

# Astrad<sup>TM</sup> WB

Pigment dispersions for water-based coatings



# Experience the Penn Color Difference

Penn Color serves the widest base of applications in the industry, with both colors & functional additives for thermoplastics, and dispersions for inks & coatings. The position that Penn Color holds makes a difference for customers: as a global leader, Penn Color is a stable and dependable partner, offering world-class knowledge, experience and capabilities; as a privately held company, Penn Color is fast, nimble, willing to take calculated risks, and easy to do business with.

## Astrad Range

Astrad is a portfolio of water-based, solvent-based and UV dispersions for a broad range of applications in architectural, automotive and industrial coatings.

## Astrad Formulations

Astrad is available both as a portfolio of standard colorants and as proprietary technologies used by Penn Color to formulate custom dispersions on demand.

# Astrad-WB Properties

ASTRAD-WB is an APEO free, binder free, water-based high pigment loaded color dispersion. ASTRAD-WB offers tight tolerances of shade and color, for reproduction of formulas and batch-to-batch consistency. The broad product compatibility, extensive color palette, along with the proven Penn Color quality, deliver best-in-class performance for coatings.

## Applications





ASTRAD-WB is especially formulated for low-no VOC architectural coatings, wood coatings, emulsion paints, marine and protective coatings.



# Color Palette







## Yellow Iron Oxide

 PY 42     16.7  
 64     70.7



## Oxide Yellow

 PBr 24     18.3  
 65     74.4







## Organic Yellow

 PY 83     10.5  
 50     63.45







## Azo Yellow

 PY 65     9.82  
 44     51






## Organic Yellow G/S

 PY 74     9.7  
 42.6     55.2







## Durable Yellow

 PY 184     18.5  
 65     71.2







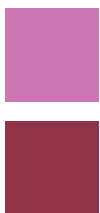
## Red Iron Oxide

 PR 101     19.2  
 65     76.3






## Iron Oxide Red B/S

 PR 101     18.8  
 65     76.4







## Magenta

 PR 122     9.9  
 32     48.1



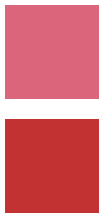
## Quinacridone Red

 PV 19     9.57  
 32     45.5

 Pigment |  Specific Gravity (lbs/gal) |  Pigment Loading %BW |  Total Solids %BW

The accuracy or completeness of product information is not guaranteed and is subject to change without notice.

# Color Palette



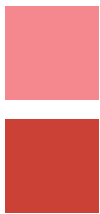
## High Hide Red

 PR 254  10.6  
 52  59.34







## Organic Red

 PR 112  9.4  
 45  56







## Scarlet Red

 PR 168  11.78  
 36  62







## Orange

 PO 5  10.6  
 45  59.6







## Carbazole Violet

 PV 23  10.1  
 30  52.5







## Phthalo Blue I/S

 PB 15:1  10.1  
 46  55.7







## Phthalo Blue G/S

 PB 15:3  10.3  
 45  56.4



## Cobalt Blue

 PB 28  17.6  
 62  74.9




## Phthalo Green

 PG 7  11.1  
 45  58.4



## Chrome Oxide Green

 PG 17  22.4  
 75  82.2



 Pigment |  Specific Gravity (lbs/gal) |  Pigment Loading %BW |  Total Solids %BW

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# Color Palette







## Cobalt Green

 PG 50    20  
 70    77.4





## Raw Umber

 PBr 7    12.7  
 45    53.7





## IR Black

 PBk 17    22  
 70    83.4







## Carbon Black

 PBk 7    10.6  
 43    54.1







## Black Iron Oxide

 PBk 11    15.6  
 53    66.3



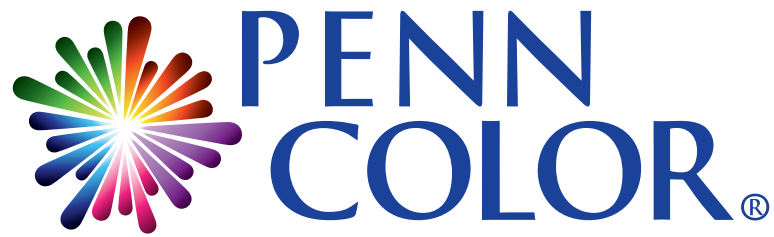
## Titanium White

 PW 6    18.8  
 65    80.3



 Pigment |  Specific Gravity (lbs/gal) |  Pigment Loading %BW |  Total Solids %BW

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HATFIELD, PENNSYLVANIA | VENRAY - THE NETHERLANDS | SINGAPORE

**Penncolor.com**



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CHECK OUT OUR OTHER ASTRAD PRODUCTS:

**Astrad**<sup>™</sup> **AUTO**

Pigment dispersions for  
water & solvent-based coatings

**Astrad**<sup>™</sup> **UV**

Pigment dispersions for  
UV curable coatings

**Astrad**<sup>™</sup> **IS**

Pigment dispersions for  
solvent-based coatings

**Astrad**<sup>™</sup> **SF**

Pigment dispersion for  
highly transparent coatings