

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

IDENTITY (as Used on Label and List): Stainless Steel Beads 1.6 mm

Section I - Company Identification

| | |
|------------------------------------|---|
| Manufacturer/Supplier name: | Emergency Telephone Number: (518) 674-3510 |
| Next Advance, Inc. | Telephone Number for Information: (518) 674-3510 |
| 1548 Burden Lake Road | Date Prepared: 12/20/2012 |
| Averill Park, NY 12018 | |

Section II - Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity, Common Name(s)) | OSHA PEL mg/m ³ | ACGIH TLV mg/m ³ | Other Limits Recommended | % (optional) |
|---|-------------------------------|--------------------------------|-----------------------------|--------------|
| Iron - Fe | 10 | 5 | None Listed | >96 |
| Carbon – C | None Listed | None Listed | None Listed | <1.2 |
| Manganese – Mn | | | | >1.3 |
| Elemental, Inorganic Compounds as Mn | 5 (ceiling) | 0.2 | None Listed | |
| Fume as Mn | 5 (ceiling) | None Listed | None Listed | |
| Silicon – Si | | | | <1.2 |
| As total dust | 15 | 10 | None Listed | |
| Respirable fraction | 5 | None Listed | None Listed | |
| Chromium – Cr | | | | <0.25 |
| Elemental, Inorganic Compounds as Cr metal | 1 | 0.5 | None Listed | |
| Cr II compounds - as Cr | 0.5 | None Listed | None Listed | |
| Cr III compounds - as Cr | 0.5 | 0.5 | None Listed | |
| Cr IV compounds - water soluble | None Listed | 0.05 | None Listed | |
| Cr IV compounds - insoluble | None Listed | 0.01 | None Listed | |
| Chromic Acid and Chromates as CrO ₃ | 0.1 (ceiling) | None Listed | None Listed | |
| Copper – Cu | None Listed | None Listed | None Listed | <0.20 |
| Nickel – Ni | | | | <2.0 |
| Elemental metal, insoluble as Ni | 1 | 0.05 | None Listed | |
| Soluble compounds as Ni | 1 | 0.05 | None Listed | |

Section III - Physical/Chemical Characteristics

| | | | |
|--------------------------------|--------------|---|--------------|
| Boiling Point | 2850-3150 °C | Specific Gravity (H2O = 1) | >7.6 |
| Vapor Pressure (mm Hg) | N/A | Melting Point | 1371-1483 °C |
| Vapor Density (AIR = 1) | N/A | Evaporation Rate (Butyl Acetate = 1) | N/A |
| Solubility in Water | N/A | Percent Solid by Weight | 100% |

Cast steel shot and grit are non-hazardous as received. Fine metallic dust is generated as the abrasive breaks down from impact and wear during normal use. Since the ferrous content is >96%, dust or fumes will consist mainly of iron or iron oxide. In addition, the fine steel dust created can be a mild explosion hazard (see section IV).

Appearance and Odor: Spherical & angular with no odor

Section IV - Fire and Explosion Hazard Data

| | | | |
|---|-------------------------|-----------------|-----------------|
| Flash Point (Method Used): N/A - Non-flammable | Flammable Limits | LEL: N/A | UEL: N/A |
|---|-------------------------|-----------------|-----------------|

Auto Ignition Temperature: (solid iron exposed to Oxygen) -930 degree C

Extinguishing Media: Use suitable extinguishing media for surrounding material and type of fire.

Unusual Fire and Explosion Hazards: A mild fire or explosion hazard situation may be created due to the fine dust that may result from use.

Special Fire Fighting Procedures: Fire Extinguishing method for dust created due to use – use Class D extinguishing agents or dry sand to exclude air. Do not use water or other liquids or foam.

Section V - Reactivity Data

| | | | |
|-------------------|----------|---|---|
| Stability: | Unstable | | Conditions to Avoid: None Identified |
| | Stable | X | |

Incompatibility (Materials to Avoid): None Identified

Hazardous Decomposition or Byproducts: None

| | | | |
|----------------------------------|----------------|---|---|
| Hazardous Polymerization: | May Occur | | Conditions to Avoid: None Identified |
| | Will Not Occur | X | |

Section VI - Health Hazard Data

Effects of exposure:

Over exposure to dust and fumes may cause mouth, eye, and nose irritation. Prolonged overexposure to manganese dust or fume affects the central nervous system. Chronic overexposure can cause manganese poisoning, and attendant apathy, loss of appetite, uncontrolled laughter, insomnia followed by sleepiness, headache, difficulty in walking, frequent falling, tremors, salivation sweating and mental detachment. Prolonged overexposure to iron oxide fume can cause siderosis, or "iron pigmentation" of the lung. It can be seen on a chest x-ray but causes little or no disability.

| | | | |
|-------------------------|----------------|--|----------------------------|
| Carcinogenicity: | NTP? No | IARC Monographs? chromium [VI] - carcinogenic to humans (Group 1), metallic chromium and chromium [III] compounds - not classifiable as to their carcinogenicity to humans (Group 3); nickel | OSHA Regulated? N/A |
|-------------------------|----------------|--|----------------------------|

| | | | |
|--|--|--|--|
| | | compounds are carcinogenic to humans, metallic nickel is possibly carcinogenic to humans (Group 2B). | |
|--|--|--|--|

Target Organs: Lung for chromium and lung and nasal for Nickel.

Medical Conditions Generally Aggravated by Exposure: Pre-existing respiratory disorders.

Emergency and First Aid Procedures:

Inhalation: Dusts - Remove If inhaled, move out of area into fresh air. Beads - If victim is choking dislodge foreign object by performing the Heimlich Maneuver. Seek immediate medical assistance.

Skin: Dusts - Remove contaminated clothing, brush material off skin, and wash affected area with mild soap and water. Seek medical attention.

Ingestion: Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

Eye: Dusts - Flush eyes with plenty of water for at least 15 minutes using an eyewash fountain. Lift upper and lower lids and rinse well under them. Have any remaining particles removed from eyes by qualified medical person.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: Dusts - When cleaning up large quantities of dust, a NIOSH approved respirator should be used. Spilled shot and grit can be reclaimed for reuse, or disposed of as a non-hazardous solid waste. Collected dust from blast cleaning or shot peening operations always contains contaminants from the surfaces of the parts being processed, and therefore the dust may be classed as a hazardous waste and, as such, must be disposed of according to appropriate local, State or Federal regulations.

Beads - Spilled or loose beads may pose a tripping or falling hazard. Be sure to contain all loose beads - do not walk on or place items on beads. No special precautions need to be followed when cleaning up spills or leaks of beads.

Waste Disposal Method: Dispose of in accordance with Local, State and Federal Waste Disposal Regulations.

Precautions to Be Taken in Handling and Storing: Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly after handling and before meals.

Other Precautions: Spilled or loose beads may pose a tripping or falling hazard. Be sure to contain all loose beads - do not walk on or place items on beads. Observe maximum floor loading limitations. The company has no control over this product or its use after it leaves our facility. The company assumes no liability for loss or damage incurred from the proper or improper use of this product.

Section VIII - Control Measures

Respiratory Protection (Specify Type): Wear a NIOSH/MSHA approved dust respirator under dusting conditions.

| | | | | |
|---------------------|-----------------------|----------|----------|--|
| Ventilation: | Local Exhaust: | X | Special: | |
| | Mechanical (General): | X | Other: | |

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses with side shields

Other Protective Clothing or Equipment: Protective gear suitable to prevent contamination.

Work/Hygienic Practices: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low

levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. Maintain eyewash capable of sustained flushing, safety drench shower and facilities for washing.

Section X - Transportation

DOT Classification - Not a regulated material

Proper Shipping Name – N/A

DOT ID # - Not regulated

Section XI Regulatory

a) CERCLA Hazardous Substance

_____yes X no

b) SARA, Title III, Extremely Hazardous Substance

_____yes X no

c) Toxic Chemical Release Report

 X yes _____no

Nickel & Manganese are subject to reporting under the requirements of Section 313 of the Emergency Planning and Community Right-to-know Act of 1986 and 40CFR Part 372.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Next Advance, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.