuring the occupational exposure limits are not exceeded, inhalable dust to be below  $5\text{mg}/\text{m}^3$ . Where exceeded provide local exhaust ventilation and appropriate respiratory protective equipment. Good housekeeping is essential to reduce the risk of dust inhalation.

	Type of Limit	Reference Period	
		8 hr TWA*	(15 min)
Iron oxide, fume (as Fe)	Occ. Exposure Standard	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Zinc oxide, fume	Occ. Exposure Standard	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Chromium metal, also chromium (II) and (III) compounds (as Cr)	Occ. Exposure Standard	0.5 mg/m <sup>3</sup>	-
Chromium (VI) compounds (as Cr)	Max. Exposure Limit	0.05 mg/m <sup>3</sup>	-
Lead and lead compounds excluding tetraethyl lead (as Pb)	Approved Code of Practice. Lead in Air Standard	0.15 mg/m <sup>3</sup>	-
Antimony and its compounds (as Sb)	Max. Exposure Limit	0.5 mg/m <sup>3</sup>	-

- 9. Physical and Chemical Properties:**  
Coating melting point in range 419-450<sup>0</sup>C  
Steel melting point in range 1450-1520<sup>0</sup>C  
Density around 7.85kg/dm<sup>3</sup> at 20<sup>0</sup>C
- 10. Stability and Reactivity:** product is stable under normal conditions, fume produced under elevated temperatures
- 11. Toxicological Information:** Mechanical working such as grinding will produce a dust of the same composition as the coating and base metal. Under raised temperatures fumes produced contain oxides of zinc and iron, and will also breakdown any protective coating.
- 12. Ecological Information:** No known harmful effects
- 13. Disposal Considerations:** Reuse recycle or landfill
- 14. Transport Arrangements:** No special precautions
- 15. Regulatory Information:** Coated steel products are articles and not substances. Compliant with the Packaging and Packing waste directive on heavy metal content

**Other Information:** Chromium and its inorganic compounds. Occupational Skin Disease. Occupational Exposure Limits. Assessment of exposure to fume from welding. The control of exposure to fume from welding, brazing or similar process.

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Date: 28/09/07