

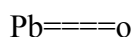
## **AKEM-SPERSE LITHARGE 90**

05.2007

### - **Composition :**

. Active ingredient :

. Formula : PbO



. N° CAS : 1317-36-8

. N° EINECS : 215-267-0

### - **Supplier :**

. Origin : Safic-Alcan UK

. Availability : not regularly available – made on request

### - **Function :**

. Main function :

. Curing activator and stabilizer

. Compatibility :

. good compatibility with :

- CSM	- CR	- ECO
- AEM	- ACM	- FKM

. Final uses :

- . Cable compounds
- . Water resistant articles
- . fuel hose
- . hydraulic hoses

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- **Synonyms :**

- . Lead (II) oxide
- . Lead monoxide

- **Characteristics :**

- . Synthetic lead (II) oxide prepared by heating lead or certain lead compounds in air is called LITHARGE.
- . It accelerates the rate and scorch time of rubber and is often used with other accelerators as well as activators chiefly in NBR and NR
- . It is also used as a vulcanising agent ( activator ) for CR and CSM ; it effective in presence of aldehydeamine, guanidine and thiourea accelerators.
- . Enhances the linkage of the FKM to the ECO/CO compound
- . It is also used as cure system to increase the acid resistance of FKM
- . It serves as an activator in the vulcanization of butyl rubber with quinone dioximes.
- . Increases the critical temperature when using dithiocarbamate and thiuram accelerators
- . It can only be used in black or dark-coloured compounds
- . It is used in the extrusion compounds for the open steam vulcanization, water resistant articles and articles with good electro insulating properties, heat resistant CSM compounds; also in NR and synthetic rubbers for X-ray gloves
- . Used also as filler in acid compounds for x-ray proofing.
- . The alternative to curing with lead compounds typically consists of a curing agent, such as a bisphenol derivative, a phosphonium derivative as activator and an acid acceptor.
- . Other applications :
  - used for the manufacture of plates.
  - gives a glossy coating to protect ceramic bodies.
  - reduces the friction of metals in sliding contact.
  - used in the preparation of Lead Stabilisers for PVC.
- . Dosage : 3 – 20 phr

- **Typical formulations :**

- . Tecnoflon P459 : 100
- . Varox DBPH-50 : 2.5
- . TAIC DLC-A : 3
- . Zinc Oxide : 0
- . Litharge : 5
- . N-990 black : 40
- . Struktol WS 280, paste : 0.5

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## **- Technical Specifications :**

<u>. Appearance:</u>	Yellow/BufF Pellets
<u>. Typical S.G. (at 20oC) :</u>	4.58
<u>. Mooney Viscosity ML (1+4) 100oC :</u>	30 - 60
<u>. Melting point ( active ingredient ) :</u>	880 C for Litharge Powder
<u>. Shelf life :</u>	24 months
<u>. Packaging Type :</u>	20 kg cardboard boxes
<u>. Formula Weight (active ingredient):</u>	223.19

## **- Dangers :**

<u>. Handling risk :</u>	<ul style="list-style-type: none"><li>. R 22 Harmful if swallowed</li><li>. R 33 Danger of cumulative effects</li><li>. R 61 May cause harm to the unborn child</li><li>. S 53 Avoid exposure – obtain special instructions before use</li></ul>
<u>. Transport Risk :</u>	Class 6.1

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### **- Competitors :**

#### **Litharge ( raw material )**

- Aspect	reddish yellow powder, odorless
- Boiling point	1470 C
- Specific Gravity	9.5 to 9.9
- Melting Point	250 °C to 897°C
- Solubility in water	insoluble in water and alcohol
- Solubility	soluble in acetic acid, nitric acid, alkalies
- pH	strong base
- Lead monoxide	99.3% max
- Lead peroxide	0.1 % max
- Residue in nitric acid	0.1 % max