



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

# AST™ Brake Cleaner

## SAFETY DATA SHEET

### Section 1- Product and Company Identification

**Product code:** 17033

**Manufacture/Supplier :** Anti-Seize Technology  
2345 N. 17<sup>th</sup> Ave.  
Franklin Park, IL 60131

**Phone:** 847-455-2300

**Fax:** 847-455-2371

**Web:** antiseize.com

**Emergency Phone, 24 hr:** Infotrac @ 1-800-535-5053 ( US & Canada )  
1-352-323-3500 ( International )

**Web:** infotrac.net

**Product Use:** Safety Solvent and Degreaser

**Restriction of Use:** Use only as directed

**Date:** Nov. 2017

### Section 2- Hazard Identification

**GHS Classification ( Hazcom 2012):**

Specific Target Organ Toxicity – Single Exposure (Narcotic Effect) Category 1

Specific Target Organ Toxicity, Single exposure- Category 3

Skin Irritation – Category 2

Eye irritation – Category 2B

Acute Toxicity – Category 4

Aspiration Hazard- Category 2

Carcinogenicity – Category 1B

Gases under pressure, compressed gas.

Hazardous to the aquatic environment, Long term hazard ,Category 2

Hazardous to the aquatic environment, Short term hazard ,Category 2

**Label Elements:**



**Signal word:**

WARNING

**Hazard Phrases – Physical:**

P202- Do not handle until all safety precautions have been read and understood

P271- Use only outdoors or in well ventilated area

P285 –In case of inadequate ventilation wear respiratory protection

P251- Pressurized container –Do not pierce or burn , even after use.

H336 – May cause drowsiness or dizziness .  
 H304 - May be fatal if swallowed and enters airways.  
 H315 - Causes skin irritation .  
 H320 Causes eye irritation  
 H351- Suspected of causing cancer.  
 H402 – Harmful to aquatic life  
 H412 - Harmful to aquatic life with long lasting effects

**Precautionary Phrases – General:**

P103 – Read label before use.  
 P101 – If medical advice is needed, have product container or label at hand  
 P102 – Keep out of reach of children.  
 P412- Do not expose to temperatures above 50°C/122°F.

**Precautionary Phrases – Prevention:**

P202 – Do not handle until all safety precautions have been read and understood.  
 P261 – Avoid breathing fume/ gas/ mist / vapors/ spray.  
 P271 – Only use outdoors or in a well ventilated area.  
 P285 - In case of inadequate ventilation wear respiratory protection.  
 P264 --Wash thoroughly after handling.  
 P280 – Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P211 – Do not spray on an open flame or other ignition source.  
 P251 – Do not pierce or burn, even after use.  
 P273 – Avoid release to the environment .

**Precautionary Phrases – Response:**

P301 + P310 – **IF SWALLOWED:** Immediately call a POISON CENTER or a doctor  
 P331 – Do NOT induce vomiting .  
 P314 -- Get medical advice/ attention if you feel unwell  
 P302 + P352 – **IF ON SKIN:** wash with soap and water.  
 P332 + P313 – If skin irritation occurs: Get medical advice/ attention .  
 P362 – Take off contaminated clothing and wash it before reuse .  
 P305 + P351 + P338 – **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 – If eye irritation persists: Get medical advice/ attention.  
 P308 + P313 – IF exposed or concerned. Get medical advice/ attention.  
 P304 + 340 – **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Precautionary Phrases – Storage:**

P405 – Store locked up  
 P410 – Protect from sunlight  
 P412 – Do not expose to temperatures exceeding 50°C/ 122°F

**Precautionary Phrases – Disposal:**

P501 – Dispose of contents/ container according to local, state, national and international regulations.

|   |
|---|
| <b>Section 3- Composition/ Information on Ingredients</b> |
|---|

| CHEMICAL          | CAS NUMBER | PERCENT |
|-------------------|------------|---------|
| Perchloroethylene | 127-18-4   | 90-100  |
| Carbon Dioxide    | 124-38-9   | 5-10    |

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

#### Section 4 – First Aid Measures

**Eye:** Flush eyes with water, holding the eyelids apart. Get medical attention if irritation develops or persists.

**Skin:** Remove all contaminated clothing and wash thoroughly before reuse. Wash thoroughly with plenty of water. Get medical attention if irritation persists.

**Inhalation:** Remove to fresh air and keep comfortable for breathing. If irritation occurs, get medical attention.

**Ingestion:** If swallowed contact physician or poison control center. Rinse mouth.

**Most Important symptoms and effects, both acute and delayed:** May cause drowsiness and dizziness, Headache, Nausea, vomiting. Irritation of eyes and mucus membranes. Irritation of nose and throat. Skin Irritation. May cause redness and pain. Causes damage to the Central Nervous System, Liver, Kidney, Respiratory system through prolonged or repeated exposure. May cause cancer.

**Indication of any immediate medical attention and special treatment needed:** Narcosis. Treat symptomatically. Keep victim under observation. Provide supportive measures. Remove to fresh air.

#### Section 5 – Fire Fighting Measures

**Suitable and Unsuitable Extinguishing Media:** Use water spray or fog, foam, carbon dioxide or dry chemical. DO NOT use water jet as an extinguisher, this will spread the fire.

**Special Hazards Arising from the Chemical:** Contents under pressure, exposure to high temperatures may cause containers to burst. Water fog may be used to cool the containers but do not spray directly into large containers of burning liquids as frothing may occur. Dense smoke and noxious or toxic fumes may be generated in a fire. The thermal decomposition products are highly dependent upon the combustion conditions. Vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.

**Special Equipment and Precautions for Fire-Fighters:** Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

#### Section 6 – Accidental Release Measures

##### Emergency Procedure:

Keep, unnecessary people away; isolate hazard area and deny entry. Wear appropriate equipment and clothing during cleanup. Do not touch or walk through spilled material. Avoid breathing mist or vapor. Wear a NIOSH approved respirator if necessary. Clean up immediately. Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal. Keep area well ventilated.

##### Recommended Equipment:

Positive pressure, full-face piece self contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

##### Personal Precautions:

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Wear a NIOSH Organic Vapor respirator or SCUBA gear for larger spills. Do not touch damaged containers or spilled materials unless wearing appropriate

protective clothing and protective gloves.

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate personal protective equipment, such as protective gloves, protective clothing and a NIOSH approved Organic Vapor respirator. Use caution: slip hazard.

**Environmental Hazards:**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Report spills and releases as required to appropriate authorities.

**Methods and Material for Containment and Cleaning Up:** Collect liquid spill with an inert absorbent material and place into a suitable container for disposal. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or entering sewers or drainage system that lead to waterways.

**Section 7 – Handling and Storage**

**General:**

- For industrial use only.
- Do not use before reading instructions.
- Pressurized container, do not pierce or burn.
- Do not spray on naked flames or any other incandescent material.
- Open doors or windows while using product and product is drying to keep ventilation adequate.
- Do not cut, weld, solder, drill, grind or expose container to heat.
- Contents under pressure: Do not expose to heat or store at temperatures above 50°C / 122°F.
- For used by trained personnel only.
- Keep away from children.
- Wash hands after use.
- Do not get in eyes, on skin or on clothing.
- Do not breathe vapors or mists.
- Avoid release to the environment, do not pour down drains.
- Use good personal hygiene practices.
- Eating, drinking and smoking in work areas is prohibited.
- Remove contaminated clothing and protective equipment.
- Eyewash stations and showers should be available in areas where this material is used and stored.

**Ventilation Requirements:**

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Keep windows and doors open while product is in use and drying or use a NIOSH Organic vapor respirator to keep exposure levels below recommended guidelines.

**Storage Requirements:**

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated areas away from heat, or open flames. If exposed to high temperatures the container may burst. Protect against physical damage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld or perform similar operations on or near containers.  
Store at temperatures below 120°F.

**Section 8 – Exposure Controls / Personal Protection**

| CHEMICAL NAME  | EXPOSURE LIMITS                             |
|----------------|---|
| CARBON DIOXIDE | 5,000 ppm OSHA PEL<br>30,000 ppm ACGIH STEL |

|                   |                                      |
|-------------------|--------------------------------------|
|                   | 30,000 ppm NIOSH TWA                 |
| PERCHLOROETHYLENE | 100 ppm OSHA TWA<br>25 ppm ACGIH TWA |

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the exposure limits. Local exhaust ventilation may be required. Ventilation that includes 10 air changes per hour should be used.

**Individual Protection Measures:**

**Respiratory Protection:** In operations where the occupational exposure limits are exceeded, a NIOSH approved respirator with organic vapor/particulate cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice. In confined spaces and emergency situations use a self contained breathing apparatus. Air monitoring is needed to determine actual employee exposure levels.

**Skin Protection:** Impervious gloves such as rubber or Nitrile recommended where needed to avoid prolonged skin contact. Chemical resistant clothing is also recommended to avoid prolonged contact. Avoid unnecessary skin contact.

**Eye Protection:** Safety glasses with splash shields or goggles recommended where needed to avoid eye contact.

|   |
|---|
| <b>Section 9 – Physical and Chemical Properties</b> |
|---|

|   |  |
|---|--|
| <b>Appearance:</b> Colorless                                    | <b>Vapor Density (air = 1):</b> 5.76                 |
| <b>Odor:</b> Irritating   | <b>Specific Gravity:</b> 1.62                        |
| <b>Odor Threshold:</b> 50 ppm                                   | <b>Water Solubility:</b> 0.02% (77°F / 25°C)         |
| <b>pH:</b> Not available  | <b>Octanol/Water Partition Coefficient:</b> 2.88     |
| <b>Melting Point/Freezing Point:</b> -8.1°F (-22.3°C) estimated | <b>Autoignition Temperature:</b> Not available       |
| <b>Boiling Point:</b> 250.3°F (121.3 °C) estimated              | <b>Decomposition Temperature:</b> Not available      |
| <b>Flash Point:</b> None (Tag Closed Cap)                       | <b>Viscosity:</b> Not available                      |
| <b>Evaporation Rate:</b> Very Fast                              | <b>Explosion Properties:</b> None                    |
| <b>Flammable Limits:</b><br>LEL: N/A<br>UEL: N/A                | <b>Oxidizing Properties:</b> Not oxidizing           |
| <b>Vapor Pressure:</b> 1352.4 hPa estimated                     | <b>Aerosol Fire Protection Level:</b> Not applicable |
| <b>VOC Content:</b> 97.7% estimated                             | <b>Flammability (solid, gas):</b> Not available      |

|  |
|--|
| <b>Section 10 – Stability and Reactivity</b> |
|--|

**Stability:** Stable under normal conditions of use, storage and transport.

**Reactivity:** Not reactive under normal conditions of use.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** None known under normal condition of use.

**Conditions to Avoid:** Heat, flames, sparks. Contact with incompatible materials. When exposed to extreme heat or hot surfaces, vapors may decompose to form harmful or corrosive gases such as hydrogen chloride and possibly phosgene.

**Incompatible Materials:** Avoid strong oxidizing agents and acids and bases.

**Hazardous Decomposition Products:** Hydrogen chloride. Trace amounts of chlorine and phosgene. Carbon oxides. Halogenated materials. Carbonyl halides.

## Section 11 – Toxicological Information

### Potential Health Effects:

**Eye:** May cause mild irritation.

**Skin Corrosion /Irritation:** Prolonged contact may cause mild irritation of the skin.

**Inhalation:** Prolonged inhalation may be harmful. May cause drowsiness and dizziness. Headache, nausea and vomiting.

**Ingestion:** Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea.

**Chronic Hazards:** Suspect cancer hazard. Overexposure may cause kidney damage. May cause liver disorders (e.g. edema, proteinuria ) and damage. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin or eyes.

**Carcinogen Status:** IARC, Perchloroethylene, 2A Probable carcinogenic to humans.  
NTP: Reasonably anticipated to be a human carcinogen.

**Aspiration Hazards:** Hazardous if swallowed, may be fatal if swallowed and enters airways.

**Acute Toxicity:** Inhalation: effect of overexposure include irritation of respiratory tract, headache, dizziness, nausea, and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death. Narcotic effects.

**Germ Cell Mutagenicity:** No data available to indicate product or any components at greater than 0.1% are mutagenic or genotoxic.

### Perchloroethylene

#### Acute

Dermal, LD50, Rabbit, 3305 mg/kg estimated

Inhalation ,LC50, Rat, 20 mg/l, 4 hours estimated

Oral, LD50 , Rat , 2691. mg/kg estimated

## Section 12 – Ecological Information

### Perchloroethylene Ecotoxicity:

Fish, LC50, 19 mg/l, 96 hours estimated

**Components:**

Perchloroethylene

Fish LC50, Rainbow trout, Donaldson trout 4.7-5.2 mg/l, 96 hours

**Bioaccumulative Potential:** Not available.

**Partition coefficient n-octanol / water (log Kow)**

Perchloroethylene 2.88

**Persistence and Degradability:** Not available.

**Mobility in Soil:** Not available.

**Other Adverse Effects:** No Data

**Section 13 – Disposal Consideration**

**Waste disposal:** This material and its container must be disposed of as a hazardous waste. Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers, Water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

**Hazardous waste code:**

D039: Waste Perchloroethylene

F001: Waste Halogenated Solvent – Spent Halogenated Solvent used in Degreasing

F002: Waste Halogenated Solvent – Spent Halogenated Solvent

**US RCRA Hazardous Waste U list: Reference**

Perchloroethylene (CAS 127-18-4) U210

**Contaminated Packaging:**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**Section 14- Transport Information**

**DOT**

**UN number:** UN1950

**UN proper shipping name** Aerosols, Non-Flammable

**Transport Hazard Classes**

**Class** 2.2, **Subsidiary risk** 6.1 , MARINE POLLUTANT

**Labels** LTD QTY

**Packing Group** III

**Environmental Hazards**

**Marine Pollutant** Yes

**Packaging exceptions** LTD QTY

**IATA**

**UN number:** UN1950

**UN proper shipping name** Aerosols, non flammable,

**Transport Hazard Classes:**

**Class** 2.2 LTD QTY

**Subsidiary Risk** 6.1

**Packing Group** III

**Environmental Hazards** Marine Pollutant

**ERG Code** 2P

|  |  |
|--|--|
| <b>Other information</b>                     |  |
| <b>Passenger aircraft and cargo aircraft</b> | Forbidden  |
| <b>Cargo aircraft only</b>                   | Forbidden  |
| <b>IMDG</b>                                  |  |
| <b>UN Number</b>                             | UN 1950  |
| <b>UN proper shipping name</b>               | AEROSOLS, Non Flammable  |
| <b>Transport hazard classes</b>              |  |
| <b>Class</b>                                 | 2.2, LTD QTY   |
| <b>Subsidiary Risk</b>                       | 6.1, Marine Pollutant  |
| <b>Packing Group</b>                         | III  |
| <b>Environmental Hazards</b>                 |  |
| <b>Marine pollutant</b>                      | Yes  |
| <b>EmS</b>                                   | F-D, S-U   |
| <b>Special precautions for user</b>          | Read safety instructions, SDS and emergency procedures before handling |
| <b>General information</b>                   | DOT regulated marine pollutant, IMDG regulated marine pollutant        |

|  |
|--|
| <b>Section 15-Regulatory information</b> |
|--|

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

**TSCA Section 12 (b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated

**SARA 304 Emergency Release Notification**  
Not required

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
Not listed

**US EPCRA (SARA Title III) Section 313 – Toxic Chemical: Listed Substance**  
Perchloroethylene (CAS 127-18-4)

**CERCLA Hazardous Substances : Reportable Quantity**  
Perchloroethylene (CAS 127-18-4) 100 LBS  
Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your local emergency planning committee.

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Perchloroethylene (CAS 127-18-4)

**Clean Air Act (CAA) Section 112 ( r ) Accidental Release Prevention (40 CFR 68.130)**  
Not regulated


**Safe Water Drinking Act (SDWA)**  
Not Regulated

**Food and Drug Administration (FDA)**  
Not Regulated

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**  
**Section 311/312 Hazard Categories** Immediate Hazard – Yes  
Delayed Hazard – Yes  
Fire Hazard – No  
Pressure Hazard – Yes  
Reactivity Hazard – No

**SARA 302 Extremely Hazardous Substance**  
No



**U.S. California Proposition 65:**  **WARNING:** This product can expose you to Perchloroethylene which is known to the State of California to cause cancer. For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

**Section 16 – Other Information:**

**Notice to reader:**

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.