

SAFETY DATA SHEET.

Issuing date 02-Aug-2017

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Version 2.01

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name 4647 QUART NON-CHLOR BRAKE CLEANER

Recommended use of the chemical and restrictions on use

Product code F02261

Product Type Highly Flammable Liquid and Vapor
Synonyms None

Supplier's details

Recommended Use Non-Chlorinated Brake Cleaner.
Uses advised against No information available

Manufactured For:
Imperial Supplies LLC
789 Armed Forces Drive
P.O. Box 11008
Green Bay, WI 53407-1008
1-800-558-2808

Emergency telephone number

Chemical Emergency Phone Number Chemtrec 1-800-424-9300

Company Emergency Phone Number 800-558-2808

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2A
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements

Causes serious eye irritation

Suspected of damaging fertility or the unborn child

May cause respiratory irritation.

May cause damage to organs (Eyes, Skin, Respiratory System, Central Nervous System, Lungs, Kidney, and Liver) through prolonged or repeated exposure.

May be fatal if swallowed and enters airways

Highly flammable liquid and vapor



Appearance Clear

Physical state Liquid

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/eye protection/face protection/protective clothing

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces.-No smoking.

Keep container tightly closed

Ground/Bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention

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.

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting.

In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
ACETONE	67-64-1	70-80
TOLUENE	108-88-3	10-20
HEPTANE	64742-49-0	10-20

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Avoid contact with eyes, skin, and clothing. Avoid breathing vapors or mist.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Artificial respiration and/or oxygen may be necessary. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed

Main Symptoms	Causes eye irritation . May cause eye and respiratory irritation . Harmful if swallowed and enters airways.
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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water Fog, Carbon Dioxide (CO2), Foam, Dry Powder, Dry Chemical . Cool tanks / containers with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Extremely Flammable / Flammable. Keep product and empty container away from heat and sources of ignition.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventilation to keep the exposure levels below the OELS.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Report spills as required by local and federal regulations.

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Ground and bond containers when transferring material. Take precautionary measures against static discharges. Prevent product from entering drains. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces, and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Store locked up. Keep in properly labeled containers. Keep out of the reach of children. Keep containers tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Do not spray on hot surfaces.

Incompatible products Strong acids, alkalis, oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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ACETONE 67-64-1	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
HEPTANE 64742-49-0	TLV: 400 ppm STEL: 500 ppm	TWA: 500 ppm	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Safety glasses with side-shields.

Skin and body protection

Chemical resistant apron. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state

Liquid

Appearance

Clear

Odor

Solvent

Color

Clear

Odor Threshold

Property

Values

Remarks • Methods

pH

No information available

Melting/freezing point

No information available

Boiling point/boiling range

Flash Point

-20 °C / -4 °F

Based on lowest flashpoint of the products constituents.

Evaporation rate

No information available

Flammability (solid, gas)

No information available

Flammability Limits in Air

upper flammability limit

lower flammability limit
 Vapor pressure
 Vapor density
 Specific Gravity 0.791
 Water solubility Practically insoluble
 Partition coefficient: n-octanol/water
 Autoignition temperature No information available
 Decomposition temperature
 Viscosity No information available
 Explosive properties

Other information

VOC Content(%) 20.5

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause drowsiness and dizziness.
Eye contact	Irritating to eyes.
Skin contact	May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Ingestion	Harmful if swallowed and enters airways.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ACETONE 67-64-1	= 5800 mg/kg (Rat)	-	= 50100 mg/m ³ (Rat) 8 h
TOLUENE 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
HEPTANE 64742-49-0	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 73680 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Irritating to eyes. May cause skin and respiratory irritation. Harmful if swallowed and enters lungs and airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Irritating to eyes.
Irritation May cause skin, eye, and respiratory irritation.
Sensitization None known.
Germ Cell Mutagenicity Not a germ cell mutagen.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
TOLUENE 108-88-3	-	Group 3	-	-

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity This product does contain a chemical which is a known or suspected reproductive hazard.
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness and dizziness.
Specific target organ systemic toxicity (repeated exposure) May cause damage to target organs listed below through prolonged or repeated exposure.
Chronic toxicity Causes eye irritation. May cause skin and respiratory irritation. May cause drowsiness. Harmful if swallowed and enters airways.
Target Organ Effects Eyes, Skin, Respiratory System, Central Nervous System, Lungs, Kidney, and Liver.
Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 70000 mg/kg
ATEmix (dermal) 13623 mg/kg
ATEmix (inhalation-gas) 2500000 mg/l
ATEmix (inhalation-dust/mist) 62 mg/l
ATEmix (inhalation-vapor) 244 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
ACETONE 67-64-1	-	4.74 - 6.33 mL/L LC50 Oncorhynchus mykiss 96h 6210 - 8120 mg/L LC50 Pimephales promelas 96h static 8300 mg/L LC50 Lepomis macrochirus 96h	-	10294 - 17704 mg/L EC50 Daphnia magna 48h Static 12600 - 12700 mg/L EC50 Daphnia magna 48h

<p>TOLUENE 108-88-3</p>	<p>433 mg/L EC50 Pseudokirchneriella subcapitata 96h 12.5 mg/L EC50 Pseudokirchneriella subcapitata 72h static</p>	<p>15.22 - 19.05 mg/L LC50 Pimephales promelas 96h flow-through 12.6 mg/L LC50 Pimephales promelas 96h static 5.89 - 7.81 mg/L LC50 Oncorhynchus mykiss 96h flow-through 14.1 - 17.16 mg/L LC50 Oncorhynchus mykiss 96h static 5.8 mg/L LC50 Oncorhynchus mykiss 96h semi-static 11.0 - 15.0 mg/L LC50 Lepomis macrochirus 96h static 54 mg/L LC50 Oryzias latipes 96h static 28.2 mg/L LC50 Poecilia reticulata 96h semi-static 50.87 - 70.34 mg/L LC50 Poecilia reticulata 96h static</p>	<p>-</p>	<p>5.46 - 9.83 mg/L EC50 Daphnia magna 48h Static 11.5 mg/L EC50 Daphnia magna 48h</p>
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Persistence and degradability

Bioaccumulation

Chemical Name	log Pow
<p>ACETONE 67-64-1</p>	<p>-0.24</p>
<p>TOLUENE 108-88-3</p>	<p>2.7</p>

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground UN1993,FLAMMABLE LIQUIDS, N.O.S. (ACETONE, TOLUENE),3, PGII

IATA UN1993,FLAMMABLE LIQUIDS, N.O.S. (ACETONE, TOLUENE),3, PGII

IMDG UN1993,FLAMMABLE LIQUIDS, N.O.S. (ACETONE, TOLUENE),3, PGII

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
ACETONE	X	X	X	X	X	X	X	X
TOLUENE	X	X	X	X	X	X	X	X
HEPTANE	X	X	X	Not listed	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
TOLUENE - 108-88-3	108-88-3	10-20	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TOLUENE 108-88-3	1000 lb	X	X	X

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ACETONE 67-64-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
TOLUENE 108-88-3	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
TOLUENE - 108-88-3	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
TOLUENE 108-88-3	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

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

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 3	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 3	Physical Hazard 0	Personal protection B
<i>Chronic Hazard Star Legend</i>		<i>Chronic Health Star Hazard Repeated or prolonged exposure may cause central nervous system damage</i>		

Prepared By Regulatory Affairs
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 Revision Note

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet