

# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000028765  
**Product identifier** 18 OZ MACS BRAKE CLEANR 4700 LT 12PK  
**Company information** NAPA Balkamp  
2601 Stout Heritage Parkway  
Plainfield, IN 46168 United States  
**Company phone** General Assistance 1-317-754-3900  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** CLEANER  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Gases under pressure Compressed gas  
**Health hazards** Carcinogenicity Category 2  
**OSHA defined hazards** Not classified.  
**Label elements**



**Signal word** Warning  
**Hazard statement** Contains gas under pressure; may explode if heated. Suspected of causing cancer.  
**Precautionary statement**  
**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.  
**Response** If exposed or concerned: Get medical advice/attention.  
**Storage** Store locked up. Protect from sunlight. Store in a well-ventilated place.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 2  
Hazardous to the aquatic environment, long-term hazard Category 2  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Perchloroethylene		127-18-4	90 - 100
Carbon Dioxide		124-38-9	1 - 2.5

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	No specific first aid measures noted.
<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Most important symptoms/effects, acute and delayed</b>	Headache. Dizziness. Nausea.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	Cool containers exposed to flames with water until well after the fire is out.
<b>General fire hazards</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
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**Conditions for safe storage, including any incompatibilities**

Level 1 Aerosol.

Store locked up. Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m3
		5000 ppm

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

Components	Type	Value
Perchloroethylene (CAS 127-18-4)	Ceiling	200 ppm
	TWA	100 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
Perchloroethylene (CAS 127-18-4)	STEL	100 ppm
	TWA	25 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		30000 ppm
	TWA	9000 mg/m3 5000 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Perchloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethylene	Blood	*
	3 ppm	Tetrachloroethylene	End-exhaled air	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - Minnesota Haz Subs: Skin designation applies**

Perchloroethylene (CAS 127-18-4)

Skin designation applies.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

If contact is likely, safety glasses with side shields are recommended.

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear suitable protective clothing. Use of an impervious apron is recommended.

<b>Respiratory protection</b>	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Gas.
<b>Form</b>	Aerosol. Compressed gas.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	100 psig @70F estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	1.621 estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Hydrogen chloride.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Headache. Dizziness. Nausea.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
Perchloroethylene (CAS 127-18-4)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Dog; Mouse; Rabbit; Rat	3000 ppm
<b>Oral</b>		
LD50	Cat; Dog; Mouse; Rabbit; Rat	> 1500 mg/kg
	Rat	3005 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

#### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Suspected of causing cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Perchloroethylene (CAS 127-18-4) 2A Probably carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

#### US. National Toxicology Program (NTP) Report on Carcinogens

Perchloroethylene (CAS 127-18-4) Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not likely, due to the form of the product.

**Chronic effects** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Perchloroethylene (CAS 127-18-4)			
Aquatic			
Crustacea	EC50	Daphnia	7.55 mg/L, 48 Hours
		Water flea (Daphnia magna)	6.1 - 9 mg/l, 48 hours

Components		Species	Test Results
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4.82 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

#### Bioaccumulative potential

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

Perchloroethylene 3.4

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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 of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

### 14. Transport information

#### DOT

**UN number** UN1950  
**UN proper shipping name** Aerosols, non-flammable, (each not exceeding 1 L capacity)  
**Transport hazard class(es)**  
**Class** 2.2  
**Subsidiary risk** -  
**Label(s)** 2.2  
**Packing group** Not applicable.  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Packaging exceptions** 306  
**Packaging non bulk** None  
**Packaging bulk** None

#### IATA

**UN number** UN1950  
**UN proper shipping name** Aerosols, non-flammable  
**Transport hazard class(es)**  
**Class** 2.2  
**Subsidiary risk** -  
**Label(s)** 2.2  
**Packing group** Not applicable.  
**Environmental hazards** Yes  
**ERG Code** 2L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**Packaging Exceptions** LTD QTY

#### IMDG

**UN number** UN1950

<b>UN proper shipping name</b>	AEROSOLS
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	None
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Packaging Exceptions</b>	LTD QTY
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

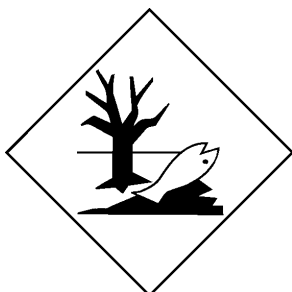
#### DOT



#### IATA; IMDG



#### Marine pollutant



#### General information

IMDG Regulated Marine Pollutant. Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

## 15. Regulatory information

**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.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Perchloroethylene (CAS 127-18-4) Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
 Immediate Hazard - No  
 Delayed Hazard - Yes  
 Fire Hazard - No  
 Pressure Hazard - Yes  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Perchloroethylene	127-18-4	90 - 100

**Other federal regulations****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 Drinking Water Act (SDWA)** Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Perchloroethylene (CAS 127-18-4)

**US. Massachusetts RTK - Substance List**

Carbon Dioxide (CAS 124-38-9)  
 Perchloroethylene (CAS 127-18-4)

**US. New Jersey Worker and Community Right-to-Know Act**

Carbon Dioxide (CAS 124-38-9)  
 Perchloroethylene (CAS 127-18-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Carbon Dioxide (CAS 124-38-9)  
 Perchloroethylene (CAS 127-18-4)

**US. Rhode Island RTK**

Perchloroethylene (CAS 127-18-4)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Perchloroethylene (CAS 127-18-4) Listed: April 1, 1988

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No



Country(s) or region	Inventory name	On inventory (yes/no)*
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

<b>Issue date</b>	07-07-2016
<b>Version #</b>	01
<b>Disclaimer</b>	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
<b>Revision information</b>	This document has undergone significant changes and should be reviewed in its entirety.