Binary Fluorine Compounds

This table shows compounds of the element fluorine (F) with other elements:

— Radicals are not shown

— The table is not necessarily complete: Please report missing entries and better references to the given email address

— Compounds are arranged by the oxidation state of the non-fluorine element, or by stoichiometry

— Each compound is linked to its English Wikipedia page, or to another language Wikipedia page, or to a paper (in that order of preference)

— Not all compounds are equally stable; this table does not show which compounds are more stable

— Many compounds have multiple phases; only the most stable at standard conditions is indicated

— Many ionic and polymeric compounds have a molecular phase at high temperatures or low pressures; these are not indicated

Type of compound at standard conditions:

- Molecular with single non-fluorine atom (monomeric)
- Molecular with multiple non-fluorine atoms (oligomeric)
- Polymeric (1D/2D)
- Ionic or polymeric (3D)
- ***X*** Compounds in italics are not chemically stable at standard conditions
- Unknown or unclear structure
- X Predicted or contested
- Fluorine (for reference)
- [X] No binary compound with fluorine known
- Other elements: No information is available

Bonus material: binary fluorine minerals

LiF Griceite				
NaF Villiaumite	**MgF₂** Sellaite	**AlF₃** Oskarssonite	**AlF₃·3H₂O** Rosenbergite	
KF Carobbiite	**CaF₂** Fluorite			
	SrF₂ Strontiofluorite	**YF₃** Waimirite-(Y)		
	BaF₂ Frankdicksonite	**LaF₃** Fluocerite-(La)	**CeF₃** Fluocerite-(Ce)	**PbF₂** Fluorocronite	**BiF₃** Gananite

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FN₃ is the only compound named “fluorine X” rather than “X fluoride”. **AuF₇** is the addition complex **AuF₅·F₂**. **PdF₃** is a mixed-valence compound of **Pd^{II}** and **Pd^{IV}**. Other mixed-valence compounds include e.g. **U₂F₉**, **U₄F₁₇** (not shown).