BIT
1,2-Benzisothiazolin-3-one

Use
Origin of Disruption
BIT Supplier's / Registrant's Response
BIT Supply Update
BIT – USE

- Wet-state preservative for a wide range of formulations, particularly those with an alkaline pH.
- Effective in the control of bacterial contamination during the manufacture and storage of aqueous end-use products.
BIT – Origin of Disruption

1) Q-4 2017, due to pollution violations
   a) Chinese government shut down tens of thousands of chemical factories
   b) Factories could reapply to open if they reapply and met the standards
   c) Some will never reopen
   d) BIT supply chain not affected and assured us they were OK
BIT – Origin of Disruption

2) Q-2 2018, due to pollution violations
   a) BIT supply chain factories inspected and shut down
   b) World’s largest producers of 2-Chlorobenzonitrile (o-CBN), BIT precursor and BIT paste is in China
   c) Recent explosion is going to put pressure on the supply
BIT – Origin of Disruption

- Supply Chain
  - New definition for single source?
    - Formerly – single company
    - Now – regulated region?
BIT – Supplier’s/Registrant’s Response

- Companies announced an allocated supply
BIT – Supplier’s/Registrant’s Response

- CBC joined with Crop Life, RISE, BPIA, CDPA, HPCA to work with the EPA to assess the substitution of BIT-blends or non-BIT containing products.
- All products suggested had been previously assessed and approved for use under 180.910, 180.920 or for non-food.
- Chemistries: CIT/MIT CTAC Bronopol NaOPP IPBC
BIT – Supplier’s/Registrant’s Response

- Thor immediately began working with its customers to find low or no-BIT containing alternatives
- To date, no customer was shut down due to the availability of these alternatives
BIT – Supplier’s/Registrant’s Response

- Special attention was needed for AgChem customers due to restrictions under 180.910/920
- AgChem customers given options to use the following:
  - 180.920 approval  CIT/MIT
  - 180.910 approval  Bronopol
  - 180.920 approval  CIT/MIT + Bronopol
  - Non-food BIT + CIT/MIT + MIT
  - Non-food BIT + MIT
BIT – Supply Update

In Mid-March-2019 a heavy chemical accident has occurred in the Chemical Park Yancheng in China, province of Jiangsu.

According to the authorities 78 workers are dead. Over 100 workers are injured and 28 workers are still missing.

We have received the following pictures from China and can only suspect the extent of destruction
BIT – Supply Update
BIT – Supply Update
BIT – Supply Update

Due to the magnitude of the accident, all chemical sites in the affected province are shut down at present.

The authorities are now investigating and inspecting all sites. After positive inspection the companies will re-start the production.

Also the BIT supply is affected by this accident because o-CBN (BIT precursor) and BIT paste producers have has been effected by the explosion which will have an impact on the market.

We expect that the availability of BIT will not improve in the coming months, and will become difficult again.
Thank you