



**ANTI-SEIZE TECHNOLOGY**  
A.S.T. Industries, Inc.

H.M.I.S.	
H -	2
F -	0
R -	0
P.P.	A

**POLY-TEMP<sup>®</sup> XHD**  
**STAINLESS STEEL GRADE**  
**TEFLON TAPE**  
STOCK # ('S): 46231, 46231A  
**MATERIAL SAFETY DATA SHEET**

**SECTION I - PRODUCT IDENTIFICATION**

**MANUFACTURE:** ANTI-SEIZE TECHNOLOGY  
2345 N. 17th. Ave.  
FRANKLIN PARK, IL. 60131  
**TELEPHONE #:** 847-455-2300  
**24 HR. EMERGENCY #:** INFOTRAC@ 1-800-535-5053

**SECTION II - COMPOSITION**

	CAS #	OSHA PEL, NOT ESTABLISHED	TLV	SARA III	PROP 65,	PERCENT
POLYTETRAFLUROETHANE (99.9% virgin material )	9002-84-0			NO	NO	80 - 90
NICKEL, AS DUST OR FUME	7740-02-0	1mg/m3	1mg/m3	YES	NO	1 - 15

"TEFLON" (DuPONT TRADEMARK)

**SECTION III - PHYSICAL PROPERTIES**

**BOILING POINT:** DOES NOT APPLY  
**MELTING POINT:** OVER 550 F  
**VAPOR PRESSURE:** 0  
**EVAPORATION RATE:** 0  
**APPEARANCE AND ODOR:** NICKEL COLORED PLASTIC LIKE TAPE  
**SOLUBILITY IN WATER:** NONE  
**REACTIVITY IN WATER:** NONE  
**SPECIFIC GRAVITY:** 2.7  
**PERCENT VOLATILE:** 0

**SECTION IV - FIRE AND EXPLOSION DATA**

**FLASH POINT AND METHOD USED:** DOES NOT APPLY  
**FLAMMABLE LIMITS:** LEL: NO DATA UEL: NO DATA  
**EXTINGUISHING MEDIA:** FOAM, CO2, DRY CHEMICAL  
**SPECIAL FIRE FIGHTING PROCEDURES:** . MAY EMIT TOXIC FUMES IN A FIRE. DOES NOT BURN WITHOUT AN EXTERNAL SOURCE OF FUEL.. WEAR A " N.I.O.S.H." APPROVED ORGANIC VAPOR RESPIRATOR.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** DENSE SMOKE AND NOXIOUS OR TOXIC FUMES MAY BE GENERATED IN A FIRE. FIRE FIGHTERS SHOULD WEAR A SELF CONTAINED BREATHING APPARATUS.

**SECTION V- PHYSICAL HAZARDS**

**STABILITY:** (X) STABLE ( ) UNSTABLE  
**CONDITIONS TO AVOID:** TEMPERATURE OVER 500F  
**INCOMPATIBILITY ,(MATERIALS TO AVOID):** ALKALI METALS, INTERHALOGEN COMPOUNDS.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** IF THE SERVICE TEMPERATURES EXCEEDS 750 F. THEN "TEFLON" WILL BEGIN TO UNDERGO THERMAL DECOMPOSITION. AT THESE TEMPERATURES "TEFLON" CAN EMIT ACUTELY TOXIC VAPORS. THESE VAPORS CAN INCLUDE HEXAFLUOROPROPYLENE, PERFLUOROISOBUTYLENE AND CARBONYL FLUORIDE.  
**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR

**SECTION VI - HEALTH HAZARDS AND FIRST AID**

**ROUTES OF ENTRY:**      SKIN      EYES      INHALATION      INGESTION  
**HEALTH HAZARDS:** "TEFLON" IS RELATIVELY NON-TOXIC. THE PRIMARY HEALTH HAZARD ASSOCIATED WITH "TEFLON" IS EXTREMELY HIGH TEMPERATURE ( OVER 750 F )THERMAL DECOMPOSITION BYPRODUCTS. . HIGH TEMPERATURE DECOMPOSITION PRODUCTS CAN PRODUCE A CONDITION KNOWN AS "POLYMER FUME FEVER" , CHARACTERIZED BY INFLUENZA LIKE SYMPTOMS. THE EFFECTS ARE REVERSIBLE,

NICKEL POWDER AND NICKEL OXIDE HAVE CAUSED TUMORS AT THE SITE OF INJECTION IN RODENTS. HOWEVER, STUDIES OF NICKEL CONTAINING PROSTHESES DO NOT SUGGEST A SIGNIFICANT RISK TO HUMANS. PROLONGED AND REPEATED SKIN CONTACT WITH METALLIC NICKEL CAN CAUSE NICKEL SENSITIVITY RESULTING IN ALLERGIC SKIN RASHES

THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (I.A.R.C.) HAS CONCLUDED THAT NICKEL REFINING WAS CARCINOGENIC TO HUMANS AND THAT NICKEL AND CERTAIN NICKEL COMPOUNDS WERE PROBABLE HUMAN CARCINOGENS. I.A.R.C. COULD NOT STATE WITH ANY CERTAINTY WHICH FORMS OF NICKEL ARE PROBABLE CARCINOGENS BUT STATED " .... METALLIC NICKEL SEEMS LESS LIKELY TO BE A CARCINOGEN THAN NICKEL SUBSULFIDE OR NICKEL OXIDES..." EPIDEMIOLOGICAL STUDIES OF WORKERS EXPOSED TO DUST AND FUME GENERATED IN THE PRODUCTION OF NICKEL ALLOYS AND OF STAINLESS STEEL HAVE NOT INDICATED THE PRESENCE OF A SIGNIFICANT RESPIRATORY CANCER HAZARD

### EMERGENCY FIRST AID PROCEDURES

**SKIN:** WASH WITH SOAP AND WATER,

**EYES:** UNLIKELY

**INGESTION:** IF INGESTED THIS PRODUCT IS NOT EXPECTED TO CAUSE AN ACUTE REACTION. CALL A POISON CONTROL CENTER OR A PHYSICIAN.

**INHALATION:** NOT LIKELY UNDER NORMAL CONDITIONS OF USE. IF USING IN HIGH TEMPERATURE APPLICATIONS WHERE THERMAL DECOMPOSITION IS LIKELY, USE A LOCAL EXHAUST TO REMOVE FUMES. IF DIZZINESS OR IRRITATION OCCURS, SEEK FRESH AIR.

**CHEMICAL (S) LISTED AS CARCINOGENS:** NICKEL,  
**NPT ?:** GROUP 2 **I.A.R.C. ?:** GROUP 2 A **OSHA ? :** 1910.1027

## SECTION VII - SPECIAL PRECAUTIONS AND SPILL PROCEDURES

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** NONE REASONABLY FORESEEN.

**OTHER PRECAUTIONS:** KEEP AWAY FROM CHILDREN.

**SPILL/ LEAKAGE PROCEDURES:** DOES NOT APPLY

**WASTE DISPOSAL:** DISPOSE OF IN A RESPONSIBLE MANNER. FOLLOW LOCAL, STATE AND FEDERAL GUIDELINES. . INCINERATION IS THE PREFERRED METHOD OF DISPOSAL, ALTHOUGH IT MAY BE LANDFILLED AT AN APPROVED FACILITY.

## SECTION VIII - SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION:** NORMALLY NOT REQUIRED. IF THIS PRODUCT IS BEING USED IN HIGH TEMPERATURE APPLICATIONS WHERE THE PRODUCT "SMOKES" ,USE A LOCAL EXHAUST OR VENTILATE THE AREA TO MAINTAIN THE AIR QUALITY. A "N.I.O.S.H." APPROVED ORGANIC VAPOR RESPIRATOR IS ALSO ACCEPTABLE.

**PROTECTIVE GLOVES:** NORMALLY NOT REQUIRED.

**EYE PROTECTION:** NOT REQUIRED..

**WORK/HYGIENIC PRACTICES:** USE GOOD STANDARD PRACTICES WHEN USING THIS MATERIAL. DO NOT SMOKE WHILE USING. USE A NAIL BRUSH WHEN WASHING HANDS.

## SECTION X - DISCLAIMER

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE, HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS OBTAINED FROM THE USE OF THIS PRODUCT. THEREFORE, BECAUSE THE PRODUCT MAY BE USED UNDER CONDITIONS BEYOND OUR CONTROL, WE ASSUME NO LIABILITY FOR IT'S USE.

**DATE PREPARED:** 6/30/04

**Poly-temp XHD STAINLESS STEELI.doc**