

**1. PRODUCT AND COMPANY IDENTIFICATION****NAME: HARDNESS TITRANT Z****USE:** TEST KIT REAGENT**MSDS # 014887    CODE: Z****US** CHEMICAL, 316 HART STREET, WATERTOWN WI 53094 USA

MEDICAL EMERGENCY #: 1-866-923-4913 USA

SPILL EMERGENCY #: 1-800-424-9300 USA

PRODUCT INFORMATION #: 1-800-558-9566 (8 A.M. TO 5 P.M. CST MONDAY TO FRIDAY)

INTERNET ADDRESS: [WWW.USCHEMICAL.COM](http://WWW.USCHEMICAL.COM)

REVIEWED 11-7-13    REVISED 11-7-13    SECTION REVISED: 1

**2. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW:** CAUTION! MAY BE IRRITATING TO EYES AND SKIN.**PRINCIPLE ROUTES OF EXPOSURE:** EYES, INGESTION**POTENTIAL ACUTE HEALTH EFFECTS****EYES:** MAY BE MILDLY IRRITATING TO EYES.**SKIN:** MAY BE MILDLY IRRITATING TO SKIN.**INHALATION:** NONE KNOWN.**INGESTION:** MAY CAUSE ABDOMINAL DISCOMFORT, NAUSEA, VOMITING AND DIARRHEA.**MEDICAL CONDITIONS AGGRAVATED:** PERSONS WITH PRE-EXISTING SKIN DISORDERS MAY BE MORE SUSCEPTABLE TO IRRITATING EFFECTS.**3. COMPOSITION / INFORMATION ON INGREDIENTS**

HAZARDOUS INGREDIENT	CAS #	% BY WT	LC50/LD50
PROPYLENE GLYCOL	57-55-6	20.0 – 30.0	N.A.P.
STATE RIGHT TO KNOW: THIS PRODUCT CONTAINS: WATER/7732-18-5, PROPYLENE GLYCOL/57-55-6			

#### 4. FIRST AID MEASURES

Page 2 of 4

**EYES:** FLUSH IMMEDIATELY WITH PLENTY OF WATER. IF IRRITATION DEVELOPS, GET MEDICAL ATTENTION.

**SKIN:** FLUSH IMMEDIATELY WITH PLENTY OF WATER. IF IRRITATION DEVELOPS, GET MEDICAL ATTENTION.

**INHALATION:** NO SPECIFIC FIRST AID MEASURES ARE REQUIRED.

**INGESTION:** DO NOT INDUCE VOMITING. IF PATIENT IS CONSCIOUS AND CAN SWALLOW, ADMINISTER MILK OR WATER.

**ADMINISTER FIRST AID TREATMENT AS STATED ABOVE, THEN CALL 1-866-923-4913 OR CONTACT PHYSICIAN FOR FURTHER MEDICAL INSTRUCTIONS.**

**NOTE TO PHYSICIAN:** CALL 1-866-923-4913 FOR ASSISTANCE WITH THE MANAGEMENT OF EXPOSURES.

#### 5. FIRE-FIGHTING MEASURES

**FLAMMABILITY:** NO HAZARD.

**FLASH POINT:** N.A.P.

**PRODUCTS OF COMBUSTION:** SEE SECTION 10.

**SUITABLE EXTINGUISHING MEDIA:** FOR FIRES IN AREA, USE APPROPRIATE MEDIA. FOR EXAMPLE: WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE, OR ALCOHOL FOAM.

**SPECIFIC HAZARDS:** N.A.P.

**SPECIFIC METHODS:** NORMAL FIRE FIGHTING PROCEDURES MAY BE USED.

#### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** SEE SECTION 8.

**SPILL RESPONSE:** EVACUATE UNPROTECTED PERSONNEL FROM AREA. WEAR PROPER PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS. VENTILATE AREA IF NEEDED. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. DIKE OR DAM LARGE SPILLS. AVOID DIRECT DISCHARGE TO SEWER AND SURFACE WATERS. PUMP TO CONTAINER OR SOAK UP WITH NON-COMBUSTIBLE INERT ABSORBENT MATERIALS. AFTER SPILL COLLECTION, FLUSH AREA WITH WATER AND FOLLOW WITH NORMAL CLEAN-UP PROCEDURES. BE CAREFUL AS SPILLS ARE SLIPPERY.

#### 7. HANDLING AND STORAGE

**HANDLING:** FOLLOW ALL LABEL DIRECTIONS. INSTRUCT PERSONNEL ABOUT PROPER USE, HAZARDS, PRECAUTIONS, AND FIRST AID MEASURES.

AVOID INGESTION AND CONTACT WITH EYES. DO NOT TASTE OR SWALLOW.

PRODUCT RESIDUE MAY REMAIN ON OR IN EMPTY CONTAINERS.

HANDLE CAREFULLY TO AVOID DAMAGING CONTAINER.

**STORAGE:** ROTATE STOCK REGULARLY. KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID TEMPERATURES BELOW 35°F OR ABOVE 120°F. PROTECT FROM FREEZING.

STORAGE AT AMBIENT TEMPERATURES IN A DRY AREA OUT OF DIRECT SUNLIGHT IS RECOMMENDED. KEEP AWAY FROM FOOD AND DRINK. KEEP OUT OF CHILDREN'S REACH.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Page 3 of 4

**EXPOSURE LIMITS:** N.AP.**ENGINEERING CONTROLS:** NONE REQUIRED. GENERAL ROOM VENTILATION IS ADEQUATE.**PERSONAL PROTECTION****EYES:** NONE REQUIRED WITH NORMAL USE.**HANDS:** NONE REQUIRED WITH NORMAL USE.**RESPIRATORY:** N.AP.**FEET:** N.AP.**BODY:** N.AP.**9. PHYSICAL AND CHEMICAL PROPERTIES****COLOR:** COLORLESS**ODOR:** NONE**pH CONCENTRATE:** 5.0**pH @ 2500 PPM SOLUTION:** N.AP.**pH @ USE DILUTION:** N.AP.**PHYSICAL STATE:** LIQUID**SPECIFIC GRAVITY:** 1.026**VISCOSITY:** NON-VISCOUS**BOILING POINT:** N.AP.**MELTING POINT:** N.AP.**FLASH POINT:** N.AP.**UEL:** N.AP.**LEL:** N.AP.**EVAPORATION RATE:** N.AP.**ODOR THRESHOLD:** N.AP**VAPOR PRESSURE:** N.AP**VAPOR DENSITY:** N. AP.**COEFF. OIL/WATER:** N.AP.**WATER SOLUBILITY:** MISCIBLE**OTHER:** N.AP.**10. STABILITY AND REACTIVITY****STABLE:** YES**CONDITIONS TO AVOID:** AVOID TEMPERATURES BELOW 35°F OR ABOVE 120°F.**MATERIALS TO AVOID:** AVOID MIXING DIRECTLY WITH ANY OTHER CLEANING PRODUCT. AVOID OXIDIZING AGENTS. MIX ONLY WITH WATER OR AS DIRECTED IN THE TEST KIT MANUAL.**DECOMPOSITION PRODUCTS:** FIRE OR MIXING WITH INCOMPATIBLE MATERIALS MAY PRODUCE OXIDES OF SULFUR AND OTHER TOXIC OR IRRITATING FUMES.**POSSIBILITY OF HAZARDOUS REACTIONS:** N.AP.**11. TOXICOLOGICAL INFORMATION****ACUTE EFFECTS:** SEE SECTION 2.**CHRONIC EFFECTS:** NONE KNOWN. NO REPORTABLE CARCINOGENS, MUTAGENS, SENSITIZERS, SYNERGISTIC MATERIALS, TERATOGENS, OR REPRODUCTIVE TOXINS.**LC50/LD50:** N.AV.**TARGET ORGANS:** NONE KNOWN.**OTHER TOXIC EFFECTS:** NONE KNOWN.

**12. ECOLOGICAL INFORMATION**

Page 4 of 4

NOT AVAILABLE.

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** COMPLY WITH ALL FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS AND REGULATIONS. CONSULT STATE AND LOCAL AUTHORITIES FOR RESTRICTIONS ON DISPOSAL OF CHEMICAL WASTE. MANAGE CHEMICAL WASTES THROUGH AN APPROVED WASTE TREATMENT FACILITY. DO NOT REUSE EMPTY CONTAINER. RINSE EMPTY CONTAINER THOROUGHLY WITH WATER BEFORE DISCARDING CONTAINER IN ACCORDANCE WITH CURRENT LOCAL COMMUNITY CODES. PLEASE RECYCLE EMPTY CONTAINER WHENEVER POSSIBLE.

**14. TRANSPORT INFORMATION**

**DOT/TDG:** NOT REGULATED  
**DOT RQ:** N.AP.  
**DOT ERG #:** N.AP.

**15. REGULATORY INFORMATION**

**EPA CERCLA RQ:** N.AP.  
**EPA REGISTERED:** NO  
**OSHA HAZARDOUS:** NO  
**PHOSPHORUS CONTENT:** 0.00%  
**PROPOSITION 65:** N.AP.  
**SARA 311/312 HAZARDS:** ACUTE  
**SARA 313 CHEMICALS:** N.AP.  
**STATE RIGHT TO KNOW:** SEE SECTION 3 FOR STATE RTK CHEMICAL NAMES.  
**TSCA INVENTORY STATUS:** ALL COMPONENTS ARE LISTED ON THE INVENTORY.  
**VOC:** 0.00% CALCULATION METHOD USED IS BASED ON CALIFORNIA ARB STANDARD.

**16. OTHER INFORMATION**

**NFPA RATING:** HEALTH-1/FLAMMABILITY-0/REACTIVITY-0/SPECIAL HAZARD-N.AP.  
**HMIS RATING:** HEALTH-1/FLAMMABILITY-0/REACTIVITY-0/PERSONAL PROTECTION-SEE 8.0

N.AV. = NOT AVAILABLE    N.AP. = NOT APPLICABLE

PREPARED BY: HEALTH AND SAFETY

**NOTICE TO READER**

THIS DOCUMENT HAS BEEN PREPARED USING DATA FROM SOURCES CONSIDERED TECHNICALLY RELIABLE. IT DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THE INFORMATION CONTAINED WITHIN. ACTUAL CONDITIONS OF USE AND HANDLING ARE BEYOND SELLER'S CONTROL. USER IS RESPONSIBLE FOR EVALUATING ALL AVAILABLE INFORMATION WHEN USING PRODUCT FOR ANY PARTICULAR USE AND TO COMPLY WITH ALL FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS AND REGULATIONS.