

HERMES ABRASIVE SURFACE TREATMENT PRODUCTS AND METAL IMPORT INDUSTRY
AND TRADE LIMITED LIABILITY COMPANY



HERMES
A B R A S I V E

satis@hermesabrasive.com

GARNET Technical Data Sheet - TDS



Product name: GARNET-TDS

Seller: HERMES YÜZEY İŞLEME VE METAL İTH.İHR.LTD.ŞTİ

www.hermesabrasive.com

Contact: +90 (534) 431 0589 +1 (315) 633-32954716

Saadetdere Mah.Fevzi Çakmak Cad.No:83/A

ESENYURT/İSTANBUL

AVCILAR VD - 461 103 7156

İTO SİCİL NO: 378680-5

MERSİS NO: 0461103715600001

Garnet is a monocrystalline natural stone belonging to a group of garnet stones, It does not contain free silica, in the structure. Unbroken granules have irregular forms and naturally ground edges. Its structure is homogenous, hard and durable. With its high quality and durable structure, it is a material that lasts longer and causes less consumption. For this reason, garnet sand is the most common among economic abrasives.

Garnet is used as raw material and consumables for many industrial applications such as sandblasting, water-jet cutting, water treatment and wastewater filtration, abrasive paper and abrasive stone production. Garnet is not toxic and contains no harmful content. Garnet does not absorb water and does not cause dust formation. In addition, there are no heavy metals or radioactive particles that threaten human health.

TYPICAL CHEMICAL ANALYSIS	
CHEMICAL NAME	RATE
SiO ₂ (No free silica. It does not contain free silica)	35,00 %
Fe ₂ O ₃	33,00 %
Al ₂ O ₃	23,00 %
MgO	7,00 %
MnO	1,00 %
CaO	1,00 %

TYPICAL PHYSICAL PROPERTIES	
Hardness	ca. 8 mohs
Grain shape	angular
Melting point	approx.1320 °C
Specific gravity	approx. 3,5 – 4,3 g/cm ³
Bulk density depending on granular size	approx. 1,9 – 2,2 g/cm ³

PACKAGING
1000 Kgs. Bigbag or 25 Kgs bag in 1000Kgs Bigbag

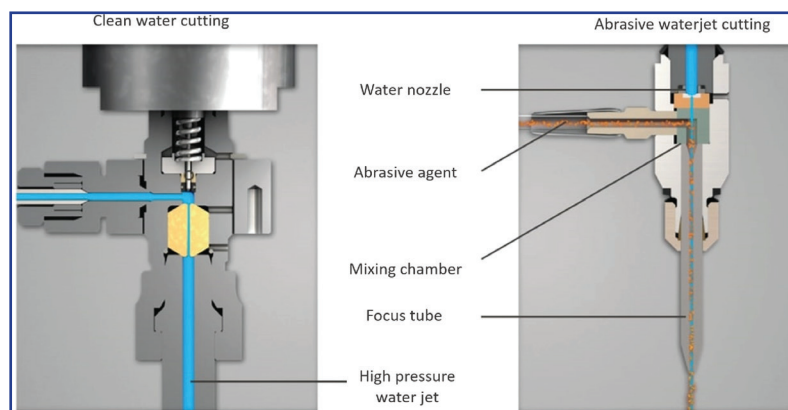
AVAILABLE SIZES	
MESH	Averga grain size (mm)
GARNET for standard usage	
12/20	0,50 – 1,20
20/40	0,50 – 1,00
30/60	0,20 – 0,60
GARNET for high-pressure water jet cutting	
80	0,180 – 0,35
120	0,180 – 0,25
180	0,090 – 0,15
200	0,075 – 0,15
240	0,045 – 0,10
GARNET SOFT for cleaning of building exteriors	
	0,01 – 0,06
	0,06 – 0,10
	0,10 – 0,25

Hermes Abrasive Turkey Waterjet Garnet; Companies have made a significant investment in your Waterjet cutting equipment, with Hermes Abrasive Turkey Garnet you can be confident you maximise production and safeguard their investment. Hermes Abrasive Turkey Garnet's world best processing ensures highest purity garnet and highly accurate sizing of grains. This ensures there is no dust or ineffective fine grains to restrict garnet free flow, and no oversize grains to block focusing tubes. A steady flow of garnet to the focusing tube and no blockages allows uninterrupted production without downtime resulting in optimum efficiency and lowest production costs. Companies can be confident that each delivery and each bags of Hermes Abrasive Turkey Garnet is up to the same highest quality standard that you would expect from the world's leading supplier of excellent Waterjet abrasives. that Hermes Abrasive Turkey Garnet's hard and tough sub angular grains provide the perfect balance between cutting speed and edge quality with reduced wear and tear to equipment and in particular the cutting head and focusing tube. The reduced wear and tear on components using Hermes Abrasive Turkey Garnet alluvial grains result in direct cost savings and longer service life. Excellent quality alluvial garnet does not contain any fracture lines that weaken the grain inherent with crushed garnet.

	Hermes Abrasive Grade Garnet	Focusing Tube	Orifice
Industrial Normally Standard Configuration	80 mesh 300-150 micron	0.4" 1.02mm	0.013-0.014" 0.330-0.356mm
Industrial High Speed Cutting Configuration	60 mesh 400-200 micron 50 mesh 600-200 micron	0.5" 1.27mm	0.014-0.018" 0.356-0.457mm
Industrial High Precision Edge Cutting Configuration	80 mesh 300-150 micron 120 mesh 200-100 micron	0.36" 0.91mm	0.012-0.013" 0.305-0.330mm
Industrial Fine Precision Edge Cutting Configuration	120 mesh 200-100 micron	0.3" 0.76mm	0.010-0.011" 0.254-0.279mm

Waterjet Cutting Industries; Metalworking, Manufacturing, Aerospace, Automotive, Defense, Stone cutting, Glass cutting,.. etc. used in waterjet cutting processes in many industries.

Waterjet Cutting Applications; Granite, Marble, Ceramics, Tile & Faience, Aluminum, Carbon Steel, Copper, Stainless Steel, Rubber, Wood, Glass,... etc used in cutting of materials.



Hermes Abrasive Turkey Sandblasting Garnet; Companies have made a significant investment in their sandblasting machine, equipment and nozzle, with Hermes Abrasive Turkey Garnet you can be confident you maximise production and safeguard your investment. Hermes Abrasive Turkey Garnet's world best processing ensures highest purity garnet and highly accurate sizing of grains. This ensures there is no dust or ineffective fine grains to restrict garnet free flow, and no oversize grains to block focusing sandblasting nozzle. A steady flow of garnet to the focusing sandblasting nozzle and no blockages allows uninterrupted production without downtime resulting in optimum efficiency and lowest production costs. Companies can be confident that each delivery and each bags of Hermes Abrasive Turkey Garnet is up to the same highest quality standard that you would expect from the world's leading supplier of excellent sandblasting abrasives. that Hermes Abrasive Turkey Garnet's hard and tough sub angular grains provide the perfect balance between sandblasting speed and sandblasting quality with reduced wear and tear to equipment and in particular the sandblasting equipments and focusing sandblasting nozzle. The reduced wear and tear on components using Hermes Abrasive Turkey Garnet hard grains result in direct cost savings and longer service life. Excellent quality hard garnet does not contain any fracture lines that weaken the grain inherent with crushed garnet.

Sandblasting Applications; Hermes Abrasive Turkey Sandblasting Garnet is well suited to most fields of the surface preparation industry with and without subsequent coatings, in particular:

- Shipyards, new building, conversion and repair, including antimagnetic and other special steels, as well as aluminium superstructures and aluminium and fibreglass hulls.
- Oil and petrochemical industry maintenance, work in refineries and storage tanks as well as on-shore and off-shore installations
- Construction and maintenance of chemical plants, nuclear and fossil power stations, gas and sewerage plants, desalination and industrial plants.
- Bridge and weir locks.
- Building industry and structural steel.
- Construction and maintenance of containers and tanks, tank trucks and rail tanks as well as wagons and coaches.
- Stone building facades and monuments.
- Non-ferrous surfaces and turbine blades (special mesh).
- Stainless Steel.



Hermes Abrasive Turkey Garnet Filter Sand; Hermes Abrasive garnet is a high hardness, high density granular filter media. It can be used extremely effectively as the lower strata in a dual media filter bed. Its high specific gravity as well as its chemical and abrasive resistance makes garnet ideal for filtration. An effective multi-media filter system will utilize larger sized media on top to filter out the larger particulates and smaller sized media to filter out the smaller particulates. Hermes Abrasive Garnet, with its high density, is heavier than most other filter media. Hermes Abrasive Garnet's higher density provides stability within your dual media bed, allowing the filter sized garnet to filter down to microns size particulates. Filter sand or anthracite are used effectively as the strata of bed. High specific gravity allows unique filter design. In combination with other filter medias, higher flow rates, higher loading and better filtration can be achieved. High hardness reduces attrition and provides for years of reliable service. An excellent support bed for other high density medias.



HERMES ABRASIVE SURFACE TREATMENT PRODUCTS AND METAL IMPORT INDUSTRY AND
TRADE LIMITED LIABILITY COMPANY

GARNET Technical Data Sheet - TDS

