

To further complement its EcoStream<sup>TM</sup> family of alloys, Mueller Brass Company has developed a dezincification resistant version of its **C27450** Lead Free Brass Alloy. Through a patented process, this new alloy, **C27451**, is specifically designed for machined or forged parts requiring compliance to both lead free and dezincification resistance criteria adopted by potable water and PEX standards and applications.

## **Compliant • Competitive • Compatable**

Although specifically developed for parts requiring compliance to dezincification resistance standards; Mueller Brass Company's **C27451 Lead Free Brass Alloy** still retains the same inherent advantages over other lead free alloys offered by other manufacturers.

With the customer as its core focus, Mueller Brass Company developed **C2745** I to not only aide manufacturers with their compliance needs, but also develop an alloy that would help manufacturers control their material costs and retain their competitive advantage.

Since no expensive additives or potential contaminants like silicon, bismuth or arsenic are added, C27451 DZR Lead

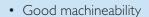


**Free Brass** is completely recyclable and compatible with all EcoStream<sup>™</sup> and conventional leaded alloys widely used today. Since the need for segregation, the cleaning out of machines or the rejection of contaminated scrap is virtually eliminated; **C27451** offers the manufacturer the additional benefits of manufacturing efficiency and productivity.

Whether it be rod, bar or forged parts, Mueller Brass Company's **C27451 DZR Lead Free Brass** is the logical solution...



# **Applications:**



- Excellent forgeability
- Excellent ability to Thread Roll
- Excellent Brazing & Plating
- Dezincification Resistant
- Potable water components, fixtures & applications
- PEX plumbing applications & systems
- Forged products requiring lead free &/or dezincification resistance compliance



#### For More Information:

For more information on **C27451 DZR Lead Free Brass** or any of Mueller Brass Company's EcoStream<sup>™</sup> alloys or products; please visit our website at www.muellerindustriesipd.com or contact your local territory representative.



# Technical nformation



# **Chemistry:**

Cu	Pb	Fe	Р	Zn	Others
60 ~ 65%	< 0.25 (max)	< 0.35	0.05-0.12	Rem	< 0.5%

## **Typical Mechanical Properties:**

Rod H02	Tensile Strength (ksi)	Yield Strength (ksi)	Elongation (%)	Hardness (Rb)
	55	35	30%	55 ~ 75

## **Size and Shape Range:**

Rounds	0.250" ~ 3.000"
Hexagons	0.250" ~ 3.000"

Other - Consult Mill

## **Fabrication Properties:**

Soldering	Excellent	Plating	Excellent
Brazing	Excellent	Forgability	95
Cold Working	Excellent	Machinability	70

#### **Heat Treatments:**

Stress Relieving	For the purpose of relieving stresses induced by the manufacturing process to reduce the risk of stress corrosion cracking. Typical treatment consists of heating parts at 450°F – 600°F for 1.5 to 3 hours, then air cooled.
Annealing	In order to maximize dezincification corrosion resistance after hot forging, it is strongly recommended to heat treat parts to 850°F – 950°F. Duration of heat treatment / anneal to be determined by part geometry and desired DZR*.

<sup>\*</sup>Contact Mueller Brass Company for specific part analysis and technical support.

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