

-
1. What is the specific gravity of a 1 ft³ concrete block which weighs 145 lbs?
 2. What is the specific gravity of a chlorine solution if 1 (one) gallon weighs 10.2lbs?
 3. How much does each gallon of zinc orthophosphate weigh (pounds) if it has a specific gravity of 1.46?
 4. How much does a 55 gallon drum of 25% caustic soda weigh (pounds) if the specific gravity is 1.28?
 5. How much does each gallon of zinc orthophosphate weigh (pounds) if it has a specific gravity of 1.46?

Solution:

$$8.34 \frac{lb}{gal} * 1.46 = \boxed{12.18 \frac{lb}{gal}}$$

6. How much does a 55 gallon drum of 25% caustic soda weigh (pounds) if the specific gravity is 1.28?

Solution:

$$8.34 \frac{lb}{gal} * 1.28 * 55 gal = \boxed{12.18 \frac{lb}{gal}}$$

7. What is the weight of 5 gallons of a 40% ferric chloride solution given its specific gravity of 1.43?

$$(8.34 * 1.43) \text{ lbs/gal} * 5 \text{ gallons} = \boxed{59.6 \text{ lbs}}$$

The weight of active ferric chloride in the drum will be 59.6*0.4=23.84 lbs (as ferric chloride is 40% strength)