



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

H.M.I.S.	
H -	2
F -	4
R -	0
P.P.	A

NICKEL-GRAF™ AEROSOL

Nickel and Graphite Based

LUBRICATING ANTI-SEIZE COMPOUND

STOCK # ('S) : 13014

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@ 1-800-535-5035

SECTION II - COMPOSITION

	CAS #	OSHA PEL,	TLV	SARA III	PROP 65,	PERCENT
NICKEL, AS DUST OR FUME	7740-02-0	1mg/m3	1mg/m3	YES	NO	15 TO 25
PETROLEUM OIL, AS MIST	MIXTURE	5mg/m3	5mg/m3	NO	NO	30 TO 50
ALUMINUM, AS DUST	7429-90-5	5mg/m3	5mg/m3	YES	NO	1 TO 5
GRAPHITE	7782-42-5	2.5mg/m3	SAME	NO	NO	10 TO 20
PETROLEUM DISTILLATE	64741-84-0	400ppm	SAMENO	NO	NO	22 TO 30
BUTANE	106-97-8	1000ppm	SAMENO	NO	NO	10 TO 15
PROPANE	74-98-6	1000ppm	SAMENO	NO	NO	10 TO 15

CHEMICAL'S SUBJECT TO REPORTING UNDER SARA TITLE III:

NICKEL POWDER CAS# 7740-02-0 21%

ALUMINUM CAS# 7429-90-5 2

SEE SECTION VI - HEALTH HAZARDS AND FIRST AID FOR ADDITIONAL INFORMATION

SECTION III - PHYSICAL PROPERTIES

BOILING POINT: DOES NOT APPLY

MELTING POINT: DOES NOT APPLY

VAPOR PRESSURE: NO DATA

EVAPORATION RATE: 0

APPEARANCE AND ODOR: NICKEL COLORED PASTE, GREASE LIKE ODOR

SOLUBILITY IN WATER: NIL

REACTIVITY IN WATER: NONE

SPECIFIC GRAVITY: 1.2, concentrate

VOC CONTENT: SOLVENT: 654.7 g/L

: PROPELLANT: 583.1 g/L

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT AND METHOD USED: OVER 450 F, C.O.C.

FLAMMABLE LIMITS: LEL: NO DATA UEL: NO DATA

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURES: THIS COMPOUND WILL NOT BURN UNLESS IT IS PRE-HEATED. WATER FOG MAY BE USED TO COOL THE CONTAINERS BUT DO NOT SPRAY DIRECTLY INTO LARGE CONTAINERS OF BURNING LIQUIDS AS FROTHING MAY OCCUR. 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: STORAGE AROUND STRONG OXIDIZERS OR PEROXIDES

INCOMPATIBILITY: MAY REACT WITH STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS: THE THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDANT UPON THE COMBUSTION CONDITIONS. NOXIOUS OR TOXIC FUMES MAY BE GENERATED, SOME OF WHICH MAY BE TOXIC OR IRRITATING.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARDS AND FIRST AID

ROUTES OF ENTRY: SKIN EYES INHALATION INGESTION

HEALTH HAZARDS: WOUNDS: 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.

EMERGENCY FIRST AID PROCEDURES

SKIN: WASH WITH SOAP AND WATER, USING A NAIL BRUSH . PAY PARTICULAR ATTENTION TO FINGER NAILS AND OPEN WOUNDS.

EYES: THIS PRODUCT COULD CAUSE SOME MECHANICAL IRRITATION IF GOTTEN INTO THE EYES AND RUBBED. FLUSH EYE WITH WATER FOR 15 MINUTES, LIFTING THE EYELIDS. IF IRRITATION PERSISTS CONSULT A PHYSICIAN.

INGESTION: IF INGESTED THIS PRODUCT IS NOT EXPECTED TO CAUSE AN ACUTE REACTION. THIS PRODUCT CONTAINS A PETROLEUM OIL , DO NOT INDUCE VOMITING, BECAUSE THE OIL MAY BE ASPIRATED INTO THE LUNGS. USE A GASTRIC LAVAGE, AND 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

NPT ?: YES **I.A.R.C. ? :** YES **OSHA ?** YES

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.

SECTION VII - SPECIAL PRECAUTIONS AND SPILL PROCEDURES

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE AWAY FROM STRONG OXIDIZERS OR PEROXIDES. DO NOT TRANSFER TO AN UNMARKED CONTAINER. KEEP AWAY FROM CHILDREN.

OTHER PRECAUTIONS: DO NOT ALLOW THIS MATERIAL TO ENTER SEWERS OR WATERWAYS.

SPILL/ LEAKAGE PROCEDURES: BECAUSE OF THE GREASE LIKE NATURE OF THIS PRODUCT LEAKS ARE NOT EXPECTED. SCOOP BACK INTO THE CONTAINER.

WASTE DISPOSAL: THIS COMPOUND MAY BE A REGULATED WASTE IN CERTAIN AREAS OF THE COUNTRY.

FOLLOW LOCAL, STATE, AND FEDERAL GUIDELINES. DISPOSE OF AT AN APPROVED FACILITY. DO NOT DISPOSE OF INTO WATERWAYS OR SEWERS. EPA Hazardous waste number: D001

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NORMALLY NOT REQUIRED. IF USED AT HIGH TEMPERATURES WHERE SMOKE OR FUMES ARE GENERATED, USE A LOCAL EXHAUST TO MAINTAIN AIR QUALITY OR WEAR A " N.I.O.S.H." APPROVED AN ORGANIC VAPOR RESPIRATOR.

PROTECTIVE GLOVES: ARE RECOMMENDED IF HAND WOUNDS ARE PRESENT

EYE PROTECTION: SAFETY GLASSES ARE RECOMMENDED

WORK/HYGIENIC PRACTICES: USE GOOD STANDARD PRACTICES WHEN USING THIS MATERIAL. DO NOT EAT OR SMOKE WHILE USING, AND THOROUGHLY WASH WITH SOAP AND WATER, USING A NAIL BRUSH AFTER USING.

SECTION IX - REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65: NICKEL

OZONE DEPLETING SUBSTANCES: NONE

TASCA INVENTORY : ALL INGREDIENTS LISTED

SARA TITLE III : NICKEL

CERCLA: NICKEL

RCRA: NO

N.F.P.A. RATING: H-2,F-4,R

DOT (49 CFR 172)

DOT, PROPER SHIPPING NAME: CONSUMER COMMODITY

DOT SHIPPING CLASS: ORM- D

IDENTIFICATION NUMBER: NONE

MARINE POLLUTANT: NONE

IATA

PROPER SHIPPING NAME: AEROSOL, FLAMMABLE

CLASS or DIVISION: DIVISION 2.1

UN or ID NUMBER: UN 1950

THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCERS.

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 ITS USE.

DATE PREPARED: 8/25/04

NICKEL-GRAF aro