



Safety Data Sheet

Heavy Duty Brake Cleaner

SECTION 1. IDENTIFICATION

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|----------------------------|--|
| Product Identifier | Heavy Duty Brake Cleaner |
| Part number | TNDS8101, TNDS8201, TNDS8201-TB, TNDS8301 |
| Product Family | Mixture |
| Recommended Use | Brake parts cleaner. |
| Restrictions on Use | Not applicable. |
| Manufacturer | Shrader Canada Limited 830 Progress Court Oakville, Ontario Canada L6L 6K1 +1.905.847.0222 www.titanchemicals.com |
| Emergency Phone No. | Immediately contact your local poison control centre. CANUTEC, +1.613.996.6666, for transportation emergencies. |

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 2; Skin irritation - Category 2; Eye irritation - Category 2A; Specific target organ toxicity (single exposure) - Category 3; Aspiration hazard - Category 1

Label Elements



Danger

Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.

Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical, ventilating, and lighting equipment.

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| Date of Last Revision: | January 04, 2019 |

Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust, fume, gas, mist, vapours or spray.
Wash hands and skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
IF ON SKIN: Wash with plenty of water.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTRE or doctor if you feel unwell.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use carbon dioxide or dry chemical to extinguish.

Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

| Chemical Name | CAS No. | % | Other Identifiers | Other Names |
|---|------------|-----------|-------------------|-------------|
| Naphtha (petroleum), hydrotreated light | 64742-49-0 | 60-100 | heptane | |
| 2-Propanol | 67-63-0 | 2.5 - 5.0 | | |

Notes

Any concentration shown as a range is due to batch processing.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove person to fresh air and keep comfortable for breathing.
If not breathing, give artificial respiration, immediately call a poison centre.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation occurs, get medical advice or attention. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice or attention.

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Ingestion

Immediately call a Poison Centre or doctor. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Do not induce vomiting. Drink two glasses of water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

Not applicable.

Immediate Medical Attention and Special Treatment

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide or dry chemical. Use water to keep non-leaking, fire-exposed containers cool.

Unsuitable Extinguishing Media

Do not use a direct stream of water.

Specific Hazards Arising from the Product

Flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. Vapours are heavier than air. May travel a considerable distance to a source of ignition and flash back to a leak or open container.

Carbon oxides, and other unidentified organic compounds.

Special Protective Equipment and Precautions for Fire-fighters

Use extreme caution, fight fire from a safe distance or a protected location.

See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Eliminate all ignition sources. Use grounded, explosion-proof equipment.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Do not spray on an open flame or other ignition source. Do not pierce or burn container, even after use. Do not

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weld, cut or perform hot work on empty container until all traces of product have been removed. General hygiene considerations: wash hands thoroughly after handling this material.

Conditions for Safe Storage

Store at temperatures not exceeding: 35°C.

Store in a closed container. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet. Store in an area that is: cool, dry, well-ventilated.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Chemical Name | ACGIH® TLV® | | OSHA PEL | |
|---------------|-------------|----------|--------------|-----------------|
| | TWA | STEL [C] | TWA | Ceiling |
| 2-Propanol | 200 ppm A4 | 400 ppm | 980000 mg/m3 | Not established |

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists. Do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Control static electricity discharges which includes bonding of equipment to ground.

Individual Protection Measures

Eye/Face Protection

Safety glasses with side shields. Contact lenses should not be worn.

Skin Protection

Gloves made of: neoprene, nitrile.

Respiratory Protection

Not normally required if product is used as directed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

| | |
|--|--|
| Appearance | Clear colourless liquid. |
| Odour | Petroleum |
| Odour Threshold | Not available |
| pH | Not available |
| Melting Point/Freezing Point | Not available (melting) |
| Initial Boiling Point/Range | Not available |
| Flash Point | -8 °C (method not specified) |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | Not applicable (liquid). |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); Not available (lower) |
| Vapour Pressure | Not available |
| Vapour Density (air = 1) | > 1 |
| Relative Density (water = 1) | 0.700 at 15 °C |
| Solubility | Negligible in water |
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not available |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | Not available |
| Viscosity | < 14 centistokes at 40°C (kinematic) |

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Other Information

| | |
|---------------------|----------------------------|
| VOCs % | 100 |
| Flame projection | Not applicable |
| NFPA Classification | Flammable liquid, Class 1B |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Hazardous polymerization will not occur.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

Increased risk of fire and explosion on contact with: strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Carbon oxides. And other unidentified organic compounds.

SECTION 11. TOXICOLOGICAL INFORMATION

Reports have associated repeated and prolonged occupational overexposure to various organic solvents with internal organ, brain and nervous system damage.

Likely Routes of Exposure

Inhalation.

Skin contact.

Eye contact.

Ingestion.

Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|---|-----------------------------------|-----------------------|----------------------|
| 2-Propanol | 17000 ppm (rat) (4-hour exposure) | 4720 mg/kg (male rat) | 12890 mg/kg (rabbit) |
| Naphtha (petroleum), hydrotreated light | Not available | 5000 mg/kg | 2000 mg/kg |

Skin Corrosion/Irritation

Moderate to severe irritant.

Serious Eye Damage/Irritation

Moderate to severe irritant. Animal tests show mild irritation. The vapour also irritates the eyes. Symptoms include slight redness and pain.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Skin Absorption

No information was located.

Ingestion

If large amounts are swallowed symptoms may include nausea, vomiting, stomach cramps and diarrhea.

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Aspiration Hazard

May cause lung damage if aspirated based on physical properties (e.g. kinematic viscosity) and chemical family (hydrocarbon).

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer.

Not known to be a skin sensitizer.

Carcinogenicity

| Chemical Name | ACGIH® | IARC | NTP | OSHA |
|---------------|--------|---------|------------|------------|
| 2-Propanol | A4 | Group 3 | Not Listed | Not Listed |

No components are listed as carcinogens by ACGIH, IARC, NTP or OSHA.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

Other Information

isopropanol increases the hepatotoxic effects of chlorinated aliphatic hydrocarbons,

No information was located for: Development of Offspring, Sexual Function and Fertility, Effects on or via Lactation, Germ Cell Mutagenicity, Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

Ecotoxicity

The product itself has not been tested.

Persistence and Degradability

The product itself has not been tested.

Bioaccumulative Potential

The product itself has not been tested.

Mobility in Soil

The product itself has not been tested.

Other Adverse Effects

The product itself has not been tested.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Empty containers retain product residue. Follow label warnings even if container appears to

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be empty. Dispose of in accordance with municipal, provincial/state or federal regulations.

SECTION 14. TRANSPORT INFORMATION

| Regulation | UN No. | Proper Shipping Name | Transport Hazard Class(es) | Packing Group |
|---------------|--------|---|----------------------------|---------------|
| Canadian TDG | UN1993 | Flammable liquid, n.o.s. (heptane, isopropanol) | 3 | II |
| IATA (Air) | UN1993 | Flammable liquid, n.o.s. (heptane, isopropanol) | 3 | II |
| IMDG (Marine) | UN1993 | Flammable liquid, n.o.s. (heptane, isopropanol) | 3 | II |

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Emergency Response Guide No. 128 EmS F-E, S-E

Other Information ICAO/IATA PI Y341/353/364
Product may ship as LTD QTY if TDG, ICAO/IATA or IMDG Limited Quantity provisions are met.

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

CEPA - National Pollutant Release Inventory (NPRI)

(Isopropanol) Part 1A.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

California Proposition 65: Not applicable.

CERCLA: Not applicable.

SARA Title III - Section 302: Not applicable.

SARA Title III - Section 313. (Isopropanol)

Massachusetts Right To Know: Not applicable.

New Jersey Right To Know. (Isopropanol)

Pennsylvania Right To Know. (Isopropanol) Not applicable.

SECTION 16. OTHER INFORMATION

NFPA Rating Health - 2 Flammability - 3 Instability - 0

SDS Prepared By Regulatory Compliance

Phone No. 905.847.0222

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Revision Indicators The following SDS content was changed on January 04, 2019:
SECTION 1. IDENTIFICATION; Emergency Phone No.
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS; Notes.

Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists

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CANUTEC = Canadian Transportation Emergency Centre
CAS = Chemical Abstract Services
CCOHS = Canadian Centre for Occupational Health & Safety
CNS = Central nervous system
GESTIS Substance Database
HSDB® = Hazardous Substances Data Bank
IARC = International Agency for Research on Cancer
ICAO = International Civil Aviation Organization
IMDG = International Maritime Dangerous Goods Code
LC = Lethal concentration
LD = Lethal dose
NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health
NTP = National Toxicology Program
OSHA = US Occupational Safety and Health Administration
PPM = Parts per million
STEL = Short term exposure limit
TDG = Transportation of Dangerous Goods Regulations (Canada)
TWA = Time weighted average

References

Material Safety Data Sheet from manufacturer.
CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS).
Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).
ECHA - European Chemical Agency, Classification and Labelling Inventory
GESTIS Substance Database
OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2015.

Disclaimer

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