



MSDS FOR CAST STEEL GRIT/SHOT

SECTION 1 : PRODUCTION IDENTIFICATION AND USE



PRODUCT NAMES :

Cast Steel Abrasive

DESCRIPTION :

Shot (spherical) and grit (angular) or shot/grit blends. W Abrasives, HPG, Hybrid Shots, Profilium, Prowheelium, Stainium & Surfium.

MANUFACTURER/SUPPLIER'S NAME :

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SECTION 2: HAZARD(S) IDENTIFICATION

CLASSIFICATION OF SUBSTANCE/ MIXTURE	with OSHA paragraph D CFR 1910.1200 and WHMIS 2015: this product is not classified according to the regulations.
HAZARD SYMBOL, SIGNAL WORD, HAZARD STATEMENT	Not applicable.
OTHER HAZARDS NOT RESULTING IN CLASSIFICATION	We currently knows of no risk connected to the product. Cast steel abrasive itself is chemically inert and does not present any risk to people or to the environment. Risks are dependent upon the user's process and application. Health Hazard: Health risks are linked to the exposure to dust. Dust is produced by the fragmentation of the abrasives and particles removed from the blasted parts. Dust may cause mechanical irritation of the eyes and respiratory tract. Fire/Explosion: Dust can form an explosive mixture with air. Other risks: Noise. Risk of falling due to the presence of abrasives on the floor.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

A. Cast Steel Abrasive Shot (SAE J827) and Grit (SAE J1993) Chemical composition: All chemical elements in our abrasives are in alloyed form and not in a free form.

Substance	Chemical Symbol	CAS Number	% Weight
Iron	Fe	7439-89-6	> 95
Carbon	C	7440-44-0	< 1.2
Manganese	Mn	7439-96-5	
Silicon	Si	7440-21-3	

B. Additional information:

The product is manufactured from recovered scrap metal. Due to the scrap metal recovery process, other unintentionally added elements such as Chromium (Cr), Nickel (Ni) or copper (Cu), may be present as impurities. The concentrations of these elements could in some case individually exceed 0.1% but do not lead to a global classification of the alloy.



SECTION 4: FIRST-AID MEASURES

a) Description of first aid measures General information: No special measures required.

LUNGS	If inhaled, move to fresh air, and if symptoms persist, consult a qualified medical person.
EYE CONTACT	Do not rub, flush eyes with running water for at least 15 minutes and have any remaining particles removed from eyes by a qualified medical person.
SKIN	Wash with soap and water after contact with dust. If irritation occurs, consult a qualified medical person.
MOUTH	Rinse out mouth, if symptoms persist consult a qualified medical person.

b) Most important symptoms/effects, acute and delayed: No further applicable information.

c) Indication of immediate medical attention and special treatment needed, if necessary: No further applicable information available.

SECTION 5: FIRE-FIGHTING MEASURES

These products are non-flammable.

EXTINGUISHING MEDIA	Select media appropriate for the surrounding materials/area.
SPECIAL HAZARDS	Fine metal dust that is created as a waste stream and/or contaminants that are removed during the blasting process may pose a small risk of fire or explosion.
SPECIAL PROTECTIVE MEASURE OR EQUIPMENT FOR FIREFIGHTERS	None required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES	Steel abrasives on horizontal surfaces can create slip and fall hazards. It is recommended to keep floors, stairs and work areas clean at all times.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	Mechanical clean up, the material may be reused, recycled or disposed of in compliance with local, federal and state regulations

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Handle with care to avoid damage to packaging to avoid spillage.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	Store in a dry place. No safety risk but oxidation and aggregation may occur in the presence of moisture. No further applicable information available



SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

- b) There are no specific threshold limit values (TLV) or permissible exposure limits (PEL) for cast steel abrasives.
- c) As the type of equipment used, surfaces/parts being processed and the operating conditions are the responsibility of the user, it is the user who must determine the appropriate thresholds, types of controls and the nature of the personal protection required.

Substance	Agency	Value Type	Value
Carbon black (1333-86-4)	OSHA	PEL	3.5 mg/m ³
	ACGIH	TLV-TWA	3 mg/m ³ (IHL)
Silicon (7440-21-3)	OSHA	PEL (TWA)	15 mg/m ³ (total dust)
			5 mg/m ³ (respirable fraction)
Manganese (7439-96-5)	ACGIH	TLV-TWA	0.02 mg/m ³ (respirable particulate matter)
Elemental and Inorganic compounds, as Mn			0.1 mg/m ³ (inhalable particulate matter)
	OSHA	PEL (Ceiling)	5 mg/m ³ (fume)

VENTILATION	Adequate ventilation and exhaust of the dust and fumes generated during operations should be provided to reduce the exposure levels.
RESPIRATORY PROTECTION	NIOSH approved respirator is recommended.
EYE PROTECTION	Approved safety eye protection (ANSI-Z87) with side shields should be worn
OTHER PROTECTIVE MEASURES	Protective gloves, work suits and work boots.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Spherical or angular steel particles of varied shades/hues of grey.		
Physical state	Solid, Non-flammable and inert (non-explosive)		
Specific gravity	> 7 g/cc	Flash Point	Not applicable
Melting Point	1371-1482 °C	Flammable limits	
Boiling Point	approx. 3000 °C	Auto-ignition temperature	
Solubility in water	Negligible	Evaporation rate	
Odor/threshold	Odorless	Vapor Pressure	
pH	Not applicable	Vapor density	
Viscosity		% Volatile	
Partition coefficient		Decomposition temperature	



SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	The product is stable under normal conditions of storage and handling.
CHEMICAL STABILITY	Stable under normal conditions.
POSSIBILITY OF HAZARDOUS REACTIONS	No hazardous reactions known, under normal storage or working conditions, steel abrasives are stable and do not present any danger of hazardous reactions occurring.
CONDITIONS TO AVOID	No applicable information available.
INCOMPATIBLE MATERIALS	Acids.
HAZARDOUS DECOMPOSITION PRODUCTS	No hazardous decomposition products under normal storage and uses conditions. Toxic metal oxide smoke can be released in case of fire.

SECTION 11: TOXICOLOGICAL INFORMATION

No known specific indications or counter indications.

INFORMATION ON THE LIKELY ROUTES OF EXPOSURE	No applicable information available.
SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS	
DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT- AND LONG-TERM EXPOSURE	
NUMERICAL MEASURES OF TOXICITY	<ul style="list-style-type: none"> • Iron oxide (1309-37-1) Oral LD50 Rat: >10000 mg/kg • Manganese (7439-96-5) Oral LD50 Rat: 9 g/kg • Silicon (7440-21-3) Oral LD50 Rat: 3160 mg/kg
Not listed under the IARC, NTP, OSHA-Ca.	

SECTION 12: ECOLOGICAL INFORMATION

The product, as delivered, does not present any threat to the environment. This product should be use under the best possible working conditions to avoid releasing it into the environment.

ECO-TOXICITY (AQUATIC AND TERRESTRIAL)	No applicable information available.
PERSISTENCE AND DEGRADABILITY	
BIO-ACCUMULATIVE POTENTIAL	
MOBILITY IN SOIL	
OTHER ADVERSE EFFECTS	

SECTION 13: DISPOSAL CONSIDERATIONS

Do not discharge product into the environment. Disposal or recycling of this product or uncleaned packaging must be done in compliance with local, federal and/or state regulations.

Operating Wastes: Each user must study the problem of waste in relation to their specific activity.



SECTION 14: TRANSPORT INFORMATION

"UN" NUMBER	Not applicable
"UN" PROPER SHIPPING NAME	
TRANSPORT HAZARD CLASS(ES)	
PACKING GROUP	
ENVIRONMENTAL HAZARDS MARINE POLLUTANT	No
TRANSPORT IN BULK (ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE)	Not applicable
SPECIAL PRECAUTIONS FOR USER	There are no special conditions.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product: No regulations specific to Steel Abrasives.

SECTION 16: MISCELLANEOUS INFORMATION

DATE OF REVISION	October 24, 2018
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Prepared in accordance with, OSHA CFR 1910.1200 (USA), NOM-018-STPS-2015 (Mexico), WHIMIS 2015 (Canada).

This Safety Data Sheet is available in English, French and Spanish. The information contained in this Safety Data Sheet applies only to cast steel abrasive as delivered and its unused state. The information contained in this Safety Data Sheet is our most up to date. The information and was obtained from sources IST believes to be reliable however IST makes no guarantee, representation or warranty as to the correctness or accuracy of the information. IST does not assume responsibility and disclaims liability for any losses, damages or expense associated with the use of these products.

