

# SAFETY DATA SHEET.

Issuing date 02-Aug-2017

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Version 2.02

## 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 drowsiness or dizziness.  
 May cause damage to organs ( Eyes, Skin, Respiratory System, Central Nervous System, Lungs, Liver, and Kidney) 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/doctor  
 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**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | Avoid contact with eyes, skin, and clothing. Avoid breathing vapors.  |
| <b>Eye contact</b>    | Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If symptoms persist, call a physician.             |
| <b>Skin contact</b>   | 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.             |
| <b>Inhalation</b>     | 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. |
| <b>Ingestion</b>      | 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**

|                      |   |
|----------------------|---|
| <b>Main Symptoms</b> | Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. |
|----------------------|---|

**Indication of immediate medical attention and special treatment needed, if necessary**

|                           |                        |
|---------------------------|------------------------|
| <b>Notes to physician</b> | Treat symptomatically. |
|---------------------------|------------------------|

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Water Fog, Carbon Dioxide (CO<sub>2</sub>), Foam, Dry Chemical . Water fog.Dry chemical. Carbon dioxide (CO<sub>2</sub>). Cool containers/tanks with water spray.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire. Keep away from heat and sources of ignition. Do not smoke. Cool containers / tanks with water spray.

**Specific hazards arising from the chemical**

Extremely Flammable / Flammable. Keep product and empty container away from heat and sources of ignition. Risk of ignition. In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

**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. Follow safe handling advice and personal protective equipment recommendations.

**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. Should not be released into the environment.

**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 if safe to do so.

**Methods for cleaning up** Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly . After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges. Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Do not eat, drink, or smoke, when using this product. 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.

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

**Technical measures/Storage conditions** Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

**Incompatible products** Strong acids, alkalis, oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

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

#### **Color**

Clear

#### **Odor**

Solvent

#### **Odor Threshold**

#### Property

#### Values

#### Remarks • Methods

#### **pH**

No information available

#### **Melting/freezing point**

No information available

#### **Boiling point/boiling range**

|   |                          |  |
|---|--------------------------|--|
| <b>Flash Point</b>                            | -20 °C / -4 °F           | Based on lowest flashpoint of the products constituents. |
| <b>Evaporation rate</b>                       | No information available |  |
| <b>Flammability (solid, gas)</b>              | No information available |  |
| <b>Flammability Limits in Air</b>             |                          |  |
| upper flammability limit                      |                          |  |
| lower flammability limit                      |                          |  |
| <b>Vapor pressure</b>                         |                          |  |
| <b>Vapor density</b>                          |                          |  |
| <b>Specific Gravity</b>                       | 0.791                    |  |
| <b>Water solubility</b>                       | Practically insoluble    |  |
| <b>Partition coefficient: n-octanol/water</b> |                          |  |
| <b>Autoignition temperature</b>               | No information available |  |
| <b>Decomposition temperature</b>              |                          |  |
| <b>Viscosity</b>                              | No information available |  |
| <b>Explosive properties</b>                   |                          |  |

**Other information**

|                       |      |
|-----------------------|------|
| <b>VOC Content(%)</b> | 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**

Carbon oxides , Hydrocarbons, Fumes.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Inhalation of vapors in high concentration may cause irritation of respiratory system. |
| <b>Eye contact</b>  | Irritating to eyes.  |
| <b>Skin contact</b> | Skin irritation may occur if person excessively exposes product to the skin.           |
| <b>Ingestion</b>    | Harmful and may be fatal if swallowed and enters airways.                              |

**Component Information**

| <b>Chemical Name</b> | <b>LD50 Oral</b>     | <b>LD50 Dermal</b>       | <b>LC50 Inhalation</b>                |
|----------------------|----------------------|--------------------------|---------------------------------------|
| ACETONE<br>67-64-1   | = 5800 mg/kg ( Rat ) | -                        | = 50100 mg/m <sup>3</sup> ( Rat ) 8 h |
| TOLUENE<br>108-88-3  | = 2600 mg/kg ( Rat ) | = 12000 mg/kg ( Rabbit ) | = 12.5 mg/L ( Rat ) 4 h               |

|                       |                      |                         |                         |
|-----------------------|----------------------|-------------------------|-------------------------|
| HEPTANE<br>64742-49-0 | > 5000 mg/kg ( Rat ) | > 3160 mg/kg ( Rabbit ) | = 73680 ppm ( Rat ) 4 h |
|-----------------------|----------------------|-------------------------|-------------------------|

**Information on toxicological effects****Symptoms**

Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Skin corrosion/irritation**

Under normal conditions there is no skin irritation. Excessive exposure of product with skin may cause skin irritation.

**Eye damage/irritation**

Irritating to eyes.

**Sensitization**

Not a known sensitizer.

**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<br>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 contains a chemical(s) 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**

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.

**Target Organ Effects**

Eyes, Skin, Central Nervous System, Respiratory System, Lungs, Liver, and Kidneys.

**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)                 | 24390 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<br>67-64-1 | -                 | 4.74 - 6.33 mL/L LC50<br>Oncorhynchus mykiss 96h<br>6210 - 8120 mg/L LC50<br>Pimephales promelas 96h<br>static 8300 mg/L LC50<br>Lepomis macrochirus 96h | -                          | 10294 - 17704 mg/L EC50<br>Daphnia magna 48h Static<br>12600 - 12700 mg/L EC50<br>Daphnia magna 48h |

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

**Persistence and degradability**

.

**Bioaccumulation**

.

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

**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**

CONSUMER COMMODITY ORM-D  
or  
LIMITED QUANTITY

**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/NDL | EINECS/ELINCS | 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/NDL - 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 | 10.25     | 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<br>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<br>67-64-1  | 5000 lb                  |                                    | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ  |
| TOLUENE<br>108-88-3 | 1000 lb 1 lb             |                                    | RQ 1000 lb final RQ<br>RQ 454 kg final RQ<br>RQ 1 lb final RQ<br>RQ 0.454 kg final RQ |

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

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

| Chemical Name      | California Prop. 65                         |
|--------------------|---|
| TOLUENE - 108-88-3 | Developmental<br>Female Reproductive 10-20% |

#### U.S. State Right-to-Know Regulations

| Chemical Name       | New Jersey | Massachusetts | Pennsylvania |
|---------------------|------------|---------------|--------------|
| ACETONE<br>67-64-1  | X          |               | X            |
| TOLUENE<br>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

|                                   |                         |  |                          |  |
|-----------------------------------|-------------------------|--|--------------------------|--|
| <b>NFPA</b>                       | <b>Health Hazard 2</b>  | <b>Flammability 4</b>  | <b>Instability 0</b>     | <b>Physical and chemical hazards -</b> |
| <b>HMIS</b>                       | <b>Health Hazard 2*</b> | <b>Flammability 4</b>  | <b>Physical Hazard 1</b> | <b>Personal protection B</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  
Issuing date  
Revision Date  
Revision Note

Regulatory Affairs  
02-Aug-2017  
01-Dec-2017

#### 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**