

Nikkacure Series Photoinitiators

The data presented in this document are for reference only and are not guaranteed values.

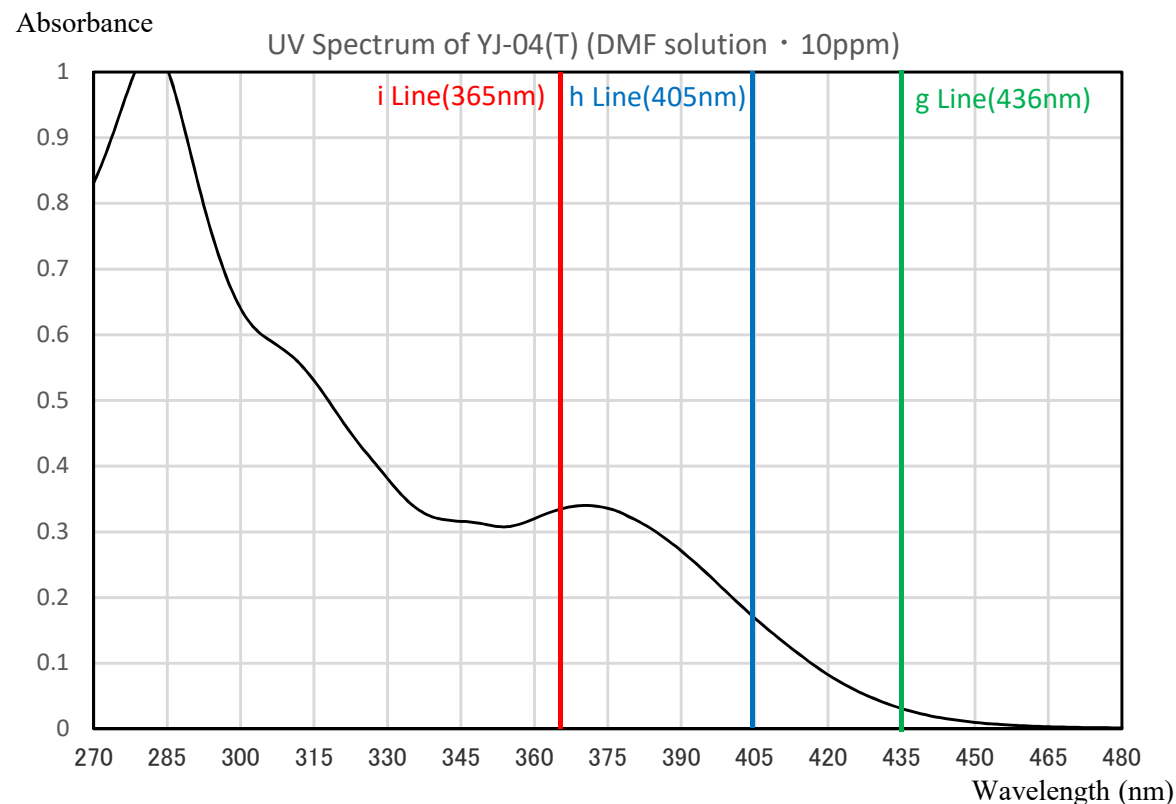
NIPPON CHEMICAL WORKS CO., LTD.

株式会社日本化学工業所

Nikkacure YJ-04(T) (Production Model Product)



NIPPON CHEMICAL WORKS CO.,LTD.



Product data

Structure : Carbazole Type oxime ester

Appearance : Yellow powder

Melting point : 148-150°C (Crystallinity change)

Decomposition point : 240°C

λ_{max} : 370.5nm (10ppm in DMF)

Absorbance : $A_{\lambda_{\text{max}}} \div 0.340$

(10ppm in DMF)

$A_{405} \div 0.170$

$A_{365} \div 0.334$

Solubility

PMA*1 : < 0.1%

AN*2 : ca 5%

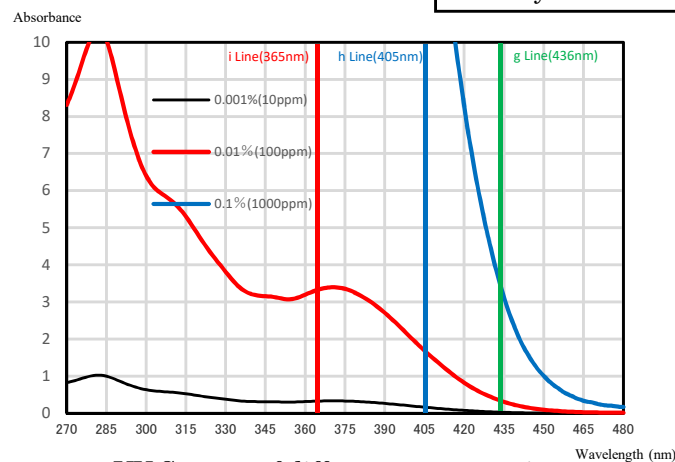
*1 : Propylene glycol monomethylether acetate

*2 : Cyclohexanone

Product profile

YJ-04(T) is a highly sensitive oxime ester photoinitiator with high absorption at long wavelength(365nm,405nm).

It has especially high absorption at 405 nm compared to general initiators, providing good curing with h- line.



UV Spectra of different concentration

Registration of each countries

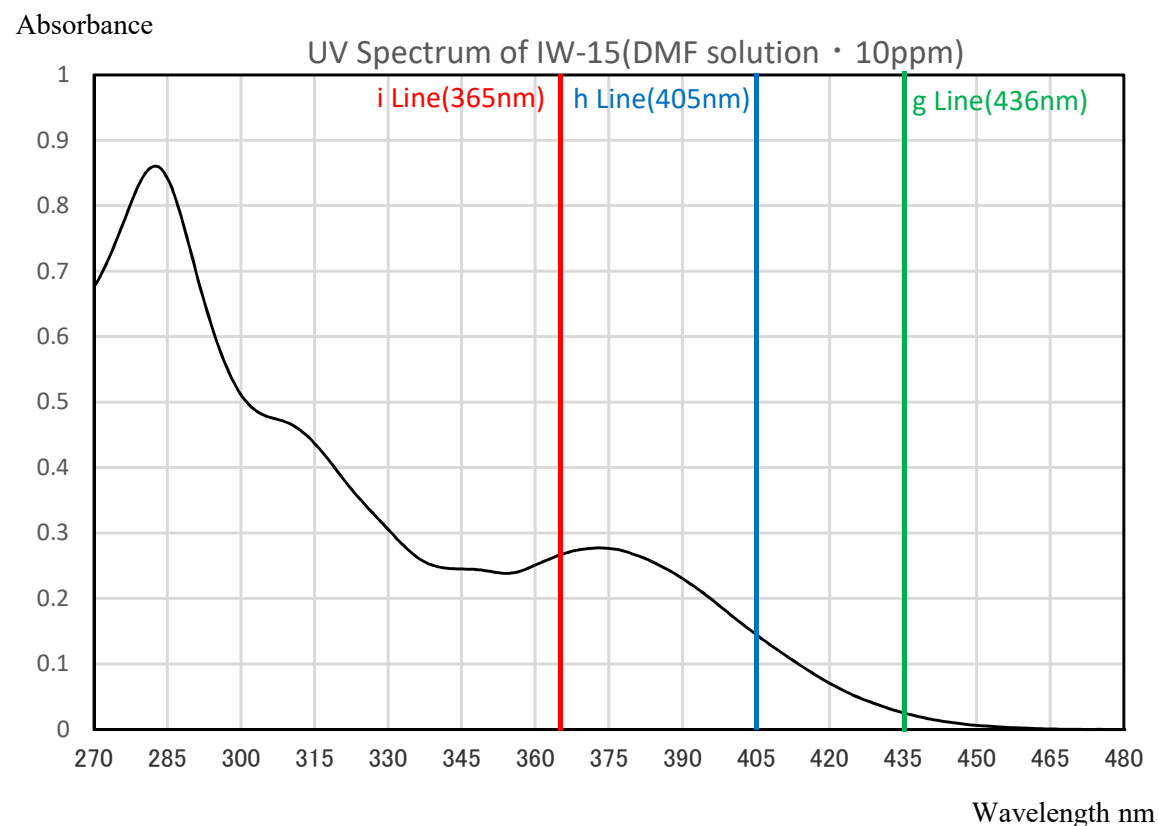
Japan MITI : Registered as a new chemical substances subject to limited(<1ton/y)]

Taiwan : Registered

Nikkacure IW-15 (Production Model Product)



NIPPON CHEMICAL WORKS CO.,LTD.



Product data

Structure : Carbazole Type oxime ester

Appearance : Yellow powder

Melting point : 110-140°C

Decomposition point : 240-245°C

$\lambda_{\max}$: 372.5nm (10ppm in DMF)

Absorbance : $A_{\lambda_{\max}} \div 0.277$

(10ppm in DMF)

$A_{405} \div 0.147$

$A_{365} \div 0.266$

Solubility

PMA*1 : 50% <

AN*2 : No data

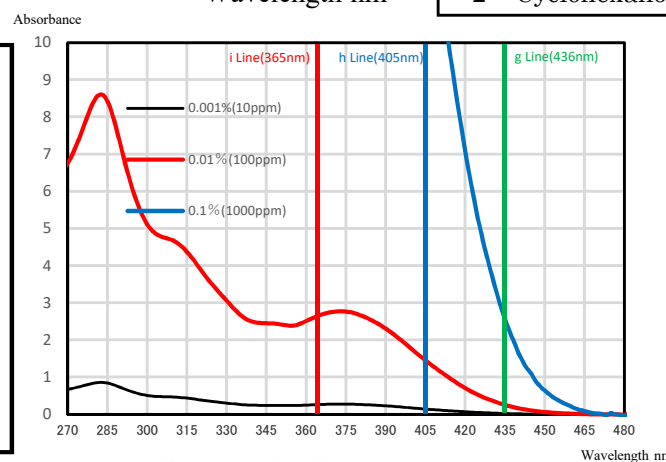
*1 : Propylene glycol monomethylether acetate

*2 : Cyclohexanone

Product profile

IW-15 is a highly sensitive oxime ester photoinitiator with high absorption at long wavelength(365nm,405nm).

It has especially high absorption at 405 nm compared to general initiators, providing good curing with h- line. Solubility is very good compared to YJ-04(T).



UV Spectra of different concentration

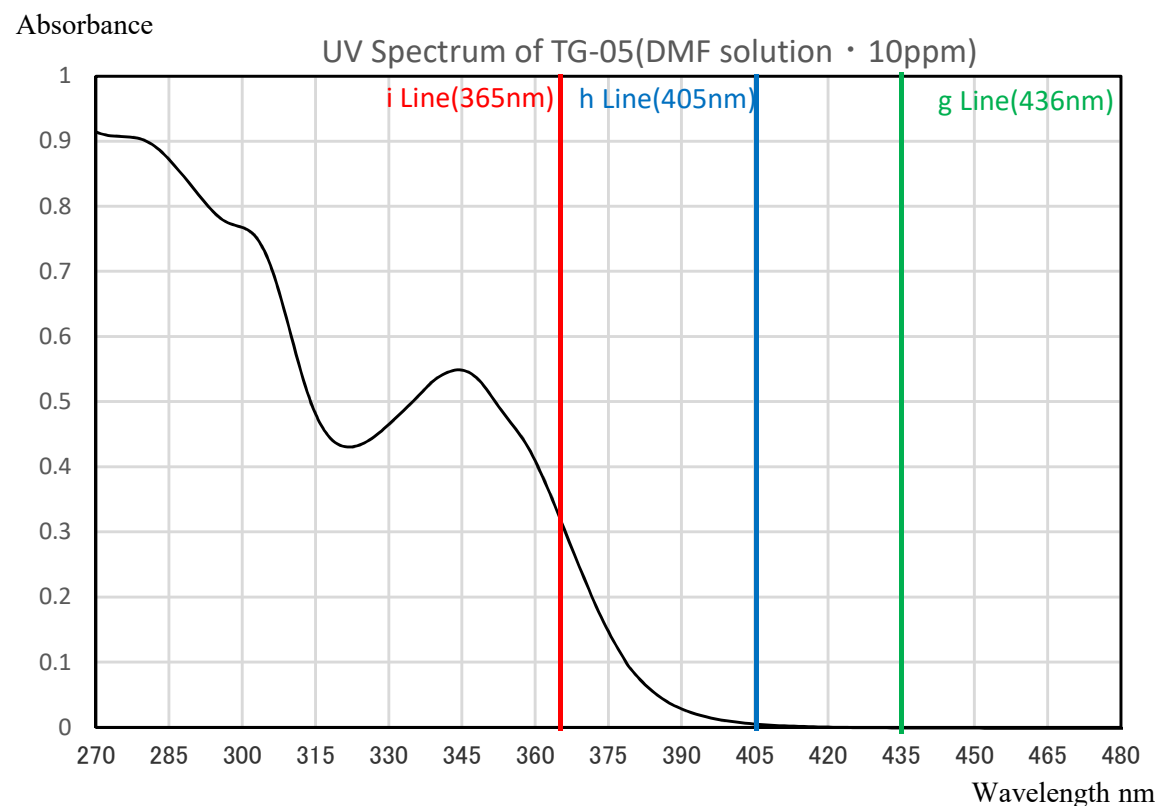
Registration of each countries

Japan MITI : Registered as a new chemical substances subject to limited(<1ton/y)]

Nikkacure TG-05 (Lab-synthesized Product)



NIPPON CHEMICAL WORKS CO.,LTD.



Product data

Structure : Carbazole Type oxime ester

Appearance : Pale yellow powder

Melting point : 184-190°C

Decomposition point : 236.5°C

λ_{max} : 344.0nm (10ppm in DMF)

Absorbance : $A_{\lambda_{\text{max}}} \div 0.549$

(10ppm in DMF)

$A_{405} \div 0.005$

$A_{365} \div 0.322$

Solubility

PMA*1 : < 0.1%

AN*2 : No data

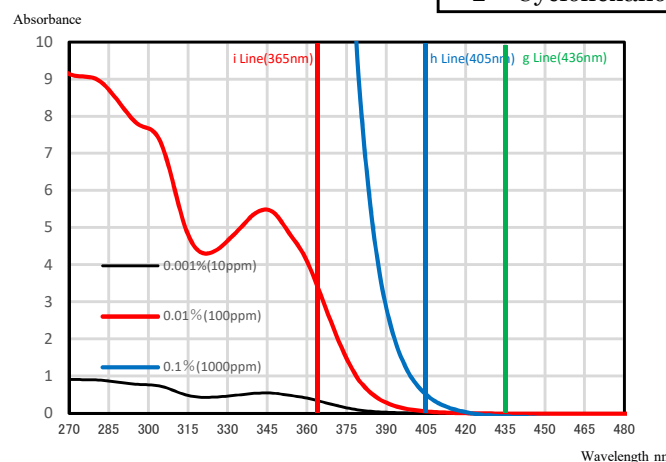
*1 : Propylene glycol monomethylether acetate

*2 : Cyclohexanone

Product profile

TG-05 is a highly sensitive oxime ester photoinitiator with high absorption at long wavelength(365nm).

Superior curing with i-line due to higher absorption at 365 nm compared to common initiators for i-line.



UV Spectra of different concentration

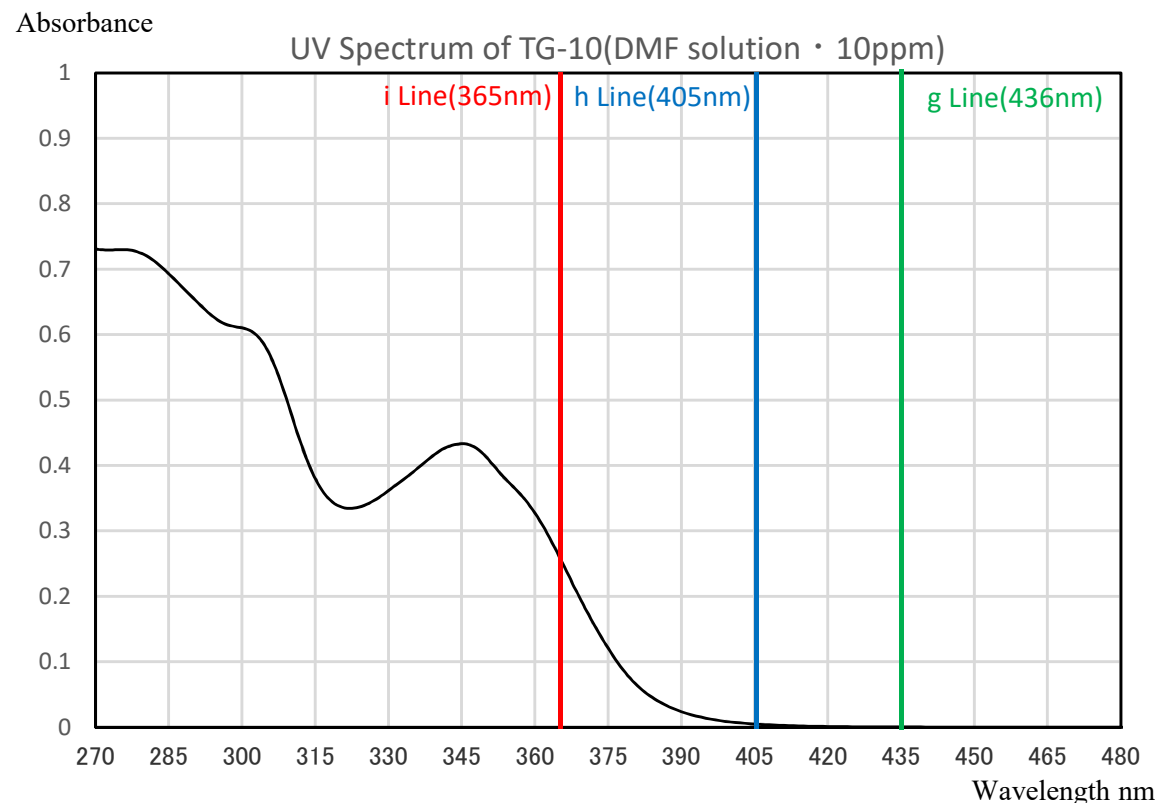
Registration of each countries

Japan MITI : Not Registered

Nikkacure TG-10 (Lab-synthesized Product)



NIPPON CHEMICAL WORKS CO.,LTD.



Product data

Structure : Carbazole Type oxime ester

Appearance : Pale yellow powder

Melting point : 110-150°C

Decomposition point : 264.9°C

$\lambda_{\max}$: 345.0nm (10ppm in DMF)

Absorbance : $A_{\lambda_{\max}} \div 0.434$
(10ppm in DMF)

$A_{405} \div 0.005$

$A_{365} \div 0.260$

Solubility

PMA*1 : 30% <

AN*2 : No data

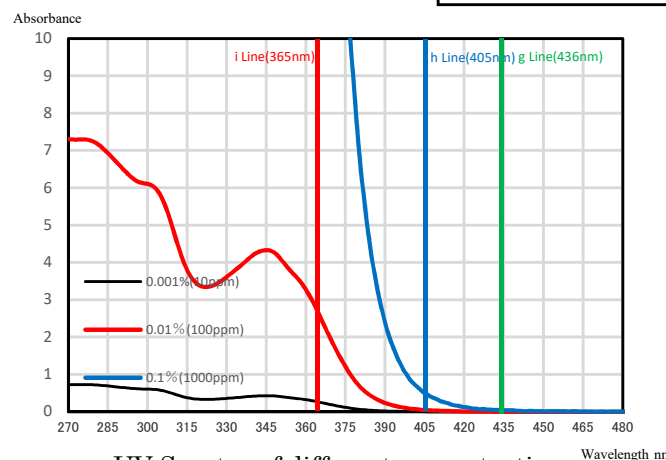
*1 : Propylene glycol monomethylether acetate

*2 : Cyclohexanone

Product profile

TG-10 is a highly sensitive oxime ester photoinitiator with high absorption at long wavelength(365nm).

Superior curing with i-line due to higher absorption at 365 nm compared to common initiators for i-line. Solubility is very good compared to TG-05.



UV Spectra of different concentration

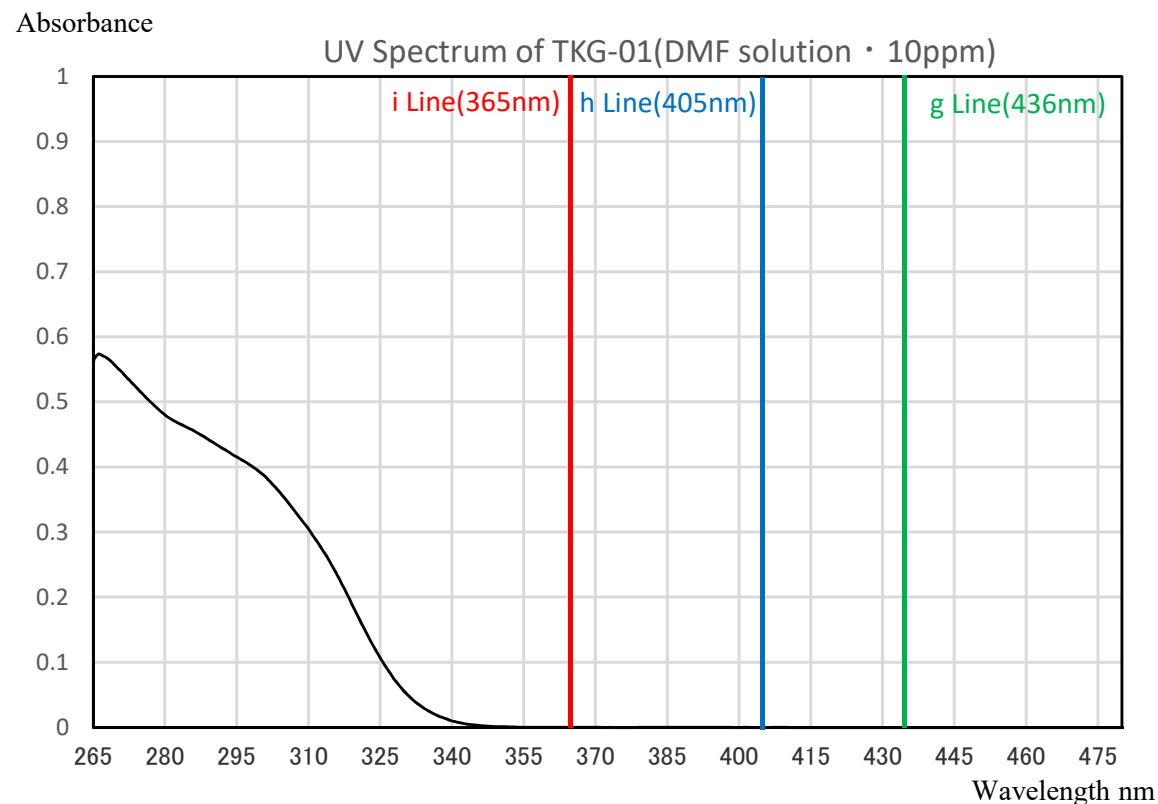
Registration of each countries

Japan MITI : Not Registered

Nikkacure TKG-01 (Lab-synthesized Product)



NIPPON CHEMICAL WORKS CO.,LTD.



Product data

Structure : Phenyl Sulfide Type oxime ester

Appearance : White powder

Melting point : 100-110°C

Decomposition point : 251.2°C

$\lambda_{\max}$: 299.0nm (10ppm in DMF)

Absorbance : $A_{\lambda_{\max}} \div 0.397$

(10ppm in DMF)

$A_{405} \div 0$

$A_{365} \div 0$

Solubility

PMA*¹ : 30% <

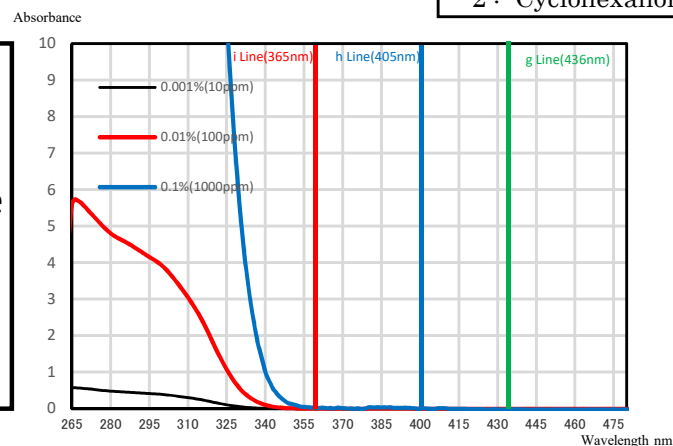
AN*² : No data

*1 : Propylene glycol monomethylether acetate

*2 : Cyclohexanone

Product profile

TKG-01 is oxime ester photoinitiator. It's appearance is white, so suitable for color free applications.



UV Spectra of different concentration

Registration of each countries

Japan MITI : Not Registered

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