

SECTION 1: Chemical Product and Company Identification

MSDS name: Stainless Steel
Product form: Beads
Product name: SSB02, SSB05, SSB14B, SSB16, SSB23, SSB32, SSB48, SSB60, SSB110, SSUFO35, SSUFO56 (Standard/RNase Free)
Company identification: Next Advance, Inc. 2113 State Highway 7 Troy, NY 12180 USA www.nextadvance.com
For information, call: 518-674-3510
Emergency number: 518-674-3510
For CHEMTREC assistance, call: US:001-800-424-9300 / Europe:001-703-527-388
For Emergency, call: US:001-201-796-7100 / Europe: +32 14 57 52 99

SECTION 2: Composition, Information on Ingredients

CAS #	Chemical Name	% Weight
7439-89-6	Iron	>80 %
7440-47-3	Chromium	<20 %
7440-44-0	Carbon	<1.2 %
7439-96-5	Manganese	<1.3 %
7440-21-3	Silicon	<1.2 %
7631-86-9	Molybdenum	<0.75 %
7440-50-8	Copper	<0.20 %
7440-02-0	Nickel	<0.20 %
7723-14-0	Phosphorus	<0.040 %
7439-98-7	Sulfur	<0.030 %

Note: Various grades of steel will contain different combinations of the above elements. Trace elements may also be present in minimal amounts.

SECTION 3: Hazards Identification

Carcinogenicity: OSHA, not listed. IARC, chromium [VI] - carcinogenic to humans (Group 1), metallic chromium and chromium [III] compounds - not classifiable as to their carcinogenicity to humans (Group 3); nickel compounds are carcinogenic to humans, metallic nickel is possibly carcinogenic to humans (Group 2B).

Fumes can be generated by welding or flame cutting a surface containing new or used abrasive or the dust created by use of the abrasive. Welding or flame cutting may convert a small portion of the chromium to hexavalent chromium [VI]. IARC reports that welding fumes are possibly carcinogenic to humans.

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.

Target Organs: Lung for chromium and lung and nasal for Nickel. Primary Routes of entry - inhalation of dust formed particle breakdown or dust particles in eyes.

Emergency and First Aid Procedure: If inhaled, move out of area into fresh air. Flush eyes with running water, have any remaining particles removed from eyes by qualified medical person.

Primary Routes of entry: inhalation of dust formed during use, or shot, grit or dust particles in eyes.

Emergency and First Aid Procedure: If inhaled, move out of area into fresh air. Flush eyes with running water, have any remaining particles removed from eyes by qualified medical person.

SECTION 4: First Aid Measures

First Aid – Eyes: In case of injury to the eye, seek medical attention. If dust particles created by processing get into the eye, immediately flush eyes with large quantities of water for at least 15 minutes. Contact a physician.

First Aid – Skin: Seek medical help for serious cuts or lacerations or if irritation from contact with dusts persists.

First Aid – Ingestion: Not a route of exposure.

First Aid – Inhalation: For overexposure to airborne fumes and dusts created from processing, move to fresh air immediately and contact a physician.

SECTION 5: Fire-fighting Measures

Flash Point: Not Applicable

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

Flammability Limits: Not Applicable

Cast steel shot will not burn or explode. A mild fire or explosion hazard situation may be created due to the **fine dust that may result from use**. 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 6: Accidental Release Measures

Shot spilled or leaked onto floors can create hazardous walking conditions. No special precautions need to be followed when cleaning up spills or leaks of shot or grit. 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.

SECTION 7: Handling and Storage

Precautions to be taken in handling and storing - Keep dry to reduce rusting. Observe maximum floor loading limitations. Other precautions - 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 8: Exposure Controls/ Personal Protection

Ventilation: General ventilation and local exhaust should be provided to keep the dust levels below the TLV's shown in Section II.

Respiratory protection: If the dust created by use exceeds the ACGIH TLV's and OSHA PEL's indicated in Section II, a NIOSH approved respirator should be worn.

Eye protection: Approved safety glasses with eye shields should be worn. Other protective equipment - none required.

SECTION 9: Physical and Chemical Properties

Boiling Point: 2850-3150 °C

Melting Point: 1371-1483 °C

Specific Gravity (at 60 Degrees F) >7.6

Vapor Pressure: Not Applicable

% Volatile by Volume: Not Applicable

pH: Not Applicable

Evaporation Rate: Not Applicable

Vapor Density: Not Applicable

Solubility in Water: Not Applicable

Percent Solid by Weight: 100%

Appearance and Odor: Spherical & angular with no odor

Color: Gray

Solubility in Water: Insoluble

SECTION 10: Stability and Reactivity

Stability: Stable

Hazardous Polymerization: will not occur

Hazardous decomposition products: None

Shot and grit will break down into progressively smaller particles and dust during normal use.

SECTION 12: Ecological Information

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Mobility: No relevant studies identified.
Persistence/Degradability: No relevant studies identified.
Bio-accumulation: No relevant studies identified.
Ecotoxicity: No relevant studies identified.

SECTION 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: Transport Information

DOT Classification: Not a regulated material
Proper Shipping Name: N/A
DOT ID #: Not regulated

SECTION 15: Regulatory Information

- a) **CERCLA Hazardous Substance** yes no
Metals in solid form larger than 0.004 inches are not reportable.
- b) **SARA, Title III, Extremely Hazardous Substance** yes no
- c) **Toxic Chemical Release Report** 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.

SECTION 16: Other Information

The information and recommendations herein are based upon data believed to be correct for material as shipped. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to this information.