

Pentagon Lubricants (I) Private Limited



By ABK-AOTS DOSAKAI, Japan.

1st Company in India to be conferred in SSI category.

Issue 3	27.5.2013	

an initiative of pentagon lubricants (I) private limited, chennai, india.

for the benefit of its esteemed customers

to know more about us please visit www.pentagonlubricants.com

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## CUSTOMER EDUCATION PROGRAM





Recipient of 'Model 5s Company' By ABK-AOTS DOSAKAI, Japan. 1st Company in India to be conferred in SSI category.

Beyond Creating
Great Products,
We Are Here To
Create More
Educated
Customers!

Dear All,

**Greetings!** 

The response to our  $2^{nd}$  issue of Customer Education Program (CEP) – Apr-2013 - is quite encouraging and many of you have wrote to us to say how the contents were useful in making well-informed purchase decision for the benefit of your Company.

As you may already be aware, at Pentagon through Customer Education Program (CEP), we aim to increase customer awareness on our products and services and share articles and write-ups on proper handling, storage, maintenance practice, troubleshooting, etc.

foreword by s.alex wilfred managing director

With your valuable support, I am pleased to send herewith our  $3^{\rm rd}$  issue – May 2013 and I am sure you will find the contents worth the reading.

If you wish your friend or colleague in Purchase/ Commercial/Production/Quality/Maintenance department to be benefitted by our CEP please send us their contact details to us.

Cheers!
S. Alex Wilfred

foreword by s.alex wilfred managing director

## TOPICS COVERED IN THIS ISSUE:

Glossary of terms related to Industrial oils, Industrial lubricants, Automotive Lubricants, Industrial fuels and solvents.





## Glossary

Glossary of terms related to Industrial oils, Industrial lubricants, Automotive Lubricants, Industrial fuels and solvents.

Acid Number (AN)- Milligrams of KOH required in tests to neutralize all the acidic constituents present in a 1g sample of a petroleum product. Also formerly called the Neutralization Number, this property is often used to indicate the extent of contamination an oxidation of used oils.

Additive - Any material that is incorporated into a product at relatively low concentration to impart new properties or enhance existing properties.

Adhesion - The force or forces causing two materials such as lubricating grease and a metal, to stick together.

Boundary Lubrication - Lubrication between two rubbing surfaces without the development of a full lubricating film. It occurs under high-load and low-speed, and requires the use of anti-wear or extreme pressure additives to prevent metal-to-metal contact.

Cloud Point - Temperature at which a noticeable cloud of crystals or other solid material appears when a sample is cooled under prescribed conditions.

Chemical Stability - Lubricating oil should be chemically stable. At high temperature, it should not deform in carbon particles otherwise, these carbon particles makes spark plug in faulty function.

Demulsibility - Property of a lubricant to separate from water.

Density - The mass of liquid per unit of volume of a substance at 15 C.

Dropping Point - The temperature at which the first drop of liquid separates when grease is heated under prescribed conditions.

Film Strength - Ability of a film of Lubricant to resist rupture due to load, speed and temperature.

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Flash Point - The lowest temperature at which vapors rising from a sample will ignite momentarily on application of a flame under specified conditions.

Fire Point - The lowest temperature at which an oil or other product vaporizes sufficiently rapidly to form above its surface an air-vapor mixture which when subjected to a source of ignition or a flame, will ignite and continue to burn. Typically for most Petroleum products the Fire Point is about 50°F above the Flash Point.

Kinematic Viscosity - Measure of a fluid's resistance to flow under gravity at a specific temperature (usually 40 C or 100 C).

Lubrication- Control of friction and wear by the introduction of a friction reducing film between moving surfaces in contact. The film may be fluid, solid or plastic.

Multipurpose Grease - Lubricating grease suitable for a variety of applications such as chassis, wheel bearings, universal joints and water pumps on automotive equipment.

Neutralization Number - A measure of the acidity or alkalinity of an oil. The number is the mass in milligrams of the amount of acid (HCI) or base (KOH) required to neutralize one gram of oil.

Oxidation Stability -Ability of a lubricant to resist oxidation and deterioration resulting from high temperatures and/or exposure to air.

Pour Point - Lowest temperature at which a liquid petroleum product will flow when it cooled under the conditions of the standard test method.

SAE Grade - Grade indicating the viscosity range of a crankcase, transmission or rear axle lubricant, according to systems designed by SAE.

Shear Stability - Ability of a lubricant such as a grease or VI improved oil to withstand mechanical shearing without being degraded in consistency or viscosity.

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Spindle Oil - Low viscosity oil intended for the lubrication of high-speed spindles such as those used in textile mills.

Straight Mineral - Oils, which do not contain compounds or "additives".

Synthetic Lubricant - Lubricant made chemically by reacting materials of a specific chemical composition to produce a compound with planned and predictable physical and chemical properties.

Thermal Stability - The property of a fuel or lubricant that indicates its ability to resist cracking and decomposition on prolonged exposure to elevated temperatures.

Thickener - The solid particles that are uniformly dispersed to form the structure of a lubricating grease in which the liquid lubricant is held.

Wetting Agent - Compound having the property of modifying the characteristics of the contact between a liquid and a solid surface to promote more rapid and complete wetting of the surface.

Worked Penetration - The penetration of a sample of lubricating grease immediately after it has been brought to 25 C and worked 60 strokes in the ASTM grease worker.

