

Safety Data Sheet
Carbon Steel Shot
SDS Revision Date: 06/23/2017

1. Identification

1.1. Product identifier Carbon Steel Shot
Product Identity Carbon Steel Shot
Alternate Names Carbon Steel Shot

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Abrasive Blasting Applications.
Application Method Abrasive Blasting Applications
Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Company Name Marco Group International
3425 East Locust Street
Davenport, IA 52803

Emergency

24 hour Emergency Telephone No. 800 BLAST IT (800-252-7848)
Customer Service: Marco Group International PH: 800-252-7848
FX: 800-735-6849
Email: sales@marco.us
Reach Marco after hours: 877-782-3247

2. Hazard identification

2.1. Classification of the substance or mixture

Skin Sens. 1; H317 May cause an allergic skin reaction.
Resp. Sens. 1; H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled.

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[Prevention]:

- P261 Avoid breathing dust / fume.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves / eye protection / face protection.
- P281 Use personal protective equipment as required.

[Response]:

- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P313 Get medical advice / attention.
- P321 Specific treatment (see information on this label).
- P333+313 If skin irritation or a rash occurs: Get medical advice / attention.
- P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.
- P363 Wash contaminated clothing before reuse.

[Storage]:

No GHS storage statements

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification*	Notes
Carbon CAS Number: 0007440-47-3	1 – 5	Not Classified	[1][2]
Chromium compounds (as Cr (III)) CAS Number: 0007440-47-3	0.1 – 1.0	Skin Sens. 1; H317 Resp. Sens. 1; H334 Eye Irrit. 2; H319 Resp. Irrit 3; H335 Skin Irrit 2; H315 Aquatic Chronic 4; H413	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

*The full texts of the phrases are shown in Section 16.

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4. First-aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, roll the person onto his or her side (the recovery position) if there are no obvious signs of injury and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Brush off excess dust, wash area with soap and water.
Ingestion	Seek medical help if large quantities have been ingested.

4.2. Most important symptoms and effects, both acute and delayed

Overview:	Inhalation: Inhalation of dust may cause respiratory irritation. Chromium and certain compounds of chromium have been reported to cause lung damage and breathing difficulties. Ingestion: May cause gastric disturbances. Skin: May cause sensitization on repeated contact. Dermatitis has been reported after contact with chromium compounds. Eyes: Contact may cause irritation. See section 2 for further details.
Inhalation	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Skin	May cause an allergic skin reaction.

5. Fire-fighting measures

5.1. Extinguishing media

As appropriate for surrounding fire

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.
Do not breathe dust / fume.

5.3. Advice for fire-fighters

These products are non-flammable and do not react to the use of water or other materials used for extinguishing fire. Fine metal dust that is created as a waste stream and/or contaminants that are removed during use may pose a risk of fire or explosion.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Cast Steel Shot 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 Shot can be reused or disposed of as a non-hazardous waste. Collected dust from blast cleaning or shot peening operations 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.

7. Handling and storage

7.1. Precautions for safe handling

Keep dust away from sources of ignition.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Keep dry to reduce rusting. Observe maximum floor loading limitations.

Store material away from incompatible materials

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CASNo.	Ingredient	Source	Value
0007440-44-0	Carbon	OSHA	TWA: 15 mg/m ³ (total), 5 mg/m ³ (resp)
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

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0007440-47-3	Chromium compounds (as Cr (III))	OSHA	0.05 mg/m ³ TWA
		ACGIH	0.05 mg/m ³ TWA
		NIOSH	0.05 mg/m ³ TWA
		Supplier	No Established Limit

The exposure limits for nuisance dust (particles not otherwise regulated):

OSHA PEL:	15 mg/m ³ TWA (total dust)
	5 mg/m ³ TWA (respirable fraction)
ACGIH TLV:	10 mg/m ³ TWA (inhalable fraction)
	3 mg/m ³ TWA (respirable fraction)

8.2. Exposure controls

Respiratory	If the particulate exposure limit is exceeded, wear NIOSH-approved respiratory protection. According to OSHA, only a Type CE NIOSH-certified blasting airline respirator with positive pressure blasting helmet should be used for abrasive blasting (https://www.osha.gov/Publications/OSHA3697.pdf).
Eyes	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.
Skin	Wear protective gloves and clothing to prevent skin contact.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Steel shot is angular in shape and light gray to silver in color. Solid.
Odor	Odorless
Odor threshold	Not determined
pH	Not Applicable
Melting point / freezing point	1371° to 1482°C
Initial boiling point and boiling range	2850° - 3150°C
Flash Point	Not Applicable
Evaporation rate (Ether = 1)	Not Applicable
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Applicable

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Vapor pressure (Pa)	Upper Explosive Limit: Not Applicable Not Applicable
Vapor Density	Not Applicable
Specific Gravity	Not Measured
Solubility in Water	Not Applicable
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	930°C
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Applicable
% Solid by Weight	100%

9.2. Other information
 No other relevant information

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity
Ingredient

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust LC50 mg/L/4hr	Inhalation Gas LC50 ppm
Carbon – (7440-44-0)	10,000.00, Rat- Category: NA	No data available	No data available	64.40, Rat- Category: NA	No data available
Chromium compounds	422.00, Rat	No data	No data	No data	No data

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(as Cr (III)) (7440-47-3) Category: 4 available available available available

Carcinogenicity

Ingredient	Source	Evaluation
Carbon – 0007440-44-0	OSHA	Not evaluated or listed
	NTP	Not evaluated or listed
	IARC	Not evaluated or listed
Chromium compounds as Cr (III) (1302-62-1)	OSHA	Not evaluated or listed
	NTP	Not evaluated or listed
	IARC	Not classifiable as to its carcinogenicity to humans (Group 3)
	ACGIH	Not classifiable as a human carcinogen (A4)

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	1	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization	1	May cause an allergic skin reaction
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	1a	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	Er C50 algae, mg/l
Carbon – (7440-44-0)	Not available	Not available	Not available
Chromium compounds as Cr (III) (7440-47-3)	77.50, Pimephales promelas	1.20, Daphnia magna	580.00 (72 hr), Chlorella pyrenoidosa

12.2. Persistence and degradability

There is no data available on the preparation itself.

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12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

MATERIAL CONTAMINATED IN USE MAY REQUIRE SPECIAL HANDLING.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1 UN number	Not Applicable	Not Regulated	Not Regulated
14.2 UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3 Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable	Air Class: Not Applicable
14.4 Packing group	Not Applicable	Not Applicable	Not Applicable
14.5 Environmental hazards			
IMDG:	Marine Pollutant: No		
14.6 Special Precautions for user			
	No further information		

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

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WHMIS Classification D2A
US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

Nickel

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Pennsylvania RTK Substances (>1%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H413 May cause long lasting harmful effects to aquatic life.

END OF DOCUMENT