CLAIMS

1. A flux comprising:

a rosin methyl ester,

an unesterified rosin and,

an activator which includes an organic halogen compound activator,

wherein a content of the rosin methyl ester is 0.5% to 20% by mass with respect to a total mass of the flux,

a content of the unesterified rosin is 40% to 98.9% by mass with respect to the total mass of the flux, and

the flux is a solid or

solid-like flux at 25°C wherein a viscosity η_1 at 25°C is 3,200 Pa·s or more, which is measured 5 minutes after a start of rotation at 6 Hz using a rheometer,

and is suitable for use as an inside of a flux-cored solder or an exterior of a flux-coated solder.

2. The flux according to claim 1,

wherein the rosin methyl ester is one or two or more methyl ester products selected from a natural rosin, a hydrogenated rosin, a polymerized rosin, a disproportionated rosin, an acid-modified rosin, a hydrogenated polymerized rosin, and a hydrogenated acid-modified rosin.

3. The flux according to claim 1 or 2,

wherein the flux has a softening point of 28°C to 100°C, when the softening point of the flux is measured according to JIS K 5902-1969.

4. The flux according to any one of claims 1 to 3,

wherein the rosin methyl ester is a liquid at 25°C.

5. The flux according to any one of claims 1 to 4,

wherein the content of the rosin methyl ester in mass with respect to a total mass of the unesterified rosin is 0.01 or more and 0.5 or less.

6. The flux according to claim 1,

wherein the organic halogen compound activator includes trans-2,3-dibromo-2-butene-1,4-diol, 2,3-dibromo-1,4-butanediol, 2,3-dibromo-1-propanol, 2,3-dichloro-1-propanol, 1,1,2,2-tetrabromoethane, 2,2,2-tribromoethanol, pentabromoethane, carbon tetrabromide, 2,2-bis(bromomethyl)-1,3-propanediol, meso-2,3-Dibromo-succinic, chloroalkane, a chlorinated fatty acid ester, n-hexadecyltrimethylammonium bromide, triallyl isocyanurate hexabromide, 2,2-bis[3,5-dibromo-4-(2,3-dibromopropoxy)phenyl]propane, bis[3,5-dibromo-4-(2,3-dibromopropoxy)phenyl]sulfone, ethylenebispentabromobenzene, 2-chloromethyloxirane, HET acid, HET anhydride, or brominated bisphenol A epoxy resin.

7. The flux according to any one of claims 1 to 6, wherein a content of a solvent is 13% by mass or less.

8. A flux-cored solder comprising the flux according to any one of claims 1 to 7 inside thereof.

9. A flux-coated solder using the flux according to any one of claims 1 to 7 for an exterior thereof.

10. A soldering method comprising performing soldering with the flux according to any one of claims 1 to 7.