



# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** TITRANT I3  
**PRODUCT NUMBER:** I3  
**PRODUCT FAMILY:** MILD ACID  
**MANUFACTURER:** KO MANUFACTURING, INC  
2720 E. DIVISION STREET  
SPRINGFIELD, MO 65803  
417-866-8000

**DATE PREPARED:** 1/2/2020  
**SUPERCEDED DATE:** 8/28/2018

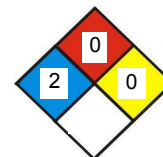
**EMERGENCY CONTACT:**  
CHEMTREC 800-424-9300

**INFORMATION USE:** ACIDIC TITRANT

## 2. HAZARD IDENTIFICATION

**DOT HAZARD CLASSIFICATION:** NOT REGULATED BY D.O.T.  
**SIGNAL WORD:** DANGER!  
**ROUTE OF EXPOSURE:** EYE CONTACT, SKIN CONTACT, INHALATION, INGESTION  
**GHS HAZARD CLASSIFICATION:** SERIOUS EYE DAMAGE/ EYE IRRITATION 1  
SKIN IRRITANT 2

NFPA



**GHS LABEL ELEMENTS:** H315 - Causes skin irritation.  
H318 - Causes serious eye damage.  
P264 - Wash exposed skin thoroughly after handling.  
P280 - Wear protective gloves/eye protection/face protection.  
P313 - Get medical advice/attention.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call POISON CENTER or doctor/physician.  
P332+ P313 - If skin irritation occurs: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.

PICTOGRAMS



## 3. COMPOSITION IDENTIFICATION

**INGREDIENTS:**  
HYDROCHLORIC ACID  
WATER

**C.A.S. NUMBER:**  
7647-01-0  
7732-18-5

**PERCENT:**  
<1.5%  
Balance

## 4. FIRST AID MEASURES

**EYE CONTACT:** RINSE WITH FRESH WATER FOR 15 MINUTES, LIFTING EYELIDS OCCASIONALLY. CALL A PHYSICIAN IF IRRITATION PERSISTS.

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#### 4. FIRST AID MEASURES - CONTINUED

**SKIN CONTACT:** RINSE WITH PLENTY OF FRESH WATER AND REMOVE CONTAMINATED CLOTHING IMMEDIATELY. CALL A PHYSICIAN IF IRRITATION PERSISTS.

**INGESTION:** RINSE MOUTH WITH FRESH WATER. DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY. IF CONSCIOUS, GIVE LARGE QUANTITIES OF WATER. DO NOT GIVE ANYTHING BY MOUTH IF UNCONSCIOUS.

**INHALATION:** IF OVERCOME BY EXPOSURE, REMOVE VICTIM TO FRESH AIR IMMEDIATELY. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED. CALL A PHYSICIAN IMMEDIATELY.

#### 5. FIRE FIGHTING MEASURES

**FLAMMABLE PROPERTIES:** NON FLAMMABLE.

**FLASH POINT:** DOES NOT FLASH.

**SUITABLE EXTINGUISHING MEDIA:** DRY CHEMICAL, FOAM OR CARBON DIOXIDE, WATER SPRAY.

**UNSUITABLE EXTINGUISHING MEDIA:** NOT ESTABLISHED.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** NONE KNOWN.

**PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:** WEAR SELF-CONTAINED BREATHING APPARATUS (PRESSURE DEMAND MSHA/NIOSH APPROVED) AND FULL PROTECTIVE GEAR.

#### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** AVOID CONTACT WITH EYES AND SKIN. SPILL AREA MAY BE SLIPPERY. WEAR PROPER PROTECTIVE EQUIPMENT WHEN DEALING WITH RELEASE.

**ENVIRONMENTAL PRECAUTIONS:** CONTAIN SPILL TO AVOID RELEASE TO THE ENVIRONMENT. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

**METHODS FOR CONTAINMENT AND CLEAN-UP:** COLLECT FOR DISPOSAL USING AN INERT ABSORBENT MATERIAL AND TRANSFER TO A CONTAINER FOR REUSE OR DISPOSAL.

#### 7. HANDLING AND STORAGE

**HANDLING:** SPILLED MATERIAL MAY BE SLIPPERY. ALWAYS WEAR PROPER PROTECTIVE EQUIPMENT WHEN HANDLING. WASH THOROUGHLY AFTER HANDLING.

**STORAGE:** STORE IN A COOL, DRY PLACE. KEEP OUT OF REACH OF CHILDREN. KEEP LID TIGHTLY CLOSED WHEN NOT IN USE.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** NONE REQUIRED UNDER NORMAL USE.

**EYE / FACE PROTECTION:** CHEMICAL SAFETY GLASSES.

**SKIN PROTECTION:** CHEMICAL RESISTANT GLOVES AND APRON

**THRESHOLD LIMIT VALUE (TLV):** NOT ESTABLISHED.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** LIQUID.

**APPEARANCE:** CLEAR LIQUID.

**ODOR:** ACID SCENT.

**BOILING POINT:** NOT ESTABLISHED.

**FREEZING POINT:** NOT ESTABLISHED.

**SPECIFIC GRAVITY:** 1.03

**pH (1%):** 2.5-3.0

**EVAPORATION RATE:** LESS THAN 1.

**FLASH POINT:** DOES NOT FLASH.

**LOWER FLAMMABILITY/EXPLOSIVE LIMIT:** NOT ESTABLISHED.

**UPPER FLAMMABLE/EXPLOSIVE LIMIT:** NOT ESTABLISHED.

**AUTO-IGNITION TEMPERATURE:** NOT ESTABLISHED.

**VISCOSITY:** NOT ESTABLISHED.

**REALITIVE DENSITY:** 8.40 LBS./GL.

**SOLUBILITY:** SOLUBLE.

**VAPOR PRESSURE:** NOT ESTABLISHED.

**VAPOR DENSITY:** NOT ESTABLISHED.

**DECOMPOSITION TEMPERATURE:** NOT ESTABLISHED.

**PARTICAL COEFFICIENT:** NOT ESTABLISHED.  
N-OCTANOL/WATER

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## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** STABLE.

**CONDITIONS TO AVOID:** NONE KNOWN.

**INCOMPATIBLE MATERIALS:** DO NOT MIX WITH OTHER CHEMICALS.

**HAZARDOUS DECOMPOSITION PRODUCTS:** CARBON MONOXIDE AND DIOXIDE FROM THERMAL DECOMPOSITION.

## 11. TOXICOLOGICAL INFORMATION

**EYE IRRITATION/CORROSION:** SERIOUS EYE DAMAGE/ EYE IRRITATION

**EFFECTS OF SHORT-TERM EXPOSURE:** DIRECT EYE CONTACT MAY CAUSE SEVERE IRRITATION.

**INGESTION:** SEVERE IRRITATION OR BURNS TO MOUTH, THROAT, STOMACH.

**LD-50:** NOT ESTABLISHED.

**CARCINOGENICITY:** NOT CONSIDERED A CARCINOGEN BY IARC, ACGIH, NTP, OR OSHA

## 12. ECOLOGICAL IDENTIFICATION

**ECOTOXICITY:** NOT ESTABLISHED.

**PERSISTENCE AND DEGRADABILITY:** BIODEGRADABLE.

**BIOACCUMULATION/ACCUMULATION:** NOT ESTABLISHED.

## 13. DISPOSAL CONDITIONS

MATERIALS ARE TO BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

## 14. TRANSPORTATION INFORMATION

**GROUND SHIPPING INFORMATION:**

CLEANING, SCOURING, OR WASHING COMPOUNDS, N.O.S., LIQUID.

**WATER SHIPPING INFORMATION:**

CLEANING, SCOURING, OR WASHING COMPOUNDS, N.O.S., LIQUID.

**AIR SHIPPING INFORMATION:**

CLEANING, SCOURING, OR WASHING COMPOUNDS, N.O.S., LIQUID.

## 15. REGULATORY INFORMATION

**US FEDERAL REGULATIONS:**

**TSCA (TOXIC SUBSTANCE CONTROL ACT)** ALL COMPONENTS LISTED ON TSCA INVENTORY.

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):**

**313 REPORTABLE INGREDIENTS**

**CAS NUMBER:**

**PERCENT:**

NONE.

**STATE REGULATIONS:**

**INTERNATIONAL REGULATIONS:** CLASS E CORROSIVE UNDER CANADIAN WHMIS

**SECTION 15 NOTES:** NONE.

## 16. OTHER INFORMATION

**PHONE NUMBER:** 417-866-8000

**DATE OF PREPARATION:** 1/2/2020

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