

**NAPA® MAC'S BRAKE & BRAKE
PARTS CLEANER NM4700**

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE
COMPANY/UNDERTAKING**

| | | |
|--------------------|-------------------------------|-----------------------------------|
| Ashland | Regulatory Information Number | 1-800-325-3751 |
| P.O. Box 2219 | Telephone | 614-790-3333 |
| Columbus, OH 43216 | Emergency telephone | 1-800-ASHLAND (1-800-274-5263) |

| | |
|-------------------------|--|
| Product name | NAPA® MAC'S BRAKE & BRAKE <u>PARTS CLEANER</u> |
| Product code | NM4700 |
| Product Use Description | No data |

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: aerosol

WARNING! CONTAINS CHLORINATED SOLVENTS. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS. HARMFUL IF INHALED. MAY BE HARMFUL IF SWALLOWED.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing this material may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.). Alcohol consumed before or after exposure may worsen harmful effects.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, Individuals with preexisting heart disorders maybe more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), temporary changes in mood and behavior, loss of coordination, confusion, irregular heartbeat, anesthesia, liver damage, and death

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: kidney damage, liver damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: mild effects on color vision

Carcinogenicity

Exposure to perchloroethylene has been shown to cause cancer in laboratory animals. It has been listed as a possible carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP).

Reproductive hazard

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This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Concentration |
|---------------------|----------|---------------|
| TETRACHLOROETHYLENE | 127-18-4 | >=90-<=100% |
| CARBON DIOXIDE | 124-38-9 | >=5-<10% |

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Notes to physician

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be

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weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water mist, Carbon dioxide (CO₂), Dry chemical

Hazardous combustion products

hydrogen chloride

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

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7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Do not store exposed to direct light. Do not store near extreme heat, open flame, or sources of ignition. Do not store in temperatures above 120 degrees F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| TETRACHLOROETHYLENE | | 127-18-4 |
|----------------------------|-----------------------------------|-----------------|
| OSHA Z2 | time weighted average | 100 ppm |
| OSHA Z2 | Ceiling Limit Value: | 200 ppm |
| OSHA Z2 | Maximum concentration: | 300 ppm |
| ACGIH | time weighted average | 25 ppm |
| ACGIH | Short term exposure limit | 100 ppm |
| CARBON DIOXIDE | | 124-38-9 |
| ACGIH | time weighted average | 5,000 ppm |
| ACGIH | Short term exposure limit | 30,000 ppm |
| NIOSH | Recommended exposure limit (REL): | 5,000 ppm |
| NIOSH | Recommended exposure limit (REL): | 9,000 mg/m3 |
| NIOSH | Short term exposure limit | 30,000 ppm |
| NIOSH | Short term exposure limit | 54,000 mg/m3 |
| OSHA Z1 | Permissible exposure limit | 5,000 ppm |
| OSHA Z1 | Permissible exposure limit | 9,000 mg/m3 |

General advice

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These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).
Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|------------------------------------|----------------------|
| Physical state | aerosol |
| Form | aerosol |
| Colour | No data |
| Odour | No data |
| Boiling point/boiling range | 121.30 °C / 250.3 °F |
| pH | No data |

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| | |
|--|---------------------------|
| Flash point | No data |
| Evaporation rate | No data |
| Explosion limits | No data |
| Vapour pressure | 24.66 hPa @ 77 °F / 25 °C |
| Vapour density | No data |
| Density | No data |
| Solubility | No data |
| Partition coefficient: n-octanol/water | No data |
| log Pow | no data available |
| Autoignition temperature | No data |

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Exposure to sunlight., excessive heat

Incompatible products

aluminum powder, amines, Powdered metals, strong bases, strong oxidizing agents

Hazardous decomposition products

Chlorine, hydrogen chloride, Phosgene, Avoid contact with open flame, welding arcs, resistance heaters, etc., which can result in thermal decomposition releasing hydrogen chloride and small amounts of phosgene and chlorine.

Hazardous reactions

Gross contamination with water can cause hydrolysis, producing small amounts of hydrochloric acid., Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

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Acute oral toxicity

| | |
|---------------------|------------------------|
| TETRACHLOROETHYLENE | LD 50 Rat: 2,629 mg/kg |
| CARBON DIOXIDE | no data available |

Acute inhalation toxicity

| | |
|---------------------|-------------------|
| TETRACHLOROETHYLENE | no data available |
| CARBON DIOXIDE | no data available |

Acute dermal toxicity

| | |
|---------------------|-----------------------------|
| TETRACHLOROETHYLENE | LD 50 Rabbit: > 3,228 mg/kg |
| CARBON DIOXIDE | no data available |

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

UN1950, AEROSOLS 2.2,

IATA_P:

UN1950, Aerosols, non-flammable 2.2,

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| Reportable quantity - Components | | |
|----------------------------------|----------|---------|
| TETRACHLOROETHYLENE | 127-18-4 | 100 lbs |
| CARBON DIOXIDE | 124-38-9 | none |

| | Health | Flammability | Reactivity | Other |
|------|--------|--------------|------------|-------|
| HMIS | 2* | 0 | 0 | |
| NFPA | 2 | 0 | 0 | |

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).