

Table 1. Phosphor crystals

Phosphor	Starting materials		Source		Preparative procedure(s)
	Host crystal	Impurity	Host	Impurity	
Low impurity KI:Tl for concentration study	Single crystal KI:Tl (0.1-0.2%)		Harshaw Chemical Co.		Melting (impurity dilution) and press fusing
0.8KI/0.2KBr:Tl	Single crystal KI:Tl and KBr:Tl		Harshaw Chemical Co.		Melting, press fusing
0.6KI/0.4KBr:Tl	Single crystal KI:Tl and KBr:Tl		Harshaw Chemical Co.		Melting, press fusing
0.4KI/0.6KBr:Tl	Single crystal KI:Tl and KBr:Tl		Harshaw Chemical Co.		Melting, press fusing
0.2KI/0.8KBr:Tl	Single crystal KI:Tl and KBr:Tl		Harshaw Chemical Co.		Melting, press fusing
NaCl:Tl	Single crystal NaCl	Chemically pure TlCl	Harshaw Chem. Co.	Fairmount Chem. Co.	Grinding press fusing
NaBr:Tl	Chemically pure NaBr	Chemically pure TlCl	Schaar Co.	Fairmount Chem. Co.	Melting, press fusing
CsBr:Tl	Single crystal CsBr	Chemically pure TlCl	Harshaw Chemical Co.		None
RbBr:Tl	Chemically pure RbBr	Chemically pure TlCl	A. D. Mackay, Inc.	Fairmount Chem. Co.	Melting, press fusing
RbI:Tl	Chemically pure RbI	Chemically pure TlCl	A. D. Mackay, Inc.	Fairmount Chem. Co.	Melting, press fusing
NaCl:Pb	Single crystal NaCl	Chemically pure PbCl ₂	Harshaw Chem. Co.	Allied Chem. and Dye	Melting, press fusing
NaBr:Pb	Chemically pure NaBr	Chemically pure PbCl ₂	Schaar Co.	Allied Chem. and Dye	Melting, press fusing
NaI:Pb	Single crystal NaI	Chemically pure PbCl ₂	Harshaw Chem. Co.	Allied Chem. and Dye	Grind together, press fusing
	Single crystal KCl	Pb	Dr. A. B. Scott, College	Oregon State	None
KCl:Pb	Single crystal KCl	Chemically pure PbCl ₂	Harshaw Chem. Co.	Allied Chem. and Dye	Melting, press fusing
KBr:Pb	Single crystal KBr	Chemically pure PbCl ₂	Harshaw Chem. Co.	Allied Chem. and Dye	Melting, press fusing
KI:Pb	Single crystal KI	Chemically pure PbCl ₂	Harshaw Chem. Co.	Allied Chem. and Dye	Melting, press fusing
RbCl:Pb	Chemically pure RbCl	Chemically pure PbCl ₂	A. D. Mackay, Inc.	Allied Chem. and Dye	Grind together, press fusing
RbBr:Pb	Chemically pure RbBr	Chemically pure PbCl ₂	A. D. Mackay, Inc.	Allied Chem. and Dye	Melting, press fusing
RbI:Pb	Chemically pure RbI	Chemically pure PbCl ₂	A. D. Mackay, Inc.	Allied Chem. and Dye	Melting, press fusing Grind together, press fusing