

TARGET ABRASIVE

COPPER SLAG

February, 06 Page 1 of 3

PRODUCT

TARGET® Abrasive is an abrasive grit prepared by selective screening of copper slag to give a series of clean, sharp abrasives meeting the needs of the abrasive blast cleaning industry. The product is approved by the California Air Resources Board for use in dry, unconfined blasting operations.

USES AND ADVANTAGES

- TARGET Abrasive is suitable for most grit blasting operations on metal surfaces. The angular shapes of individual particles of TARGET Abrasive make this product ideal for the efficient removal of mill scale, rust or existing coatings from steel and other metals in preparation for painting. The hardness and particle shape of TARGET Abrasive also permit its recycling and reuse in blast cleaning processes.
- The low crystalline silica content (less than 0.1% free silica, no detectable respirable silica) of TARGET Abrasive is a significant factor in situations where the use of silica sand blasting abrasives is not acceptable for environmental or safety reasons.

PHYSICAL PROPERTIES

Colour	Black
Grain Shape	Angular
Hardness, Moh	6 - 7
Bulk Density	104 lb/ft ³ (1666 kg/m ³)
Specific Gravity	3.19
Moisture Content	<0.01% weight

PACKAGING

All grades of TARGET Abrasive are available in 22.7 kg (50 lb), 36.3 kg (80 lb) or 45.4 kg (100 lb) paper bags, bulk bags of approximately 1770 kg (3900 lb), or in pneumatic tanker loads.

CAUTION

- Although TARGET Abrasive is suitable for blasting of concrete or wood surfaces, a test section should be done before proceeding with a project to ensure that the particles of abrasive do not become embedded in the work, causing a darkening of the exposed surfaces. TARGET silica sand or industrial sand abrasives are usually more suitable for such applications.
- The sharpness of TARGET Abrasive particles can be detrimental to certain fish species. The use of TARGET Abrasive in situations where it can enter waterways is therefore not recommended. Other TARGET abrasive products are suitable for use in situations where TARGET Abrasive might not be appropriate.

Product performance is affected by many factors, including storage, method and conditions of application and use. User testing is ESSENTIAL to determine suitability of product for intended method of application and use. Target's SOLE WARRANTY is that the product has been manufactured to specifications. No oral or written information or advice shall increase this warranty or create new warranties. Target's SOLE LIABILITY is to replace product proved defective. In no event shall Target be liable for any consequential, indirect or other damages whether arising from negligence or otherwise.

TARGET is a registered trade-mark of Tegrat Holdings Ltd. Target Products Ltd. is an authorized licensee.



TARGET ABRASIVE COPPER SLAG

TYPICAL SIEVE ANALYSES

February, 06 Page 2 of 3

Sieve Size		Cumulative % Passing		Cumulative % Retained	
ASTM E 11	Metric	Medium #16-30	Fine #35	Medium #16-30	Fine #35
No. 12	1.70 mm	92	100	8	0
No. 16	1.18 mm	72	96	20	4
No. 20	0.85 mm	47	66	25	30
No. 30	0.60 mm	25	31	22	35
No. 40	0.42 mm	10	16	15	15
No. 50	0.30 mm	Trace	8	10	8
No. 70	0.21 mm		3		5

TOTAL METALS AND LEACHATES, ppm

ELEMENT	TARGET ABRASIVE 16-36 TOTAL METALS mg/kg	LEACHABLE METALS mg/L	CCME 1996 Maximum Limit Commercial/Industrial
Arsenic	9.3	0.007	50
Barium	343	1.34	2000
Cadmium	0.9	0.01	20
Chromium	35.7	0.02	800
Cobalt			300
Copper	1458		500
Lead	3.3	0.07	1000
Mercury	0.1	0.01	10
Molybdenum			40
Nickel	17.5		500
Selenium	1.0	0.06	10
Silver	1.0	0.06	40
Tin			300
Zinc	79.0		1500

Leachable metals determined by TCLP test.

Product performance is affected by many factors, including storage, method and conditions of application and use. User testing is ESSENTIAL to determine suitability of product for intended method of application and use. Target's SOLE WARRANTY is that the product has been manufactured to specifications. No oral or written information or advice shall increase this warranty or create new warranties. Target's SOLE LIABILITY is to replace product proved defective. In no event shall Target be liable for any consequential, indirect or other damages whether arising from negligence or otherwise.

TARGET is a registered trade-mark of Tegrat Holdings Ltd. Target Products Ltd. is an authorized licensee.

T
A
R
G
E
T

P
R
O
D
U
C
T
S

L
T
D



TARGET ABRASIVE

COPPER SLAG

SAFETY

February, 06 Page 3 of 3

TARGET Abrasive does not contain any ingredients that require classification under WHMIS regulations. Because of the hazardous nature of abrasive blast cleaning operations and the toxicity of the dusts that can be created when removing certain coatings, all appropriate safety precautions must be followed when using TARGET Abrasive or any other abrasive. Consult your local Industrial Health & Safety Regulations, NIOSH or other requirements for guidance on the necessary safety procedures and equipment.

WASTE DISPOSAL

Before use, TARGET Abrasive is not classified as a special waste. The leachable metals contents, when determined by the recognized standard test procedures, are below the published limits. During use, however, the product can become contaminated with paints or other materials that would require classification of the waste material as a special waste. It is the responsibility of the user to undertake any necessary evaluation, classification and disposal of the material after use. Consult local authorities for information on the disposal requirements and procedures applicable to spent abrasive in your area.

TARGET ABRASIVE USES BY SCREEN SIZE:

- #35** Mill scale, structural steel and bottom paint preparation. For a light profile, will feather edge. Recommended for most light sandblast operations. 1.5 – 3.0 mil profile.
- #16/30** Shipyard sandblasting – all types of hull and structural work. Bottom preparation, shop blasting, concrete stripping and bridge blasting. 3.0 – 5.0 mil profile.

ABRASIVE CHEMICAL ANALYSIS*

Silicon Dioxide (SiO ²)	48.24 %
Iron Oxide (Fe ² O ³).....	.97 %
Iron Oxide (FeO).....	18.10 %
Aluminum Oxide (AlO ₃).....	9.05 %
Calcium Oxide (CaO)	18.48 %
Magnesium Oxide (MgO)	2.90 %
Copper (Cu).....	.10 %
Manganese Oxide (MgO)22 %
Free Silica	<0.1%

* Plasma Emission Spectroscopy

Product performance is affected by many factors, including storage, method and conditions of application and use. User testing is ESSENTIAL to determine suitability of product for intended method of application and use. Target's SOLE WARRANTY is that the product has been manufactured to specifications. No oral or written information or advice shall increase this warranty or create new warranties. Target's SOLE LIABILITY is to replace product proved defective. In no event shall Target be liable for any consequential, indirect or other damages whether arising from negligence or otherwise.

TARGET is a registered trade-mark of Tegrat Holdings Ltd. Target Products Ltd. is an authorized licensee.



T
A
R
G
E
T

P
R
O
D
U
C
T
S

L
T
D