



Material Safety Data Sheet

Heavy Duty Degreaser

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Heavy Duty Degreaser
Part number	TNDS8008
Product Family	Solvent blend
Manufacturer	Shrader Canada Limited 830 Progress Court Oakville, ON L6L 6K1 +1.905.847.0222 www.shradercanada.com
Emergency Contact Information	CANUTEC, +1.613.996.6666, Operation hours: 24/7
Use	Degreaser

2. HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation	At high concentrations: can irritate the nose and throat. Can harm the nervous system.
Skin Contact	SKIN IRRITANT. May cause moderate to severe irritation.
Eye Contact	EYE IRRITANT. May cause moderate to severe irritation.
Ingestion	Harmful. Can cause effects as described for inhalation. Aspiration hazard.
Effects of Long-Term (Chronic) Exposure	May harm the blood. Can cause a decrease in the ability of blood to carry oxygen. May harm the kidneys. May harm the liver. May harm the nervous system.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration %	Other Identifiers
Stoddard solvent	8052-41-3	10-30	
Light aromatic solvent naphtha	64742-95-6	7-13	
Fatty acids, tall oil	61790-12-3	7-13	
1,2,4-Trimethylbenzene	95-63-6	7-13	
Liquified petroleum gas	68476-85-7	7-13	
Alcohols, C9-11, ethoxylated, liquids	68439-46-3	1-5	
Ethylene glycol	107-21-1	1-5	
1,3,5-Trimethylbenzene	108-67-8	1-5	
n-Nonane	111-84-2	0.5-1.5	
Xylene (mixed isomers)	1330-20-7	0.1-1.0	
Potassium hydroxide	1310-58-3	0.1-1.0	
Cumene	98-82-8	0.1-1.0	

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Diethylbenzene	25340-17-4	0.1-1.0	
2-aminoethanol	141-43-5	0.1-1.0	
Naphthalene	91-20-3	0.1-1.0	
Ethylbenzene	100-41-4	0.1-1.0	

4. FIRST AID MEASURES

First Aid Procedures

Inhalation	Move victim to fresh air. Call a Poison Centre or doctor if the victim feels unwell.
Skin Contact	Quickly take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap for 5 minutes. Call a Poison Centre or doctor if the victim feels unwell.
Eye Contact	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay flushing or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a Poison Centre or doctor. Treatment is urgently required. Transport to a hospital.
Ingestion	Have victim rinse mouth with water. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. DO NOT INDUCE VOMITING. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Have victim rinse mouth with water again. If breathing has stopped, trained personnel should immediately begin artificial respiration (AR). Immediately call a Poison Centre or doctor.

5. FIRE FIGHTING MEASURES

Flammable Properties	FLAMMABLE AEROSOL.
Suitable Extinguishing Media	Carbon dioxide, dry chemical powder or appropriate foam.
Unsuitable Extinguishing Media	DO NOT use water or water-based extinguishing agents.
Specific Hazards Arising from the Chemical	Liquid can float on water and may travel to distant locations and/or spread fire. Gas or vapour may travel a considerable distance to a source of ignition and flash back to a leak or open container. Gas or vapour may accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire hazard. Closed containers may rupture violently when heated releasing contents. Very toxic carbon monoxide, carbon dioxide. and other unidentified organic compounds.
Protective Equipment and Precautions for Firefighters	Use extreme caution. Fight fire from a safe distance or a protected location.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Eliminate all ignition sources. Use grounded, explosion-proof equipment. Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Vapour or gas may accumulate in hazardous amounts in low-lying areas especially inside confined spaces, if ventilation is not sufficient.
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 for Containment and Clean-up	Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

7. HANDLING AND STORAGE

Handling	Do not weld, cut or perform hot work on empty container until all traces of product have been removed. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Only use where there is adequate ventilation.
Storage	Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this MSDS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH® TLV®		OSHA PEL			
	TWA	STEL [C]	TWA	Ceiling		
Stoddard solvent	100 ppm	Not established	Not established	Not established		
1,2,4-Trimethylbenzene	25 ppm	Not established	Not established	Not established		
Alcohols, C9-11, ethoxylated, liquids	Not established					
Ethylene glycol	Not established	100 mg/m3 A4	Not established	50 ppm		
1,3,5-Trimethylbenzene	25 ppm	Not established	Not established	Not established		
n-Nonane	200 ppm	Not established	Not established	Not established		
Xylene (mixed isomers)	100 ppm A4	150 ppm A4	435 mg/m3	Not established		
Cumene	50 ppm	Not established	50 ppm	Not established		
2-aminoethanol	3 ppm	6 ppm				
Naphthalene	10 ppm	15 ppm	10 ppm	Not established		
Ethylbenzene	20 ppm A3	Not established	100 ppm	Not established		

Engineering Controls Sufficient mechanical ventilation to maintain exposures below the TLV. Under normal conditions of use, general ventilation should be satisfactory. Local ventilation is recommended if the product is misted or used in a confined space or if the TLV is exceeded. Make up air should always be supplied to balance air exhausted.

Personal Protective Equipment (PPE)

Eye/Face Protection Not required but it is good practice to wear safety glasses or chemical safety goggles.

Skin Protection Wear chemical protective clothing e.g. gloves, aprons, boots. Suitable materials are: neoprene rubber, nitrile rubber.

Respiratory Protection Not normally required if product is used as directed.

General Hygiene Considerations It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Immediately remove any clothing which becomes wet or heavily contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear yellow liquid.

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Odour	Not available
Boiling Point	Not available
Relative Density (water = 1)	0.88 at 15 °C
Solubility in Water	Partial
pH	9.9 (10% solution)
Partition Coefficient, n-Octanol/Water	Not available
Viscosity-Kinematic	< 14 centistokes at 40°C
Vapour Pressure	Not available
Vapour Density (air = 1)	> 1
Flash Point	49 °C
Lower Flammable/Explosive Limit	Not available
Upper Flammable/Explosive Limit	Not available
Auto-ignition Temperature	Not available
VOC %	66.2
Flame projection	> 100 cm
NFPA Classification	Aerosol, level 2

10. STABILITY AND REACTIVITY

Chemical Stability	Normally stable.
Conditions to Avoid	Open flames, sparks, static discharge, heat and other ignition sources. High temperatures.
Incompatible Materials	Strong oxidizing agents (e.g. perchloric acid).
Hazardous Decomposition Products	Very toxic carbon monoxide, carbon dioxide. and other unidentified organic compounds.
Possibility of Hazardous Reactions	None known.

11. TOXICOLOGICAL INFORMATION

General Comments

Information presented below is for the entire product, unless otherwise specified.

LC50/LD50 Values

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Stoddard solvent	> 5500 mg/m ³ (rat) (4-hour exposure)	> 5000 mg/kg (rat)	> 3000 mg/kg (rabbit)
Light aromatic solvent naphtha	> 14.4 mg/L (rat) (6-hour)	8400 mg/kg (rat)	> 3160 mg/kg (rabbit)
1,2,4-Trimethylbenzene	18000 mg/m ³ (rat) (4-hour exposure)	5000 mg/kg (rat)	Not available
Ethylene glycol	2725 mg/m ³ (rat) (4-hour exposure)	4700 mg/kg (rat)	10600 mg/kg (rabbit)
1,3,5-Trimethylbenzene	24000 mg/m ³ (rat) (4-hour exposure)	Not available	Not available
n-Nonane	3200 ppm (rat) (4-hour)	> 15000 mg/kg (rat)	Not available

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	exposure)		
Xylene (mixed isomers)	6350 ppm (male rat) (4-hour exposure)	3523 mg/kg (rat)	> 1700 mg/kg (rabbit)
Potassium hydroxide	Not available	250 mg/kg (rat)	> 1260 mg/kg (rabbit)
Cumene	39 mg/L (rat) (4-hour exposure)	1400 mg/kg (rat)	10627 mg/kg (rabbit)
Diethylbenzene	> 30000 mg/m3 (mouse)	1200 mg/kg (rat)	> 5000 mg/kg (rabbit)
2-aminoethanol	> 1210 mg/m3 (mouse) (4-hour exposure)	1720 mg/kg (female rat)	1000 mg/kg (rabbit)
Naphthalene	141 ppm (rat) (4-hour exposure)	490 mg/kg (rat)	> 20000 mg/kg (rabbit)
Ethylbenzene	~ 4000 ppm (rat) (4-hour exposure)	3500 mg/kg (rat)	15380 mg/kg (rabbit)

Skin Irritation/Corrosion

There is limited evidence of moderate or severe irritation.

Eye Irritation/Corrosion

There is limited evidence of moderate or severe irritation.

Effects of Short-Term (Acute) Exposure

Inhalation

At high concentrations: may cause nose and throat irritation.

Ingestion

Harmful. May cause depression of the central nervous system, lung damage if aspirated based on physical properties (e.g. kinematic viscosity) and chemical family (hydrocarbon).

Effects of Long-Term (Chronic) Exposure

At high concentrations: may cause effects on the central nervous system, decreased ability of blood to carry oxygen, harmful effects on the liver, harmful effects on the kidneys.

Respiratory and/or Skin Sensitization

Not a respiratory sensitizer.

Not a skin sensitizer.

Carcinogenicity

Chemical Name	ACGIH®	IARC	NTP	OSHA
Light aromatic solvent naphtha	Not Listed	Not evaluated	Not Listed	Not Listed
Liquified petroleum gas	Not Listed	Not Listed	Not Listed	Not Listed
Ethylene glycol	Not designated	Not evaluated	Not Listed	Not Listed
Xylene (mixed isomers)	A4	Group 3	Not Listed	Not Listed
Potassium hydroxide	Not designated	Not evaluated	Not Listed	
Cumene	Not designated	Group 2B	Not Listed	Not Listed
Naphthalene	A4	Group 2B	Reasonably anticipated	Not Listed
Ethylbenzene	A3	Group 2B	Not Listed	Not Listed

(Cumene). (Ethylbenzene). (Naphthalene) IARC: Group 2B – Possibly carcinogenic to humans.

Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 2B = Possibly carcinogenic to humans. Group 3 = Not classifiable as to its carcinogenicity to humans.

ACGIH® = American Conference of Governmental Industrial Hygienists. A3 = Animal carcinogen. A4 = Not classifiable as a human carcinogen.

Teratogenicity / Embryotoxicity

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(Xylene (mixed isomers)) may cause effects on the unborn child based on limited evidence.
No information was located for: Reproductive Toxicity, Mutagenicity, Toxicologically Synergistic Materials

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Empty containers retain product residue. Follow label warnings even if container appears to be empty. The container for this product can present explosion or fire hazards, even when emptied. Do not cut, puncture, or weld on or near this container. Dispose of in accordance with municipal, provincial/state or federal regulations.

14. TRANSPORT INFORMATION

Shipping Information

Regulation	UN No.	Shipping Name	Class	Packing Group
Canadian TDG	UN1950	Aerosols	2.1	
IMDG	UN1950	Aerosols	2.1	
ICAO/IATA	UN1950	Aerosols, flammable	2.1	

Other Transport Information

Special Shipping Information Not applicable

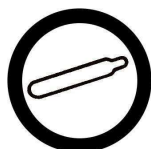
Emergency Response Guide No. 126 EmS F-D, S-U

Other Information Product may ship as LTD QTY if TDG, ICAO/IATA or IMDG Limited Quantity provisions are met.
ICAO/IATA PI Y203/203

15. REGULATORY INFORMATION

Canada

WHMIS Classification



Class A



Class B5



Class D2A; D2B

A - Compressed Gas; B5 - Flammable Aerosol; D2A - Very Toxic; D2B - Toxic

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

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

All ingredients are listed on the DSL/NDSL.

16. OTHER INFORMATION

NFPA Rating Health - 2 Flammability - 2 Instability - 0

MSDS Prepared By Regulatory Compliance

Phone No. 800.201.9486

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Key to Abbreviations ACGIH® = American Conference of Governmental Hygienists
CANUTEC = Canadian Transport Emergency Centre
CAS = Chemical Abstract Service
CCOHS = Canadian Centre for Occupational Health & Safety
CNS = Central nervous system
GESTIS = 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
LC = Lethal dose
NFPA = National Fire Protection Association
NTP = National Toxicology Program
OSHA = US Occupational Safety and Health Administration
PPM = Parts per million
RTECS® = Registry of Toxic Effects of Chemical Substances
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. Accelrys, Inc. 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.

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