

MSDS (Material Safety Data Sheet) for Steel Grit & Shot

SECTION 1 : PRODUCTION IDENTIFICATION AND USE

PRODUCT NAMES :Steel Shot and Steel Grit
 SYNONYMS :Steel Abrasives, Shot Peening Media.
 FORMULA:C / Mn / Si / S / P
 MANUFACTURER/SUPPLIER'S NAME :



Shot

Grit

International Surface Technologies

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SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Chemical Formula	CAS Number	Weight (%)	EINECS No.
Carbon	C	7440-44-0	0.85 - 1.2	231-153-3
Manganese	Mn	7439-96-5	0.60 - 1.2	231-105-1
Silicon	Si	7440-21-3	0.4 Min	231-130-8
Sulphur	S	7704-34-9	0.05 Max	231-722-6
Phosphorus	P	7723-14-0		231-768-7

SECTION 3 : HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	Steel Grit and Steel Shot are nonhazardous as received. Fine metallic dust is generated as the abrasive breaks down from impact and wear during normal use. Since the ferrous oxide is >96%, dust or fumes will consist mainly of iron and iron oxide. In addition, the fine steel dust created can be a mild explosion hazard.
POTENTIAL HEALTH EFFECTS	Target Organs: Lung for chromium and lung/nasal for nickel.
PRIMARY ROUTE(S) OF ENTRY	Inhalation of dust formed during use or shot , grit or dust particles in the eyes.
INHALATION	Inhalation of dust formed during use.
EYE CONTACT	Abrasion injuries possible if safety glasses are not worn.
SKIN CONTACT	Abrasion injuries possible during blasting operations or similar exposure, with high velocity direct exposure to skin.

SECTION 4 : FIRST AID MEASURES

INHALATION	If there is gross inhalation of dust causing coughing and shortness of breath, remove victim to fresh air. If breathing has stopped, perform artificial respiration. Seek medical attention.
EYE CONTACT	Flush eyes with large amounts of water. If irritation persists, get medical attention.
SKIN CONTACT	Wash with soap and water. Obtain first aid or medical assistance as needed..
INGESTION	If large amounts are swallowed, get medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT	Not applicable
EXTINGUISHING MEDIA	Any available
SPECIAL FIRE FIGHTING PROCEDURES	None
UNUSUAL FIRE AND EXPLOSION HAZARD	
PROTECTIVE EQUIPMENT	Fire fighters & others exposed, wear self-contained breathing apparatus and be aware of other combustible substances involved in any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Cast Steel Grit spilled or leaked onto floors can cause hazardous walking conditions. Spills or leaks should be vacuumed or swept from working areas. When cleaning up large quantities of dust, a NIOSH approved respirator should be worn. Spilled Cast Steel Grit can be reused or disposed of as a non-hazardous waste. Collected dust from blast cleaning always contain contaminants from the surface of the parts being processed, and therefore the dust may be classified as a hazardous waste and, as such, must be disposed of according to appropriate Local, State or Federal regulations.

SECTION 7: HANDLING AND STORAGE

Avoid breathing dust. Use adequate ventilation and dust collection. Avoid breakage of bagged material and spills of bulk material. Spillage may create slippery conditions. Use goodhousekeeping to prevent accumulation of dust in work area. Keep dry to avoid rusting and caking. Avoid creation of respirable dust. See OSHA Hazard Communication Standard 29 CFR 1910-94(Ventilation).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION	General and local exhaust ventilation should be provided.
RESPIRATORY PROTECTION	NIOSH approved respirator should be worn.
SKIN & HAND PROTECTION	Prolonged contact with the skin should be avoided and protective clothing such as overalls and PVC or cotton-chrome gloves should always be available. Face masks should be worn when dust is likely to be created.
EYE PROTECTION	Approved safety glasses with side shields should be worn at all times. Safety eyewash stations should be provided in close proximity to the work area.
EAR PROTECTION	Wear hearing protection when blasting and in other applications abide by noise regulations dictated by employer/workplace regulations and legislations.

SECTION 9: PHYSICAL PROPERTIES

Specific gravity (H2O = 1)	7.6
Melting Point	1371 - 1482 °C
Boiling Point	1566 - 1725 °C
Solubility in water	Insoluble
Vapor Density	N/A
Vapor Pressure	
Evaporation Rate	
Appearance/Odor	Gray; near spherical or angular particles; odorless

SECTION 10: STABILITY AND REACTIVITY

STABILITY	Stable under normal ambient conditions of temperature and pressure.
MATERIALS TO AVOID	None
CONDITIONS TO AVOID	
HAZARDOUS DECOMPOSITION	
HAZARDOUS POLYMERIZATION	Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

PRIMARY ROUTES OF ENTRY	Inhalation of dust or fumes created during use, or dust particulate in eyes. Overexposure to dust containing the component elements of cast steel grit may cause skin, nose, mouth, and eye irritation.
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SECTION 12: ECOLOGICAL INFORMATION

HAZARDOUS DECOMPOSITION PRODUCTS	None
Handled correctly these products pose no serious environmental hazard.	

SECTION 13: DISPOSAL CONSIDERATIONS

Spilled Cast Steel Grit can be reused or disposed of as a non-hazardous waste. Collected dust from blast cleaning always contain contaminants from the surface of the parts being processed, and therefore the dust may be classified as a hazardous waste and, as such, must be disposed of according to appropriate Local, State or Federal regulations.

SECTION 14: TRANSPORT INFORMATION

Steel Shot and Steel Grit is NOT a hazardous material for purposes of transportation.

SECTION 15: REGULATORY INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION	Steel Shot and Steel Grit is NOT a hazardous material for purposes of transportation. US DOT Table of Hazardous Materials, 49 CFR 172.101.
RESOURCE CONSERVATION AND RECOVERY ACT	Steel Shot and Steel Grit is NOT classified as a hazardous material under RCRA or its regulations, 40 CFR 261.
TOXIC SUBSTANCES CONTROL ACT	Steel Shot and Steel Grit is ON the EPA TSCA Inventory.
COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT	Steel Shot and Steel Grit is NOT classified as a hazardous substance under CERCLA regulations, 40 CFR 302.
KNOW ACT	Steel Shot and Steel Grit is NOT an extremely hazardous substance in Section 302 and is NOT a toxic chemical subject to the requirements of Section 313.

SECTION 16: OTHER KEY INFORMATION

CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European Inventory of Existing Commercial chemical Substances
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
RCRA	Resource Conservation and Recovery Act
TSCA	Chemicals under the Toxic Substances Control Act

ISSUE DATE

May 10, 2019

NOTICE

The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.