

## 45080 Ultramarine Blue, light

### Chemical Composition

Product name:	Ultramarine blue
Chemical name:	Sodium aluminium sulfo silicate
Color index:	C.I. Pigment Blue 29 : 77007
CAS No.:	57455-37-5 (TSCA) 101357-30-6 (EINECS)
EINECS:	3-099-283

### Specification

Coloring (optical brightening 1:5 with titanium dioxide in linseed oil compared to standard)

DL:	max. $\pm$ 0,30 CIEL
DH:	max. $\pm$ 1,00 CIEL
DC:	max. $\pm$ 1,30 CIEL
DE:	max. 1,50 CIEL
Screen oversize (45 $\mu$ m):	max. 0.10 %
Volatile part (105°C):	max. 1.00 %
Free sulfur:	max. 0.05 %
Water soluble parts:	max. 1.00 %

### Typical data

Coloring strength:	83
Density:	2.35
Bulk density (g/cm <sup>3</sup> ):	0.45
Oil absorption:	31.0
Mean particle size ( $\mu$ m):	0.85

### Fastness/Resistance

Temperature stability:	> 350°C
Light fastness (Xenon lamp and daylight):	excellent (7 - 8)
Light fastness - dilution:	excellent (7 - 8)
Alkali resistance:	excellent
Acid resistance:	weak

### Safety Data

Acute oral toxicity (LD50, rat):	> 10 g/kg
Skin irritation:	not irritant and not sensitizing
Eye irritation:	not irritant
Limit of exposition:	6 mg/m <sup>3</sup> (MAK value)
Ecology:	not hazardous

## Regulations

Ultramarine blue is a non-toxic pigment. It is generally permitted for coloring objects/things having contact with foodstuffs and for the manufacture of toys.

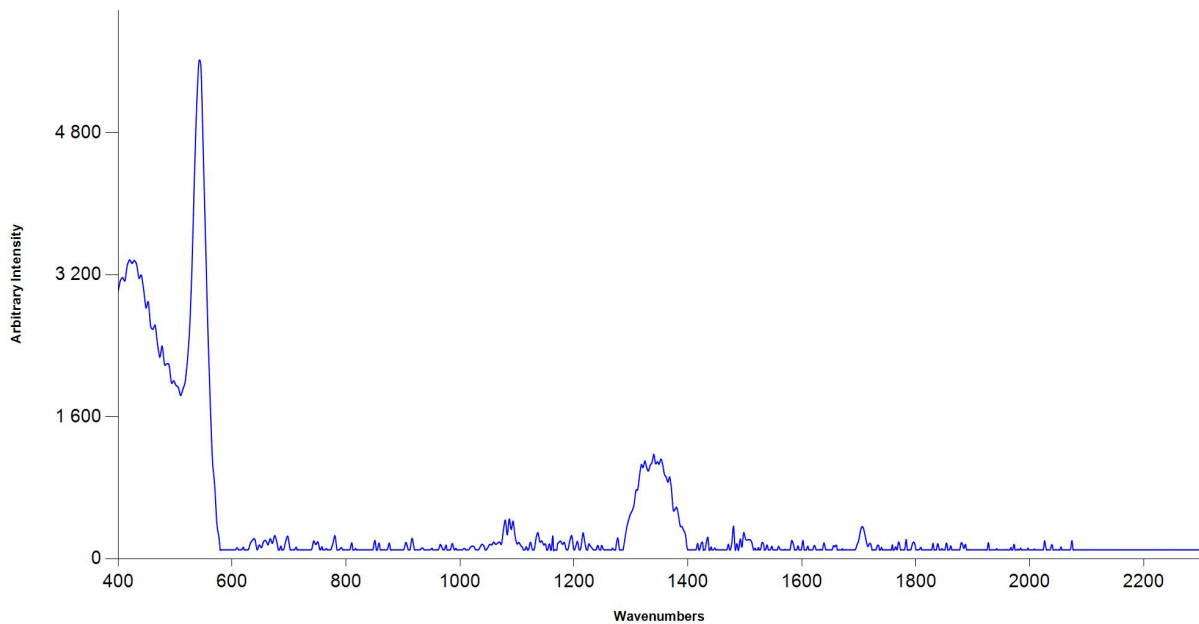
## Storage, Stability and Handling

Transportation and storage:	Do not store near acid substances.
Not compatible substances:	Acids
Decomposition products:	Release of hydrogen sulphide after contact with acids.
Special protective measures:	None, however avoid dust formation.
Methods for cleaning up / absorption:	Clean up mechanically - avoid dust development.

## Further information:

Ultramarine blue is coated (SiO<sub>2</sub>-Coating) to improve the stability.

Raman-Spektrum for 45080:  
(Quelle: MR PHSG, 2017)



— Sample Spectrum