

## Novamet<sup>®</sup> Zinc Flake

### Hazardous Ingredients

Hazardous Ingredients	Calculated Composition	C.A.S. No	PEL <sup>1</sup> – mg/m <sup>3</sup>	TLV2 – mg/m <sup>3</sup>
Zinc (Zn)	99.3	7440-66-6	n.av.	n.av.

### Physical and Chemical Data

Very fine, blue-grey, finely-divided powder.

Ingredient	Mol. Wt.	Specific Gravity	m.p.°C	b.p.°C	Sol. In H <sub>2</sub> O g/100ml
Zn	65.37	7.14	419.4	907	0

### Physical Hazards

Finely-divided zinc can form an explosive mixture with air. Bulk quantities of finely-divided zinc in a damp state can heat spontaneously and ignite on exposure to air.

For fires, smother with suitable dry powder. When fighting fire, wear self-contained breathing apparatus selected according to OSHA 29 CFR 1910.134.

### Health Hazards

#### Zinc

Inhalation: There are no reported inhalation hazards associated with zinc metal. However, if user operations generate zinc oxide fume, inhalation of the fume can result in metal fume fever. Characteristics of the signs and symptoms of exposure include unusual metallic taste accompanied by dryness and irritation of the throat, with coughing and laboured breathing, feeling of weakness and fatigue, pain in the muscles and joints, and general malaise. Fever then profuse sweating and sometimes convulsions. Recovery is usually complete in 24 to 48 hours. Tolerance to zinc oxide fume can be acquired, however, it is short-lived and usually lost in a couple of days.

Ingestion: Rats fed two per cent metallic zinc in their diets showed no injury.

### Precautions for safe storage, handling and use

If user operations generate fume, use ventilation to keep exposure to airborne zinc oxide below the exposure limit.<sup>4</sup> If ventilation alone cannot so control exposure, use NIOSH-approved respirators selected according to OSHA 29CFR 1910.134. Areas where zinc flake is used

should be free of ignition sources. Do not store near acids and alkali hydroxides. Finely-divided zinc in contact with acids and sodium hydroxide, potassium hydroxide, calcium hydroxide, etc. results in the evolution of hydrogen gas which can form explosive mixtures in air.

Store in a cool, dry, well-ventilated environment protected from moisture and separated from acids and alkali hydroxides. Protect containers from physical damage.

### **Spill, leak and disposal procedure**

Use sweeping compound to clean up spills. Waste is normally collected to recover metal values. Should waste disposal be deemed necessary, follow EPA and local regulations.

### **Emergency and first aid procedures**

For fires, see the section on PHYSICAL HAZARDS.

### **SARA Section 313 Supplier Notification**

This product contains the following chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372:

#### **Zinc**

Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers and percent by weight.

#### **NOVAMET SPECIALTY PRODUCTS CORPORATION**

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#### **Note:**

***Novamet believes that the information in this Material Safety Data Sheet is accurate. However, Novamet makes no express or implied warranty as to the accuracy of such information and expressly disclaims any liability resulting from reliance on such information.***

#### **Footnotes:**

- 1 OSHA Permissible Exposure Limit
- 2 Threshold Limit Value of the American Conference of Governmental Industrial Hygienists.
- 3 Describes possible health hazards of the product supplied. If user operations change it to other chemical forms, whether as end products, intermediates or fugitive emissions, the possible health hazards of such forms must be determined by the user.
- 4 The PEL for zinc oxide fume is 5 mg/m<sup>3</sup>; the TLV is 5 mg/m<sup>3</sup>.