



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

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TM
AST BRAKE CLEANER
STOCK #:17033
MATERIAL SAFETY DATA SHEET

Section 1- Chemical Product and Company Identification

Manufacture: Anti-Seize Technology
2345 N. 17th Ave.
Franklin Park, IL 60131
Phone: 847-455-2300
Emergency Phone, 24 hr: Infotrac @ 1-800-535-5053 or 352-323-3500

Section 2-Composition/ Information on Ingredients

	CAS #	OSHA PEL,	TLV	SARA III	PROP 65,	PERCENT
PERCHLOROETHYLENE	127-18-4	25ppm	50ppm	YES	YES	80 - 90
CARBON DIOXIDE	124-38-9	5000ppm		NO	NO	10 - 15

Section 3- Hazard Identification

ROUTES OF ENTRY: X SKIN X EYES X INHALATION INGESTION

HAZARD OF PRODUCT. WARNING! MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS, CAN CAUSE DEATH IF TOO MUCH IS INHALED? HARMFUL IF INHALED. OVEREXPOSURE MAY CAUSE SKIN IRRITATION. ASPIRATION HAZARD: CAN ENTER LUNGS AND CAUSE DAMAGE TO BODY SYSTEMS. PERCHLOROETHYLENE IS ASUSPECT CANCER HAZARD.

OSHA HAZARD COMMUNICATION STANDARD

THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200

HEALTH HAZARDS: READ THE WARNING LABELS ON THE CAN FOR ADDITIONAL INFORMATION.

THE SOLVENT CONTAINED IN THIS PRODUCT IS PRIMARILY A CENTRAL NERVOUS SYSTEM DEPRESSANT. INHALATION CAN CAUSE DIZZINESS, LIGHTEADEDNESS, HEADACHE, EQUILIBRIUM, UNCONSCIOUSNESS OR EVEN DEATH IF IN CONFINED OR POORLY VENTILATED AREAS. DEPRESSION OF THE CIRCULATORY SYSTEM HAS BEEN REPORTED AS A RESULT OF OVEREXPOSURE TO HALOGENATED HYDROCARBONS. THE HEART MAY BE SENSITIZED AND VENTRICULAR ARRHYTHMIA MAY BE INDUCED BY EPINEPHRINE ADMINISTRATION.

LIQUID SPLASHED IN THE EYES CAN RESULT IN DISCOMFORT, PAIN OR IRRITATION. PROLONGED OR REPEATED CONTACT WITH LIQUID ON THE SKIN CAN CAUSE IRRITATION AND DERMATITIS. DO NOT ALLOW CLOTHING OR SHOES TO BECOME SATURATED.

CHRONIC EXPOSURE ABOVE THE PERMISSIBLE EXPOSURE LIMITS MAY RESULT IN LIVER AND KIDNEY DAMAGE.

PERCHLOROETHYLENE, LISTED BY NTP AN IARC AS AN ANIMAL CARCINOGEN AND BY OSHA AS A POTENTIAL HUMAN CARCINOGEN, PRODUCED LIVER TUMORS AND LEUKEMIA IN RATS AND LUNG TUMORS IN MICE. HUMAN EPIDEMIOLOGICAL EVIDENCE IS CONFLICTING AND INCONCLUSIVE.

PROLONGED OVEREXPOSURE TO SOLVENT INGREDIENTS IN SECTION 2 MAY CAUSE ADVERSE EFFECTS TO THE LIVER, URINARY AND BLOOD FORMING SYSTEMS OF THE BODY.

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

Section 4 – First Aid Measures

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

EYES: FLUSH EYE WITH WATER FOR 15 MINUTES, LIFTING THE EYELIDS. IF IRRITATION PERSISTS CONSULT A PHYSICIAN.

INGESTION: NOT A LIKELY ROUTE OF EXPOSURE, DO NOT INDUCE VOMITING, USE A GASTRIC LAVAGE, AND CALL A POISON CONTROL CENTER OR A PHYSICIAN IMMEDIATELY.

INHALATION: THE SOLVENTS AND/OR PROPELLANTS IN THIS PRODUCT MAY AFFECT THE RESPIRATORY TRACT OR CENTRAL NERVOUS SYSTEM. AVOID OVEREXPOSURE. DIZZINESS OR RESPIRATORY IRRITATION ARE SIGNS OF OVEREXPOSURE. SEEK FRESH AIR. OR FOLLOW OTHER STANDARD MEDICAL PRACTICES.
MAINTAIN ADEQUATE VENTILATION AND OXYGENATION OF THE PATIENT. EXPOSURE MAY INCREASE "MYOCARDIAL IRRITABILITY". DO NOT ADMINISTER SYMPATHOMIMETIC DRUGS SUCH AS EPINEPHRINE UNLESS ABSOLUTELY NECESSARY.

CARCINOGENICITY CLASSIFICATION

NPT? ANTICIPATED CARCINOGEN **I.A.R.C.?** 2A **ACGIH:** CONFIRMED ANIMAL CARCINOGEN WITH UNKNOWN RELEVANCE TO HUMANS, GROUP A3 **OSHA?** YES

Section 5 – Fire Fighting Measures

AEROSOL FLAMMABILITY: NON-FLAMMABLE, PER FLAME EXTENSION TESTS

FLAMMABLE LIMITS: LEL: NO FLASH POINT UEL: NO FLASH POINT

EXTINGUISHING MEDIA: THIS MATERIAL IS NOT FLAMMABLE, HOWEVER IT IS CONTAINED IN A PRESSURIZED CAN WHICH CAN RUPTURE WHEN EXPOSED TO EXTREME TEMPERATURES.

SPECIAL FIRE FIGHTING PROCEDURES: CANS MAY RUPTURE, BURST OR EXPLODE IN A FIRE. USE EXTREME CAUTION. WATER MAY BE INEFFECTIVE BUT CAN BE USED TO COOL CONTAINERS TO PREVENT PRESSURE BUILD UP. WEAR GOGGLES AND A SELF CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: CANS MAY RUPTURE OR BURST, RELEASING THEIR CONTENTS. VAPOR ACCUMULATION CAN FLASH OR EXPLODE IF IGNITED. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A LONG DISTANCE AND ACCUMULATE IN LOW LYING AREAS. VIOLENT STEAM GENERATION OR ERUPTION MAY OCCUR UPON APPLICATION OF DIRECT WATER STREAM TO HOT LIQUIDS.

Section 6 – Accidental Release Measures

SPILL/ LEAKAGE PROCEDURES: AVOID BREATHING VAPORS. VENTILATE AREA AND REMOVE ALL SOURCES OF IGNITION. WEAR PROPER RESPIRATORY FILTERS OR SELF CONTAINED BREATHING APPARATUS. CLEAN UP AREA WITH ABSORBENT MATERIAL AND PLACE IN A CLOSE CONTAINER FOR PROPER DISPOSAL. DO NOT ALLOW THIS MATERIAL TO ENTER SEWER OR WATER SYSTEMS. DO NOT FLUSH DOWN DRAINS.

Section 7 – Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN A COOL, WELL VENTILATED AREA. DO NOT STORE ABOVE 120 F. USE WITH ADEQUATE VENTILATION. DO NOT USE LARGE AMOUNTS IN CONFINED AREAS.

OTHER PRECAUTIONS: DO NOT TAMPER WITH VALVE. DO NOT PUNCTURE, DO NOT SPAY IN EYES OR INGEST, READ THE PRODUCT LABEL FOR ADDITIONAL INFORMATION. KEEP AWAY FROM CHILDREN.

Section 8 – Exposure Controls / Personal Protection

RESPIRATORY PROTECTION: NORMALLY NOT REQUIRED IF USED IN SMALL QUANTITIES AND WITH GOOD VENTILATION. IF USED IN LARGER, MULTI-CAN QUANTITIES USE A PERSONAL PROTECTIVE RESPIRATORY DEVICE SUCH AS A NIOSH APPROVED ORGANIC VAPOR RESPIRATOR. AVOID BREATHING VAPORS. IN RESTRICTED AREAS, USE A LOCAL EXHAUST TO REMOVE VAPORS, AND MAINTAIN AIR QUALITY. IF TLV'S ARE ABOVE ACCEPTABLE LIMITS USE A NIOSH APPROVED ORGANIC VAPOR RESPIRATOR OR SELF CONTAINED BREATHING APPARATUS.

PROTECTIVE GLOVES: NORMALLY NOT REQUIRED. IF PROLONGED OR REPEATED EXPOSURE IS EXPECTED, USE SOLVENT RESISTANT NEOPRENE GLOVES

EYE PROTECTION: SAFETY GLASSES WITH SIDE SPLASH SHIELDS ARE HIGHLY 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 9 – Physical and Chemical Properties

BOILING POINT: <0 – 250 F (121 C)

MELTING POINT: DOES NOT APPLY

VAPOR DENSITY (air=1): 5.76

AUTOIGNITION TEMPERATURE: NONE

APPEARANCE AND ODOR: CLEAR COLORED LIQUID, CHARACTERISTIC ODOR

SOLUBILITY IN WATER: 0.015 % @ 25C

REACTIVITY IN WATER: NONE

SPECIFIC GRAVITY: 1.6

PERCENT VOLATILE: 100

Section 10 – Stability and Reactivity

STABILITY: (X) STABLE () UNSTABLE

CONDITIONS TO AVOID: APPLICATION TO HOT SURFACES, STORAGE ABOVE 120F. AVOID EXPOSURE TO OPEN FLAMES.

INCOMPARABILITY, (MATERIALS TO AVOID): AVOID CONTACT WITH STRONG BASES AND OXIDIZERS, AS SHOCK SENSITIVE EXPLOSIVES MAY BE FORMED. AVOID CONTACT WITH METALS SUCH AS ZINC, ALUMINUM MAGNESIUM, POTASSIUM, SODIUM METALS AND CERTAIN AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS: COULD INCLUDE HYDROGEN CHLORIDE GAS. THE THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT 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 11 – Toxicological Information

ACUTE TOXICITY
INGESTION
LD50, RAT > 5,000 mg/kg

SKIN ABSORPTION
THE DERMAL LD50 HAS NOT BEEN DETERMINED

REPEATED DOSE TOXICITY
IN HUMANS, THE EFFECTS HAVE BEEN REPORTED ON THE FOLLOWING ORGANS; CENTRAL NERVOUS SYSTEM. IN ANIMALS, EFFECTS HAVE BEEN REPORTED ON THE FOLLOWING ORGANS, CENTRAL NERVOUS SYSTEM, KIDNEY, AND LIVER.

CHRONIC TOXICITY AND CARCINOGENICITY
PERCHLOROETHYLENE HAS BEEN SHOWN TO INCREASE THE INCIDENCE OF TUMORS IN CERTAIN STRAINS OF MICE AND RATS. OTHER LONG-TERM INHALATION STUDIES IN RATS FAILED TO SHOW TUMORIGENIC RESPONSE. HUMAN DATA ARE LIMITED AND HAVE NOT ESTABLISHED AN ASSOCIATION BETWEEN PERCHLOROETHYLENE EXPOSURE AND CANCER. PERCHLOROETHYLENE IS NOT BELIEVED TO POSE A MEASURABLE CARCINOGENIC RISK TO MAN WHEN HANDLED AS RECOMMENDED.

DEVELOPMENTAL TOXICITY
HAS BEEN TOXIC TO THE FETUS IN LABORATORY ANIMALS AT DOSES TOXIC TO THE MOTHER. PERCHLOROETHYLENE DID NOT CAUSE BIRTH DEFECTS IN LABORATORY ANIMALS.

REPRODUCTIVE TOXICITY
IN LABORATORY ANIMAL STUDIES, EFFECTS ON REPRODUCTION HAVE BEEN SEEN ONLY AT DOSES THAT PRODUCED SIGNIFICANT TOXICITY TO THE PARENT ANIMALS. PERCHLOROETHYLENE DID NOT INTERFERE WITH FERTILITY.

Section 12 – Ecological Information

BIOCONCENTRATION POTENTIAL IS LOW. POTENTIAL FOR MOBILITY IN SOIL IS MEDIUM
THIS MATERIAL CANNOT BE CONSIDERED AS READILY BIODEGRADABLE; HOWEVER THESE RESULTS DO NOT NECESSARILY MEAN THAT THE MATERIAL IS NOT BIODEGRADEABLE UNDER ENVIRONMENTAL CONDITIONS. PERCHLOROETHYLENE DEGRADES UNDER ANAEROBIC CONDITIONS.
PERCHLOROETHYLENE MAY BE MODERATELY TOXIC TO AQUATIC ORGANISMS.

Section 13 – Disposal Consideration

WASTE DISPOSAL: DO NOT DUMP INTO SEWERS, ON THE GROUND OR INTO AND BODY OF WATER.
DISPOSE OF IN A RESPONSIBLE MANNER. FOLLOW LOCAL, STATE AND FEDERAL GUIDELINES. WASTE CHARACTERIZATION AND COMPLIANCE WITH APPLICABLE LAWS ARE THE RESPONSIBILITY SOLELY OF THE WASTE GENERATOR. DO NOT DISCHARGE INTO SEWERS OR WATERWAYS. INCINERATION IS THE PREFERRED METHOD OF DISPOSAL, ALTHOUGH IT MAY BE LANDFILLED AT AN APPROVED FACILITY. THIS MATERIAL IS CONSIDERED A HAZARDOUS WASTE BY EPA RCRA.

Section 14- Transport Information

SHIPMENT BY LAND: CONSUMER COMMODITY, ORM-D

SHIPMENT BY WATER: AEROSOL, 2, UN 1950, LTD QTY

SHIPMENT BY AIR: AEROSOLS, FLAMMABLE, 2.1, UN 1950, LTD QT.
PACKAGING INSTRUCTION Y203 APPLIES TO THESE SHIPMENTS

WHMIS Classification: CONTROLLED PRODUCT **CEPA:** ALL COMPONENTS LISTED ON DSL

Hazard Class: POSSIBLE CARCINOGEN, SEE SECTION 15

Section 15 – Regulatory Information

CALIFORNIA PROPOSITION 65: YES
OZONE DEPLETING SUBSTANCES: NO
SARA TITLE III: YES
CERCLA: YES
UN NUMBER: UN 1950
WHMIS: D1 B, D2A, D2B, CONTROLLED PRODUCT.

RCRA: YES
DOT SHIPPING CLASS: ORM D 1950
TASCA INVENTORY: ALL INGREDIENTS LISTED
N.F.P.A. RATING: H-2, F-4, R-0
PENNSYLVANIA: PERCHLOROETHYLENE
TASCA: ALL COMPONENTS LISTED.

Section 16 – Other Information:

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 HIS PRODUCT. THEREFORE, BECAUSE THE PRODUCT MAY BE USED UNDER CONDITIONS BEYOND OUR CONTROL, WE ASSUME NO LIABILITY FOR ITS USE.

DATE: 01/22/2009

BRAKE CLEANER AEROSOL, 16 PART ISO MSDS