

Aryavart Chemicals Pvt. Ltd.



Non Toxic Stabilizers

Aryavart Chemicals Background

- Incorporated in 1974 as a partnership, and in 1984 became a Pvt. Ltd. company
- Started operations at Panvel but shifted to Taloja in 1978
- Shifted facilities for manufacture of Driers to Jalgaon at a fully computerized facility in 2000
- Started production with Paint Driers, diversified to Liquid PVC Stabilizers in 1985.
- Started manufacture of PVC Powder Stabilizers at a state of the art plant at Jalgaon in 1993
- First and only Drier & Stabilizer manufacturer to achieve ISO 9002 in 1997
- Established a new line to manufacture Non Toxic Driers in 2010 and Non Toxic Stabilizers in 2012
- All plant approvals are in place and is a continuously running plant with a full fledged team
- Privately held company with majority (>90%) of the shareholding with the Nair family and related entities

Aryavart's emphasis on R&D

Aryavart has put a lot of thought, time, effort and money into its R&D effort to help the designing of its One Pack systems. This is an ongoing process to continuously match product with customer requirements. By producing all its products in situ, it gives a number of advantages to the processor

- Continuous work is ongoing in expanding our range of **Non Toxic Stabilizers** as well as on new Organic Stabilizers
- Handling losses are reduced and ease of handling due to its **non dusting nature**
- **Lower Dosages** with improved processing parameters and better properties of finished products along with enhanced service life
- It **allows the processor to cope** with machine specific and Finished Product formulation variations. It allows them to handle variations in the source & quality of Resin and other major raw materials.

PVC Additives Background

Aryavart Chemicals Pvt. Ltd. (Unit 3)

- Commissioned in the year 1993 at N-96 MIDC Jalgaon
- High capacity of 5000MTpa based on land of 9600 sq. mtrs.
- State of the art plant to manufacture PVC Heat Stabilizers. These are essentially One Pack Stabilizer Formulations based on mixed metal soaps of Stearic Acid. Full fledged modern plant with all approvals in place
- Established a separate 1800MTpa line for Non Toxic Mixed Metal Stabilizers such as Ba-Zn, Ca-Zn and K-Zn
- Commercially viable products as evidenced by world wide customer base
- World wide distribution network making the products available at the customers doorstep

The products find **applications** in the following industries

- PVC Water Pipes and Electrical Conduits
- PVC Cables
- Door and Window Profiles
- Artificial Leather Cloth

Ca-Zn Stabilizers for Cables

- For the Cable Industry we have introduced 2 grades, namely
 - **INSTABEX® CZ-981** is a high power stabilizer in powder form, specifically designed for cable compound for higher grade domestic cables. It imparts good initial color, better heat stability and electrical properties and is suitable for operating temperatures up to 70°C
 - **INSTABEX® CZ-990** is a high power stabilizer in powder form, specifically designed for cable compound for higher grade domestic cables. It imparts good initial color, better heat stability and electrical properties and is suitable for operating temperatures up to 100°C
- These are ROHS compliant products and are certified Heavy metal free



INSTABEX® CZ-981

- **INSTABEX® CZ-981** is an excellent blend of Stabilizers, Co-Stabilizers and modified new generation lubricants has been so designed to offer the best synergies to meet the requirements of the processor and is suitable for operating temperatures up to 70°C.
- Comparison Test Carried out between **INSTABEX® CZ-981** and a Standard Competitor's Product, conducted at 180°C for 90 mins. show no appreciable change of color and no black particles observed
- Dynamic (at 180°C) & Static (at 190°C) tests were carried out on a 2 roll mill, which have shown results up to 50 minutes and up to 40 minutes respectively.

DATE 11.08.13

TEMP. 180 Deg.C +/- 5 Deg.C

FORMULATION

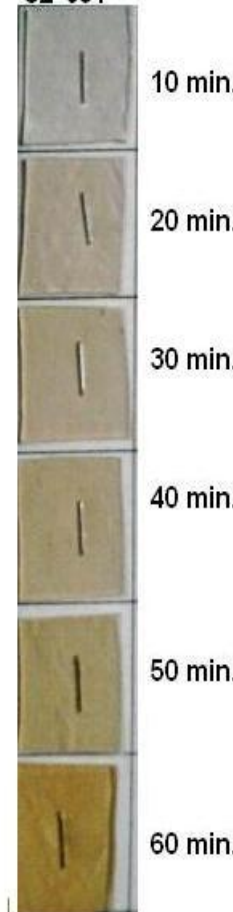
P.V.C. Resin - 100 gm.

Stabilizer - 2 gm.

Stearic Acid - 025 gm.

D.O.P - 25 gm.

DYNAMIC
CZ -981

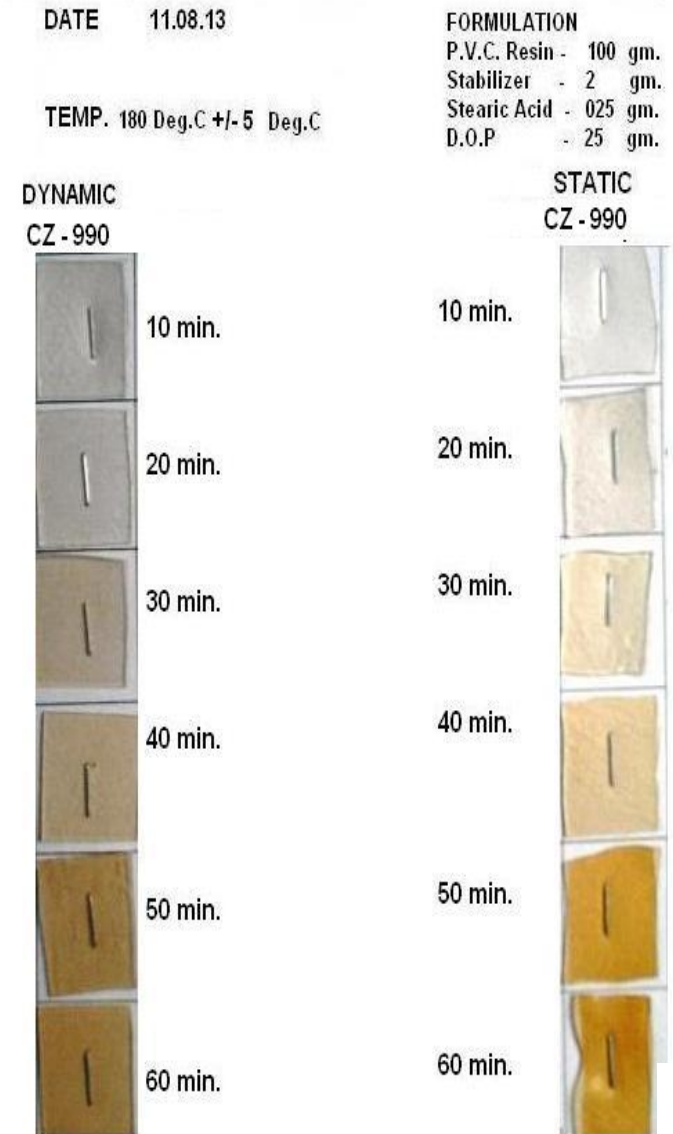


STATIC
CZ - 981



INSTABEX® CZ-990

- **INSTABEX® CZ-990** is an excellent blend of Stabilizers, Co-Stabilizers and modified new generation lubricants has been so designed to offer best of the synergies to meet the requirements of the processor. They are designed for operating temperatures up to 100°C
- Comparison Test carried out between **INSTABEX® CZ-990** and a standard competitor's product shows Heat Stability Test at 180°C for 2Hrs in a rotating oven, which indicate no appreciable change of color and no black particles observed
- Dynamic (at 180°C) & Static (at 190°C) tests were carried out on a 2 roll mill, which have shown results up to 50 minutes and up to 40 minutes respectively.

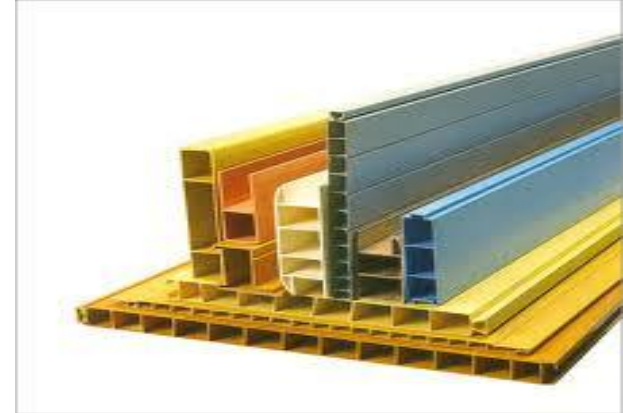


Product Performance in Cables

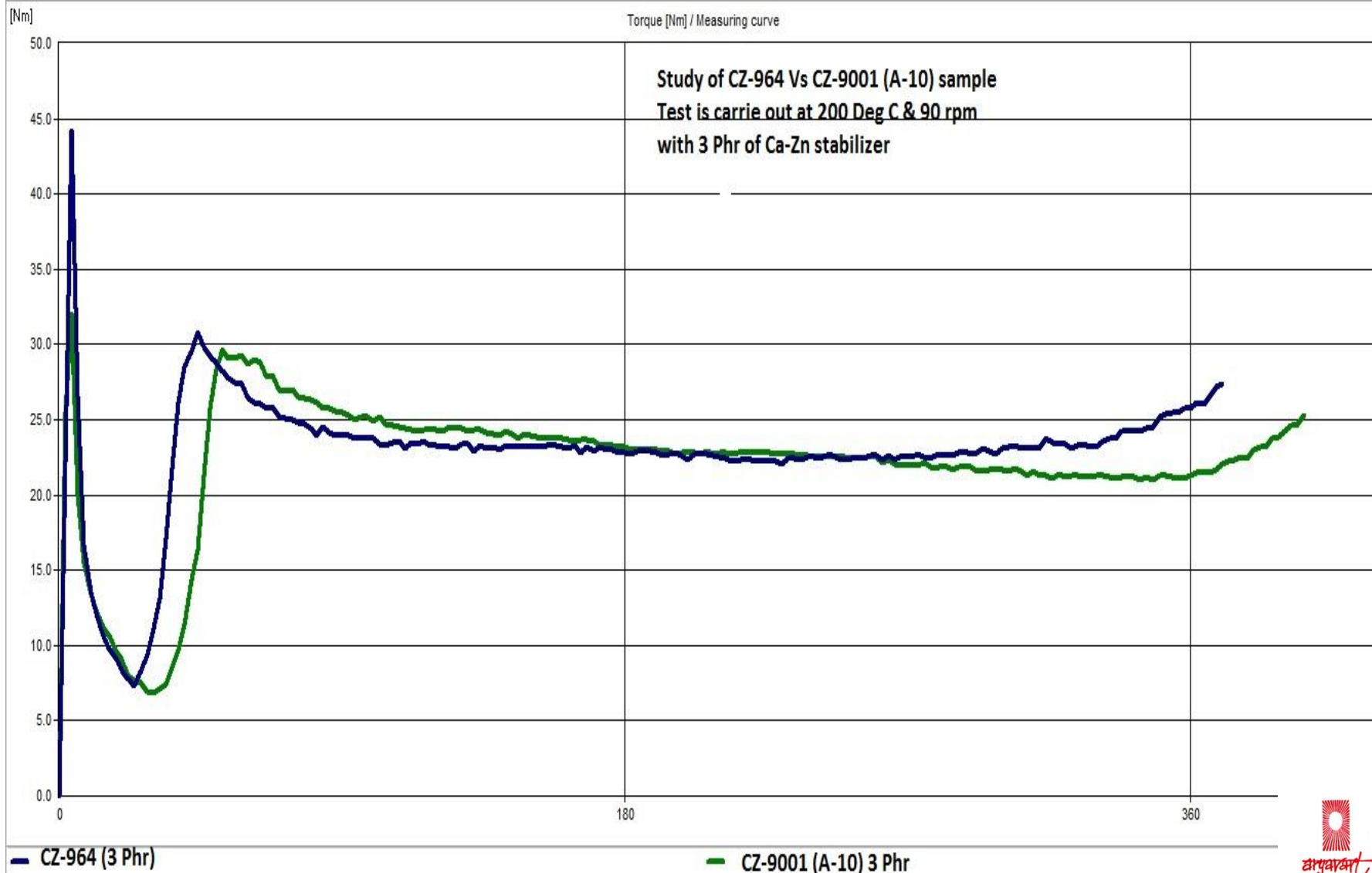
Parameter	INSTABEX® CZ-990	INSTABEX® CZ-981
Volume Resistivity (*10 ¹³ Ω cm)	12-14	5-7
VR drop after 24 hours	Running	Running
Thermal Stability at 200°C (minutes)	110-120	80-90
Tensile Strength N/sq.m.	16-18	11-12
After ageing TS	Running	Running
Elongation Break (%)	200-250	125-150

Stabilizers for PVC Pipes and Profiles

- For the PVC rigid extrusion Industry we have introduced 2 grades, namely
 - **INSTABEX® CZ-9001** is a high power stabilizer in powder form, specifically designed for PVC pipes and electrical conduits. An excellent blend of Stabilizers, Co-Stabilizers and modified new generation lubricants has been so designed to offer best of the synergies to meet the requirements of the processor.
 - **INSTABEX® CZ-3001** is a high power stabilizer in powder form, specifically designed for PVC profiles. This product has been designed keeping in mind the stringent processing requirements of the processors, the long processing times and their unique product requirements.
- The Brabender Plastograph charts attached show the relative performance of our products compared to a standard competitors sample



INSTABEX® CZ-9001



Stabilizers for Artificial Leather Cloth

- For the Calendering, Spread Coating etc. we have introduced the following grades
 - **INSTABEX® BZ-4** which is a Barium Zinc stabilizer for stability up to 40 minutes
 - **INSTABEX® BZ-6** which is a Barium Zinc stabilizer for stability up to 60 minutes
 - **INSTABEX® KC-1** which is a Potassium Zinc Kicker
- These products are typically used for
 - Top Coats of ALC
 - Reduction of blowing temp for Foam Sheets

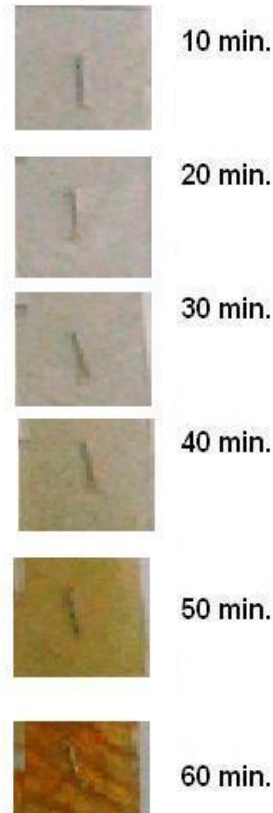


INSTABEX® BZ-4

- **INSTABEX® BZ-4** is an economical Ba-Zn stabilizers system which assures better heat stability and weather ability.
- Dynamic (at 180°C) & Static (at 190°C) Stability Tests have been carried out on a 2 roll mill. These tests have been carried out at 2phr of stabilizer and 25 phr of DOP.
- Dynamic Heat Stability achieved is up to **40 minutes** while Static Heat Stability achieved is up to 15 minutes.
- This product is most suitable for topcoats of ALC to be exported to European countries where cost is a big concern without a big sacrifice in performance. It can also be used in application where Clarity of the end product is not critical

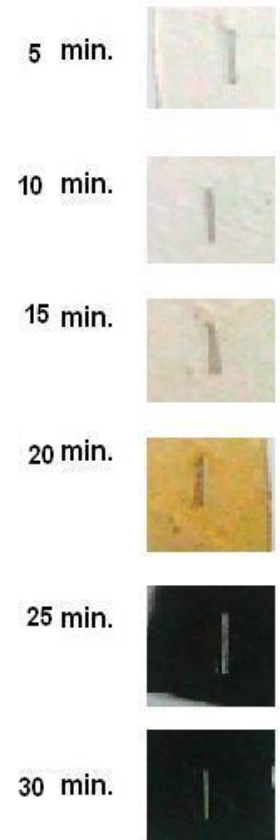
DATE 19.09.13

TEMP. 180 Deg.C +/- 5 Deg.C
DYNAMIC
BZ-IV



FORMULATION
P.V.C. Resin - 100 gm.
Stabilizer - 2 gm.
Stearic Acid - 0.25 gm.
D.O.P - 25 gm.

TEMP. 190 Deg.C +/- 5 Deg.C
STATIC
BZ-IV



INSTABEX® BZ-6

- **INSTABEX® BZ-6** is a Ba-Zn stabilizer system which assures better heat stability and weather ability.
- Dynamic (at 180°C) & Static (at 190°C) Stability Tests have been carried out on a 2 roll mill. These tests have been carried out at 2phr of stabilizer and 25 phr of DOP.
- Dynamic Heat Stability achieved is up to **50 minutes** while Static Heat Stability achieved is up to 25 minutes.
- This product is most suitable for topcoats of ALC to be exported to European countries where high stability and high clarity is critical.

DATE 22.09.13

TEMP. 180 Deg.C +/- 5 Deg.C

DYNAMIC

BZ -VI



10 min.



20 min.



30 min.



40 min.



50 min.



60 min.

FORMULATION

P.V.C. Resin - 100 gm.

Stabilizer - 2 gm.

Stearic Acid - 025 gm.

D.O.P - 25 gm.

TEMP. 190 Deg.C +/- 5 Deg.C

STATIC

BZ -VI



5 min.



10 min.



15 min



20 min



25 min



30 min

Contact Us

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