

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)


Printing date: 10/12/2016

Revision: 10/12/2016

1 Identification

- **Product identifier**
- **Trade name:** Non-Chlorinated Brake Clean
- **Article number:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Cleaner solvent
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Fleetwing Corporation
742 S. Combee Road
Lakeland, FL 33801
(863) 665-7557
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Liq. 2 H225 Highly flammable liquid and vapor.
Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 3 H311 Toxic in contact with skin.
Acute Tox. 3 H331 Toxic if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 1 H370 Causes damage to the central nervous system and optic nerve.
STOT SE 3 H336 May cause drowsiness or dizziness.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**


GHS02 GHS06 GHS07 GHS08
- **Signal word:** Danger
- **Hazard statements:**
H225 Highly flammable liquid and vapor.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H370 Causes damage to the central nervous system and optic nerve.

(Cont'd. on page 2)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 1)









- H336 May cause drowsiness or dizziness.
- H304 May be fatal if swallowed and enters airways.
- **Precautionary statements:**
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P260 Do not breathe mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection.
- P233 Keep container tightly closed.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P330 Rinse mouth.
- P331 Do NOT induce vomiting.
- P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Components:**

142-82-5	heptane	 Flam. Liq. 2, H225  Asp. Tox. 1, H304  Skin Irrit. 2, H315; STOT SE 3, H336	60-80%
67-56-1	methanol	 Flam. Liq. 2, H225  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331  STOT SE 1, H370	20-40%
67-63-0	propan-2-ol	 Flam. Liq. 2, H225  Eye Irrit. 2, H319; STOT SE 3, H336	10-20%

- **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements refer to section 16.

(Cont'd. on page 3)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 2)

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
Supply fresh air or oxygen; call for doctor.
Provide oxygen treatment if affected person has difficulty breathing.
- **After skin contact:**
Immediately remove any clothing soiled by the product.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
Headache
Breathing difficulty
Coughing
Dizziness
Shivering fit
Blindness
Nausea in case of ingestion.
Gastric or intestinal disorders when ingested.
Irritant to skin and mucous membranes.
Irritant to eyes.
- **Danger:**
Toxic if swallowed, in contact with skin or if inhaled.
Danger of impaired breathing.
Danger of serious damage to health by prolonged exposure.
May cause damage to the central nervous system and optic nerve.
Vapors have narcotic effect.
- **Indication of any immediate medical attention and special treatment needed:**
Contains Methanol. Consult literature for specific antidotes.
Later observation for pneumonia and pulmonary edema.
If necessary oxygen respiration treatment.
Medical supervision for at least 48 hours.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Water fog / haze
Foam
Alcohol resistant foam
Fire-extinguishing powder

(Cont'd. on page 4)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 3)

Carbon dioxide

- **For safety reasons unsuitable extinguishing agents:** Water stream.

- **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

- **Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

- **Additional information:**

Eliminate all ignition sources if safe to do so.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Cool endangered containers with water fog.

Use large quantities of foam as it is partially destroyed by the product.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

Protect from heat.

- **Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

Prevent from spreading (e.g. by damming-in or oil barriers).

- **Methods and material for containment and cleaning up:**

Allow to evaporate.

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

Remove from the water surface (e.g. skim or suck off).

Send for recovery or disposal in suitable receptacles.

- **Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- **Handling**

- **Precautions for safe handling:**

Prevent formation of aerosols.

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

- **Information about protection against explosions and fires:**

Highly flammable liquid and vapor.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

(Cont'd. on page 5)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 4)

Keep respiratory protective device available.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by storerooms and receptacles:**

Provide ventilation for receptacles.

Avoid storage near extreme heat, ignition sources or open flame.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidizing agents.

- **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Keep containers tightly sealed.

- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

142-82-5 heptane

PEL (USA)	Long-term value: 2000 mg/m ³ , 500 ppm
REL (USA)	Long-term value: 350 mg/m ³ , 85 ppm Ceiling limit value: 1800* mg/m ³ , 440* ppm *15-min
TLV (USA)	Short-term value: 2050 mg/m ³ , 500 ppm Long-term value: 1640 mg/m ³ , 400 ppm
EL (Canada)	Short-term value: 500 ppm Long-term value: 400 ppm
EV (Canada)	Short-term value: 2.045 mg/m ³ , 500 ppm Long-term value: 1.635 mg/m ³ , 400 ppm
LMPE (Mexico)	Short-term value: 500 ppm Long-term value: 400 ppm

67-56-1 methanol

PEL (USA)	Long-term value: 260 mg/m ³ , 200 ppm
REL (USA)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV (USA)	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI
EL (Canada)	Short-term value: 250 ppm Long-term value: 200 ppm Skin

(Cont'd. on page 6)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 5)

EV (Canada)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
LMPE (Mexico)	Short-term value: 250 ppm Long-term value: 200 ppm PIEL, IBE

67-63-0 propan-2-ol

PEL (USA)	Long-term value: 980 mg/m ³ , 400 ppm
REL (USA)	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV (USA)	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm BEI
EL (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm
EV (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm
LMPE (Mexico)	Short-term value: 400 ppm Long-term value: 200 ppm A4, IBE

- **Ingredients with biological limit values:**

67-56-1 methanol

BEI (USA)	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
-----------	---

67-63-0 propan-2-ol

BEI (USA)	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
-----------	---

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

- **Engineering controls:** No relevant information available.

- **Breathing equipment:**



Respiratory protection required.

(Cont'd. on page 7)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 6)

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

Avoid release to the environment.

· **Risk management measures** See Section 7 for additional information.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

· Form:	Liquid
· Color:	Colorless
· Odor:	Solvent-like
· Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** Not determined.

· **Flash point:** -4 °C (25 °F) (PMCC)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits**

· **Lower:** Not determined.

· **Upper:** Not determined.

· **Oxidizing properties:** Non-oxidizing.

· **Vapor pressure:** Not determined.

· **Density:** Not determined.

· **Relative density:** Not determined.

· **Vapor density:** Not determined.

· **Evaporation rate:** Not determined.

(Cont'd. on page 8)

Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 7)

- | | |
|---|------------------------------------|
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Other information | No relevant information available. |

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
Highly flammable liquid and vapor.
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Reacts with oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid:** Keep ignition sources away - Do not smoke.
- **Incompatible materials:** Oxidizing agents
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Formaldehyde

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
 - **LD/LC50 values that are relevant for classification:**
- | | | |
|-------------------------|------|-------------------------------|
| 142-82-5 heptane | | |
| Oral | LD50 | > 5000 mg/kg (rat) (Estimate) |
- **Primary irritant effect:**
 - **On the skin:** Irritant to skin and mucous membranes.
 - **On the eye:** Irritating effect.
 - **Sensitization:** No sensitizing effects known.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer):**

67-63-0 | propan-2-ol

3

(Cont'd. on page 9)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 8)

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

· **Acute effects (acute toxicity, irritation and corrosivity):**

Toxic if swallowed, in contact with skin or if inhaled.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Causes damage to the central nervous system and optic nerve.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** May be fatal if swallowed and enters airways.

12 Ecological information

· **Toxicity**

- **Aquatic toxicity** Toxic for aquatic organisms
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.

· **Ecotoxicological effects:**

· **Remark:**

Very toxic for fish
Due to mechanical actions of the product (e.g. agglutinations), damages may occur.

· **Additional ecological information**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

- **Other adverse effects:** No relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

(Cont'd. on page 10)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 9)

- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT** UN1993
- **ADR, IMDG, IATA** UN1992

- **UN proper shipping name**



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).

- **DOT** Flammable liquids, n.o.s. (Heptane, Methanol)
- **ADR** FLAMMABLE LIQUID, TOXIC, N.O.S. (HEPTANE, METHANOL), ENVIRONMENTALLY HAZARDOUS
- **IMDG** FLAMMABLE LIQUID, TOXIC, N.O.S. (HEPTANE, METHANOL), MARINE POLLUTANT
- **IATA** Flammable liquid, toxic, n.o.s. (Heptane, Methanol)

- **Transport hazard class(es)**

- **DOT**



- **Class** 3 Flammable liquids
- **Label** 3

- **ADR**



- **Class** 3 (FT1) Flammable liquids
- **Label** 3

- **IMDG**



- **Class** 3 Flammable liquids

(Cont'd. on page 11)

Safety Data Sheet


acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 10)

· Label	3
· IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards	Product contains environmentally hazardous substances: heptane
· Marine pollutant:	Yes Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	336
· EMS Number:	F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	Product is additionally classified as a MARINE POLLUTANT based on MARPOL and DOT rules. Labeling as a MARINE POLLUTANT is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 304 (emergency release notification):

None of the ingredients are listed.

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

(Cont'd. on page 12)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 11)

· Section 313 (Specific toxic chemical listings):

67-56-1 | methanol

67-63-0 | propan-2-ol

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)
· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

67-56-1 | methanol

· Carcinogenic categories
· EPA (Environmental Protection Agency):

142-82-5 | heptane

D

· IARC (International Agency for Research on Cancer):

67-63-0 | propan-2-ol

3

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision 10/12/2016 / -
· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

LDLo: Lowest Lethal Dose Observed

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

(Cont'd. on page 13)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 10/12/2016

Revision: 10/12/2016

Trade name: Non-Chlorinated Brake Clean

(Cont'd. of page 12)

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com