

Manufacturers Name and Address:

Baltimore Tool Works, Inc.  
1110 Race Street  
Baltimore, Maryland 21230

Date of Preparation:

May 21, 1986

Name and Title of Contact Person:

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Product Name:

Hand Tools

Chemical Names:

AISI-C1095 Steel Bars

Trade Names:

BALTIMORE

Chemical Composition:

<u>Component</u>	<u>CAS #</u>	<u>% Weight</u>	<u>Health Hazard or Nuisance Products (Fume Components)</u>	<u>OSHA Permissible Exposure Limits For Fumes</u>	<u>ACGIH Threshold Limit Value</u>
Iron	1309-37-1	97-99	Iron Oxide Fume	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Carbon	7440-44-0	.96	None Listed	--	--
Manganese	7439-96-5	.40	Managanese	5 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
Phosphorus (Maximum)	7723-14-0	.012	Phosphorus (Yellow)	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Sulfur (Maximum)	7704-34-9	.029	Sulfur Dioxide	5 ppm	2 ppm
Silicon	7740-21-3	.20	Silicon	--	5 mg/m <sup>3</sup>

Coating

None

Note: At room temperature, this product does not pose a health hazard. However, welding, cutting, grinding, sawing or burning may generate the health hazards or nuisances listed above.

Chemical and Physical Properties

Physical State: Solid

Appearance: Gray or Black  
(may be coated)

Odor: None

Boiling Point: N/A

Melting Point: N/A

Vapor Pressure: N/A

Vapor Density: N/A

Evaporation Rate: N/A

Solubility in  
Water: N/A

ph: N/A

Personal Protective Equipment/Measures

Respiratory Equipment: Any NIOSH approved dust/mist/fume should be used if OSHA PEL is exceeded, and is recommended when this product is being heated. Respirators are considered insufficient protection against carbon monoxide fumes.

Protective Clothing: Varies according to use.

Gloves: Refer to local, state and federal codes for selection. Required for welding, brazing, cutting or other heating operations.

Eye Protection: As per welding requirements.

Ventilation Requirements: As per welding requirements.

Other: As per welding requirements.

Fire and Explosion Hazard Data

Ignition Temperature: N/A

Flash Point: N/A

Upper Explosive Limit: N/A

Lower Explosive Limit: N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

Reactivity Data

Stability: Stable

Incompatibilities: None

Hazardous Polymerization: Does not occur

Decomposition Products: Iron oxide, manganese, phosphorus (yellow), sulfur dioxide, silicon

Route of Exposure:

Inhalation

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Effects of Overexposure: - (Acute and chronic)

Iron (Iron Oxide) - Metallic taste, irritation of eyes, nose and throat, metal fume fever, pulmonary effects, siderosis.

Manganese - Metal fume fever, dry throat, tight chest, coughing, loss of strength, insomnia, shortness of breath, low back pain, vomiting, fatigue, bronchitis, pneumonitis, loss of coordination, Parkinson's disease.

Phosphorus (Yellow) - Eye and respiratory irritation, abdominal pain, nausea, jaundice, dental pain, jaw pain, salivation, eye and skin burns, anemia, physical wasting.

Sulfur (Sulfur Dioxide) - Irritation to eyes, nose and throat, runny nose, bronchial constriction, eye and skin burns.

Silicon - Coughing.

Carcinogenicity: None Known

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First Aid:

Move victim to fresh air, wash eyes, apply artificial respiration, and seek a physician's help, as required.

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Spill and Leak Response:

Clean Up: N/A  
Disposal: Recycle as scrap metal (nonhazardous under RCRA as sold)

Precautions For Safe Handling and Use:

Welding, Cutting, etc.: This operation should be performed in areas with adequate ventilation and appropriate respiratory protection.  
Handling & Storage: N/A  
Other Precautions: N/A

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Adequate ventilation and/or respiratory protection should be provided if exposure limits in chemical composition section are exceeded.

Use good housekeeping practices to prevent accumulations of dust and to keep airborne dust concentrations to a minimum.

All information, recommendations, and suggestions contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made by Baltimore Tool Works, Inc. with respect to the information provided.

Employers should use this information only as a supplement to other information gathered by them. Since the actual use of this product is beyond our control, and it is each employer's responsibility to assure the safety and health of their employees, Baltimore Tool Works, Inc. will not assume liability arising out of the use of this product by others.

This data sheet is provided by Baltimore Tool Works, Inc. to inform users of hazards associated with this product, so that appropriate protective measures may be taken. The data herein is based primarily upon information provided by the suppliers of the raw material and chemicals used in the manufacture of this product and the NIOSH/OSHA Pocket Guide to Chemical Hazards. The product data protective measures indicated are not necessarily the sum total of all protective measures or data. Baltimore Tool Works, Inc. makes no warranty with respect to the accuracy of the information provided by their suppliers or NIOSH/OSHA and disclaims all liability or reliance thereof.