

USE OF TETRAFLUOROETHYLENE OLIGOMER AS REFRIGERANT IN SEMICONDUCTOR MANUFACTURING PROCESS AND ENERGY STORAGE

ABSTRACT

The present invention specifically relates to use of a tetrafluoroethylene oligomer as a refrigerant in a semiconductor manufacturing process and energy storage. The tetrafluoroethylene oligomer includes a tetrafluoroethylene pentamer, a tetrafluoroethylene tetramer, and a tetrafluoroethylene hexamer; and based on 100 parts by weight of the tetrafluoroethylene oligomer, the content of the tetrafluoroethylene pentamer is higher than 85 parts by weight, and a weight ratio of the tetrafluoroethylene tetramer to the tetrafluoroethylene hexamer is lower than 1. The tetrafluoroethylene oligomer refrigerant of the present invention has a suitable boiling point and fluidity, is safe and durable, and has stable temperature control and high material compatibility and miscibility, making it particularly suitable for use as the refrigerant in the semiconductor manufacturing process and energy storage.

Fig 1.