

# Api Gravity Temperature Correction Table 5a

APPENDIX I VOLUME CONVERSION ASTM/API/IP TABLE 5A/B  
 Correct Volumes API Gravity Temperature Correction Tables ...  
 Windows Based ASTM Calculation Tables, Volume Correction ...  
 Density of crude oil as function of temperature  
 FORMULA FOR CORRECTING OBSERVED API GRAVITY TO API GRAVITY ...  
 ThermoProbe - Volume Correction Factor  
 apps.dtic.mil  
 API Gravity calculator - Crude Oil API Gravity Chart  
 API Gravity Temperature Correction Online Calculator ...  
 Petroleum Measurement Tables (ASTM D 1250)  
 Military - GlobalSecurity.org - Reliable Security Information  
 Manual of Petroleum Measurement Standards ... - api.org  
 API gravity - Wikipedia  
 calculations - Temperature correction for specific gravity ...  
 Oil and Gas Correlations -- API Gravity Correction  
 Cargo Calculations on Tankers with ASTM Tables: Here is ...  
 Hydrometer Temperature Adjustment Calculator - Brewer's Friend  
 Api Gravity Temperature Correction Table  
 API Gravity - Engineering ToolBox  
 API Manual of Petroleum Measurement Standards ...

Api Gravity Temperature Correction Table 5a

Downloaded from ns1.galaxy.mu by guest

## WHEELER BLANKENSHIP

APPENDIX I VOLUME CONVERSION ASTM/API/IP TABLE 5A/B  
 Gravity Temperature Correction Table  
 API Gravity Temperature Correction Definition: 1) Usually, your API gravity reading will be at a temperature other than 60°F. To convert an API gravity reading to 60°F, we usually use ASTM Table 5B. 2) When you have located the temperature value, follow the row across till you intersect the column ...  
 API Gravity Temperature Correction Online Calculator ...  
 API Gravity Correction for Temperature In this spreadsheet, just type in the required information and press the compute button. Scroll down for more info.  
 Oil and Gas Correlations -- API Gravity Correction  
 Corrected gravity and volume correction factors calculated by this program are the same as values obtained from the Petroleum Measurement Tables 5A and 6A prepared jointly by ASTM, API, and IP. Calculations are valid on data within the following ranges:  
 Temperatures: 0 - 149.5 F Observed Gravity : 10 - 74.5 API  
 SYSTEM REQUIREMENTS. PC computer.  
 Correct Volumes API Gravity Temperature Correction Tables ...  
 apps.dtic.mil apps.dtic.mil  
 The American Petroleum Institute gravity, or API gravity, is a measure of how heavy or light a petroleum liquid is compared to water. If its API gravity is greater than 10, it is lighter and floats on water; if less than 10, it is heavier and sinks.  
 API Gravity calculator - Crude Oil API Gravity Chart  
 Density is a temperature dependent property. API gravity increases with increasing temperature, while specific gravity decreases with increasing temperature. See correlations at Density of crude oil as function of temperature. This means that the volume of a petroleum liquid increases with increasing temperature, and that a density number always must be given with the measurement temperature. The standard measuring temperature is 15°C or 60°F.  
 API Gravity - Engineering ToolBox  
 "ASTM/API/IP Table 5A/B gives the values of API gravities at 60° F corresponding to API gravities observed with a glass hydrometer at temperatures other than 60° F.". Unfortunately I think that you have to buy the tables or find them in a library. I have not found them on the internet as freebies...  
 FORMULA FOR CORRECTING OBSERVED API GRAVITY TO API GRAVITY ...  
 For

example, if one petroleum liquid is less dense than another, it has a greater API gravity. Although API gravity is mathematically a dimensionless quantity (see the formula below), it is referred to as being in 'degrees'. API gravity is graduated in degrees on a hydrometer instrument. API gravity values of most petroleum liquids fall between 10 and 70 degrees.  
 API gravity - Wikipedia  
 Update - October 2012 A browser cookie will now save your hydrometer calibration between visits (but if you clear your cache it disappears).  
 Update - August 2012 This calculator now supports different hydrometer calibrations. Look on your hydrometer (or its instructions) and it should tell you. Old hydrometers are calibrated to (59° F / 15° C) and newer ones are typically (68° F / 20° C).  
 Hydrometer Temperature Adjustment Calculator - Brewer's Friend  
 temperature and the base temperature, FP is the compressibility coefficient, and  $\delta T$  is a small base temperature correction value. In the 1980 Standard,  $\alpha T$  was correlated to the density at a 60°F base temperature and 0 psig pressure,  $\rho^*$ , and is denoted as  $\alpha_{60}$ . The CTL equation was developed as a correction to 60°F density, so  $T = 60$  and  $\delta = T - 60$ .  
 Manual of Petroleum Measurement Standards ... - api.org  
 Using Table 5A/B, correct the API gravity of the observed temperature to API gravity at 60° F. Table 5A is used for JP-4 and Table 5B is used for petroleum products other than JP-4. Example: Assume the observed hydrometer reading is 40.4 and the observed temperature is 83° F. The product is not JP-4. The  
 APPENDIX I VOLUME CONVERSION ASTM/API/IP TABLE 5A/B  
 In the Density vs temperature figure (°C), you see that the light grey line represents this crude oil. Then, use the light grey line in the Crude oil volume correction figure (Density@Observed T/Density@15°C). At 50°C the correction factor is 0.965. The volume of your crude oil at 15°C is 100 liters \* 0.965 = 97 liters.  
 Density of crude oil as function of temperature  
 Density at 15 Deg C and ASTM table to use; API Gravity at 60 Deg F and ASTM Table to use; Let us calculate the weight of cargo in each of these situations.  
 1. Density at a particular temperature and correction factor. So let us say that cargo surveyor has provided us with the density at a particular temperature and correction factor.  
 Cargo Calculations on Tankers with ASTM Tables: Here is ...  
 Table Description. 5A, 5B and 5D take the observed API gravity and observed temperature. They return the base API gravity at 60 °F  
 \*\*\*Note: If you select a large range of temperature or density values the server will take a long

time (several minutes) to produce the results. ThermoProbe - Volume Correction Factor Petroleum Measurement Tables (ASTM D 1250) for Pocket PC ... Correction of Observed API Gravity to API Gravity at 60°F • API Gravity at 60°F (B) Table 5B: Generalized Products, Correction of ... or Density) and the temperature (°F or °C) into the according input fields. If you don't want to use Glass Petroleum Measurement Tables (ASTM D 1250) Using Table 5A/B, correct the API gravity of the observed temperature to API gravity at 60° F. Table 5A is used for JP-4 and Table 5B is used for petroleum products other than JP-4. Military - GlobalSecurity.org - Reliable Security Information The Measurement Standard for Crude, Liquid Refined Products, and Lubricating Oils. API MPMS Chapter 11.1 is the established industry standard, outlining the procedure for crude oils, liquid refined products and lubricating oils for the correction of temperature and pressure effects on density and volume of liquid hydrocarbons. API Manual of Petroleum Measurement Standards ... Table 6A, 6B, 6D - Automatic generation of Volume Correction Factors to 5 DECIMAL PLACES. Table 5A, 5B - Automatic generation of Gravity @ Observed Temperature to Gravity @ 60°F. Table 8 - Generates Pound per Gallon Factors to 4 DECIMAL PLACES. Table 11 - Generates Long Ton per Barrel Factors. Table 13 - Generates Metric Ton per Barrel Factor. Windows Based ASTM Calculation Tables, Volume Correction ... If I want to convert my specific gravity reading from one temperature to an equivalent specific gravity at 60F how do I do it? Can you give me a correction factor for this case? ... Temperature correction for specific gravity. Ask Question Asked 8 years, 9 months ago. ... You can also use a correction table like the one [HERE](#). calculations - Temperature correction for specific gravity ... Specific Gravity Of Oil Calculator. Specific gravity (sp gr) measures the ratio of density of the substance to the density of water in a given temperature, (i.e., 4 o C). It is a dimensionless unit. Oil gravity differs for each liquid. Use the online API to Specific gravity converter to find the Sp gr of an oil by providing the API gravity. If I want to convert my specific gravity reading from one temperature to an equivalent specific gravity at 60F how do I do it? Can you give me a correction factor for this case? ... Temperature correction for specific gravity. Ask Question Asked 8 years, 9 months ago. ... You can also use a correction table like the one [HERE](#).

### **Correct Volumes API Gravity Temperature Correction Tables ...**

Using Table 5A/B, correct the API gravity of the observed temperature to API gravity at 60° F. Table 5A is used for JP-4 and Table 5B is used for petroleum products other than JP-4. Example: Assume the observed hydrometer reading is 40.4 and the observed temperature is 83° F. The product is not JP-4. The [Windows Based ASTM Calculation Tables, Volume Correction ...](#) Api Gravity Temperature Correction Table [Density of crude oil as function of temperature](#) temperature and the base temperature, FP is the compressibility coefficient, and  $\delta T$  is a small base temperature correction value. In the 1980 Standard,  $\alpha T$  was correlated to the density at a 60°F base temperature and 0 psig pressure,  $\rho^*$ , and is denoted as  $\alpha 60$ . The CTL equation was developed as a correction to 60°F density, so  $T = 60$  and  $\delta = T - 60$ .

### **FORMULA FOR CORRECTING OBSERVED API GRAVITY TO API GRAVITY ...**

Corrected gravity and volume correction factors calculated by this program are the same as values obtained from the Petroleum Measurement Tables 5A and 6A prepared jointly by ASTM, API, and IP. Calculations are valid on data within the following ranges: Temperatures: 0 - 149.5 F Observed Gravity : 10 - 74.5 API SYSTEM REQUIREMENTS. PC computer.

### **ThermoProbe - Volume Correction Factor**

Using Table 5A/B, correct the API gravity of the observed temperature to API gravity at 60° F. Table 5A is used for JP-4 and Table 5B is used for petroleum products other than JP-4.

[apps.dtic.mil](#)

Specific Gravity Of Oil Calculator. Specific gravity (sp gr) measures the ratio of density of the substance to the density of water in a given temperature, (i.e., 4 o C). It is a dimensionless unit. Oil gravity differs for each liquid. Use the online API to Specific gravity converter to find the Sp gr of an oil by providing the API gravity.

[API Gravity calculator - Crude Oil API Gravity Chart](#)

The American Petroleum Institute gravity, or API gravity, is a measure of how heavy or light a petroleum liquid is compared to water. If its API gravity is greater than 10, it is lighter and floats on water; if less than 10, it is heavier and sinks.

[API Gravity Temperature Correction Online Calculator ...](#)

In the Density vs temperature figure (°C), you see that the light grey line represent this crude oil. Then, use the light grey line in the Crude oil volume correction figure (Density@Observed T/Density@15°C). At 50°C the correction factor is 0.965. The volume of your crude oil at 15°C is 100 liters \* 0.965 = 97 liters.

### **Petroleum Measurement Tables (ASTM D 1250)**

"ASTM/API/IP Table 5A/B gives the values of API gravities at 60° F corresponding to API gravities observed with a glass hydrometer at temperatures other than 60° F." Unfortunately I think that you have to buy the tables or find them in a library. I have not found them on the internet as freebies...

### **Military - GlobalSecurity.org - Reliable Security Information**

Density at 15 Deg C and ASTM table to use; API Gravity at 60 Deg F and ASTM Table to use; Let us calculate the weight of cargo in each of these situations. 1. Density at a particular temperature and correction factor. So let us say that cargo surveyor has provided us with the density at a particular temperature and correction factor.

[Manual of Petroleum Measurement Standards ... - api.org](#)

The Measurement Standard for Crude, Liquid Refined Products, and Lubricating Oils. API MPMS Chapter 11.1 is the established industry standard, outlining the procedure for crude oils, liquid refined products and lubricating oils for the correction of temperature and pressure effects on density and volume of liquid hydrocarbons.

### **API gravity - Wikipedia**

For example, if one petroleum liquid is less dense than another, it has a greater API gravity. Although API gravity is mathematically a dimensionless quantity (see the formula below), it is referred to as being in 'degrees'. API gravity is graduated in degrees on a hydrometer instrument. API gravity values of most petroleum liquids fall between 10 and 70 degrees.

### **calculations - Temperature correction for specific gravity**

...

API Gravity Temperature Correction Definition: 1) Usually, your API gravity reading will be at a temperature other than 60°F. To convert an API gravity reading to 60°F, we usually use ASTM Table 5B. 2) When you have located the temperature value, follow the row across till you intersect the column ...

[Oil and Gas Correlations -- API Gravity Correction](#)

Density is a temperature dependent property. API gravity increases with increasing temperature, while specific gravity decreases with increasing temperature. See correlations at [Density of crude oil as function of temperature](#). This means that the volume of a petroleum liquid increases with increasing temperature, and that a density number always must be given with the measurement temperature. The standard measuring

temperature is 15°C or 60°F.

**Cargo Calculations on Tankers with ASTM Tables: Here is**

...

Table 6A, 6B, 6D - Automatic generation of Volume Correction Factors to 5 DECIMAL PLACES. Table 5A, 5B - Automatic generation of Gravity @ Observed Temperature to Gravity @ 60°F. Table 8 - Generates Pound per Gallon Factors to 4 DECIMAL PLACES. Table 11 - Generates Long Ton per Barrel Factors. Table 13 - Generates Metric Ton per Barrel Factor.

*Hydrometer Temperature Adjustment Calculator - Brewer's Friend*  
 Petroleum Measurement Tables (ASTM D 1250) for Pocket PC ...  
 Correction of Observed API Gravity to API Gravity at 60°F • API Gravity at 60°F (B) Table 5B: Generalized Products, Correction of ... or Density) and the temperature (°F or °C) into the according

input fields. If you don't want to use Glass

*Api Gravity Temperature Correction Table*

API Gravity Correction for Temperature In this spreadsheet, just type in the required information and press the compute button. Scroll down for more info.

**API Gravity - Engineering ToolBox**

apps.dtic.mil

Update - October 2012 A browser cookie will now save your hydrometer calibration between visits (but if you clear your cache it disappears). Update - August 2012 This calculator now supports different hydrometer calibrations. Look on your hydrometer (or its instructions) and it should tell you. Old hydrometers are calibrated to (59° F / 15° C) and newer ones are typically (68° F / 20° C).