**FIVE STAR CHEMICALS**

**IO-STAR**

*A low foaming iodophor for sanitizing in the beer-bottling, soft drink-bottling, milk-bottling, and food-canning industries.*

---

**BENEFITS**

- Easy to use
- Economical dilution ratio
- Controls water hardness
- Self-indicating

**DESCRIPTION**

IO-STAR is formulated for use by the bottling, food processing, and milk industry. When used continuously as a sanitizing spray on walls and equipment it will reduce or eliminate odors throughout the processing area. IO-STAR is effective against e coli and s s typhosa as well as most mold and yeast.

**PROPERTIES**

**APPEARANCE**...DARK BLUE to BLACK

**ODOR**...TYPICAL IODINE

**pH @ 1 ounce per 5 gallons**...2.2

**AvI₂ @ 1 ounce per 5 gallons**...25 ppm

**FOAM**...MODERATE

**COMPLIANCE**

IO-STAR is a registered pesticide by the EPA. A potable water rinse is not required after each use, when used at or under 25 ppm.
GENERAL USE DIRECTIONS

Fresh sanitizing solution should be prepared daily or more often if the solution becomes diluted or soiled.

DILUTION TABLE:

- 1 ounce IO-STAR / 10 gallons water = 12.5 ppm AvI₂
- 1 ounce IO-STAR / 5 gallons water = 25 ppm AvI₂
- 2 ounces IO-STAR / 5 gallons water = 50 ppm AvI₂

CIP SANITIZING: Use 25 ppm IO-STAR to flood lines and circulate in tanks. After 5 minutes contact, drain off solution. Do not rinse. Use 12.5 ppm IO-STAR in lines and equipment when a slight sanitizing solution is desired between filling operation. After 10 minutes contact, drain off solution. A potable water rinse is not required after use.

EQUIPMENT SANITIZING: To pre-cleaned equipment, circulate with cold or lukewarm water with a solution of 1 ounce IO-STAR to 5 gallons water. Rinse with potable water.

To sanitize, spray or immerse equipment with a fresh solution of 1 ounce IO-STAR to 5 gallons cold or lukewarm water (provides 25 ppm titratable iodine). Allow a one minute contact time. When ready to use, drain sanitizing solution.

TANK AND VAT SANITIZING: Pre-clean with 1 ounce IO-STAR to 5 gallons water (not hot). Rinse with potable water. To sanitize, spray or fill vat with 1 ounce IO-STAR to 5 gallons water (provides 25 ppm titratable iodine). After 5 minutes, drain off solution.

SANITATION OF WALLS, FLOORS, CONVEYORS, AND OTHER SIMILAR SURFACES:
Pre-clean surface by scraping or flushing to remove soil. Then thoroughly clean with a solution 2 ounces of IO-STAR to 5 gallons of water. Rinse with potable water. Sanitize with a solution containing 1 ounce of IO-STAR to 5 gallons of water (provides 25 ppm titratable iodine). Allow 2 minutes contact time. Do not rinse.

SANITIZING OF BEVERAGE CONTAINERS:
To sanitize previously cleaned beverage containers, which were first washed in detergent and rinsed, use a solution containing 1 ounce IO-STAR to 5 gallons of water (provides 25ppm titratable iodine). Allow for a one minute contact time. Invert containers, drain and allow to air dry.

SAFETY

DANGER: Avoid contact with food. Causes moderate eye injury. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

FIRST AID:
For Eyes: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes. Then continue rinsing. Call Poison Control Center or doctor for treatment advice.

If Swallowed: Call Poison Control Center or doctor immediately for treatment advice. Have person sip on a glass of water if able to swallow. Do not induce vomiting unless told to do so by the Poison Control doctor. Do not give anything to an unconscious person.
FIVE STAR CHEMICALS

IO-STAR

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Poison Control Center for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a Poison Control Center or doctor for treatment.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measure against circulatory shock, respiratory depression and convulsion may be needed.

Store this product in a cool dry area. Do not allow it to freeze.  

Rev. 06/03