

# Tephroite

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## Crystal structure and chemistry

Formula: Mn2SiO4

Crystal System: Orthorhombic

It is a member of the olivine group, it can be made up of manganese silicate, sometimes with magnesium and zinc. Variable formula: (Mn,Mg,Zn)2SiO4.

It falls i the silicates and nesosilicate groups.



## Physical Properties

Color: Gray, grayish-green, olivine green, brown, reddish-brown, pink.

Name comes from the greek word tephros which means "ash gray".

Has a hardness of 6, and has a light grey streak. It is translucent and rarely transparent. Tephroite has the specific gravity of 4.1, that is heavy for it being non-metallic.

Luster:vitreous, greasy, and waxy Fracture: conchoidal and uneven

Its is a brittle mineral and is metamorphic



### Properties

Tephroite is found in manganese-rich metamorphic deposits.

It is used for making jewelry and gemstones.

Not listed as a hazardous mineral but should still be handled with care.



# Where Tephorite is found

Tephorite is a very common mineral that is found at all continents but is most common in Japan

Largest amounts of Tephorite are in many places there.

Some including;Chubu Region, Chugoku Region,Chugoku Region, Kinki Region,Tohoku Region,**Kyushu Region,Shikoku Island** 







#### Tephroite, Willemite, Franklinite





#### **Tephroite with Franklin minerals**





#### Yellow-brown Tephroite























### References

https://www.mindat.org/min-3913.html

https://www.minerals.net/mineral/tephroite.aspx

http://www.webmineral.com/data/Tephroite.shtml#.W\_v\_OehKgWU

http://www.handbookofmineralogy.org/pdfs/tephroite.pdf