

# Safety Data Sheet



## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### Techron D Concentrate

**Product Use:** Diesel Fuel Additive

**Product Number(s):** 510728

**Company Identification**

Chevron Singapore Pte Ltd

3 Fraser Street #12-28

DUO Tower

Singapore 189352

**Transportation Emergency Response**

Singapore Civil Defense Force: 995

**Health Emergency**

Chevron Emergency & Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

**Product Information**

Product Information: +65-6318-1000

SDS Requests: +65-6318-1000

## SECTION 2 HAZARDS IDENTIFICATION

**CLASSIFICATION:**

- Aspiration toxicant: Category 1.
- Acute aquatic toxicant: Category 1.
- Chronic aquatic toxicant: Category 1.



**Signal Word:** Danger

**Health Hazards:**

- May be fatal if swallowed and enters airways (H304).

**Environmental Hazards:**

- Very toxic to aquatic life with long lasting effects (H410).

**PRECAUTIONARY STATEMENTS:**

**General:**

- Keep out of reach of children (P102).
- Read carefully and follow all instructions (P103).

**Prevention:**

- Avoid release to the environment (P273).

**Response:**

- IF SWALLOWED: Immediately call a POISON CENTER, doctor, or physician (P301+P310).
- Do NOT induce vomiting (P331).
- Collect spillage (P391).

**Storage:**

- Store locked up (P405).

**Disposal:**

- Dispose of contents and container in accordance with applicable local, regional, national, and international regulations (P501).

**HAZARDS OTHERWISE NOT CLASSIFIED:** Not applicable.

### SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Distillates (petroleum), hydrotreated light	64742-47-8	50 - 100 %weight
2-Ethylhexyl nitrate	27247-96-7	25 - 50 %weight
2-Ethylhexanol	104-76-7	1 - 5 %weight

### SECTION 4 FIRST AID MEASURES

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** If swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

### IMMEDIATE HEALTH EFFECTS

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Skin contact may cause drying or defatting of the skin. Symptoms may include pain, itching, discoloration, swelling, and blistering. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Highly toxic; may be fatal if swallowed. Because of its low viscosity, this material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death.

**Inhalation:** Not expected to be harmful if inhaled.

### DELAYED OR OTHER HEALTH EFFECTS:

**Reproduction and Birth Defects:** This material is not expected to cause adverse reproductive effects based on animal data.

**Note to Physicians:** Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

### SECTION 5 FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Unusual Fire Hazards:** See Section 7 for proper handling and storage.

## PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Nitrogen.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Protective Measures:** Observe all relevant local and international regulations. Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator. Keep out unnecessary and unprotected personnel. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Exposure Controls/Personal Protection section.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities as appropriate or required.

## SECTION 7 HANDLING AND STORAGE

**General Handling Information:** The maximum handling temperature is 50°C. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Precautionary Measures:** Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches.

Storage, processing, handling, and use at temperatures above the flash point can produce ignitable vapors if the liquid is released or vessels are vented. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling. Keep out of the reach of children.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

**General Storage Information:** The maximum storage temperature is 45°C. DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces. USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment (PPE). If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, refer to PPE information below.

Factors that affect PPE include, but are not limited to: properties of the chemical, other chemicals which may contact the same PPE, physical requirements (fit & sizing, cut/puncture protection, dexterity, thermal protection, etc.), and potential allergic reactions to the PPE material. It is the responsibility of the user to read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

### ENGINEERING CONTROLS:

Use in a well-ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

**Skin Protection:** Wear chemical personal protective equipment (PPE) to prevent skin contact. Selection of chemical protective clothing should be performed by an Occupational Hygienist or Safety Professional and be based upon applicable standards (ASTM F739 or EN 374). Using chemical PPE depends upon operations conducted and may include chemical gloves, boots, chemical apron, chemical suit, and complete facial protection. **Refer to PPE manufacturers to obtain breakthrough time information to determine how long PPE can be used before it needs to be replaced.** Unless specific glove manufacturer data indicates otherwise, the below table is based upon available industry data to assist in the glove selection process and is intended to be used as reference only.

Chemical Glove Material	Thickness (mm)	Typical Breakthrough Time (minutes)
Butyl	0.7	5
Neoprene	0.61	15
Nitrile	0.5	120
Nitrile	0.11	5
Polyvinyl Chloride (PVC)	0.7	5
Viton Butyl	0.3	240

**Respiratory Protection:** A site-specific risk assessment should be conducted by an Occupational Hygienist or a Safety Professional to determine the type and use of respiratory protective equipment. When a site-specific risk assessment determines that respiratory protection is required, use an approved respirator such as:

#### Air purifying respirator -

If airborne concentration limits exceed the applicable occupational exposure limit, but are below the maximum use concentration.

Vapors only: organic vapor cartridge (filter type A3 per EN 529:2005).

Vapors and particulates (including generated mists): both an organic vapor cartridge & particulate filter (AP3 filter per EN 529:2005).

Refer to respirator manufacturers to obtain service life of cartridge / filter.

#### Positive pressure air-supplying respirator -

If airborne concentration limits exceed the maximum use concentration offered from an air purifying

respirator.

Refer to EN 529:2005, USA OSHA 1910.134, and/or other applicable local/regional/national/international standards for regulatory requirements.

**Occupational Exposure Limits:**

Component	Country/ Agency	Form	TWA	STEL	Ceiling	Notation
Distillates (petroleum), hydrotreated light	ACGIH	--	200 mg/m3	--	--	Skin A3
2-Ethylhexanol	ACGIH	--	5 ppm	--	--	--

Consult local authorities for appropriate values.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**Attention: the data below are typical values and do not constitute a specification.**

**Color:** Amber

**Physical State:** Liquid

**Odor:** Characteristic

**Odor Threshold:** No data available

**pH:** Not Applicable

**Vapor Pressure:** No data available

**Relative Vapor Density:** No data available

**Boiling Point:** No data available

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** No data available

**Melting Point:** No data available

**Specific Gravity:** 0.867 @ 15.6°C (60°F) (Typical)

**Particle Characteristics:** Not applicable

**Density:** No data available

**Kinematic Viscosity:** 2.8 mm<sup>2</sup>/s @ 40°C (104°F) (Typical)

**Coefficient of Therm. Expansion / °F:** No data available

**Evaporation Rate:** No data available

**Partition coefficient n-octanol/water (logarithmic value):** No data available

**FLAMMABLE PROPERTIES:**

**Flashpoint:** (Pensky-Martens Closed Cup) 66 °C (151 °F) (Typical)

**Autoignition:** No data available

**Flammability (Explosive) Limits (% by volume in air):** Lower: Not Applicable Upper: Not Applicable

**SECTION 10 STABILITY AND REACTIVITY**

**Reactivity:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** Not applicable

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**Eye Irritation:** The material is not considered an eye irritant. The product has not been tested. The

statement is based on evaluation of data for similar materials or product components.

**Acute Dermal Toxicity:** The material is not considered a dermal toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The material is not considered a skin irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** The material is not considered a skin sensitizer. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The material is not considered an oral toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The material is not considered an inhalation toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Acute Toxicity Estimate:** Not Determined

**Germ Cell Mutagenicity:** The material is not considered a mutagen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Carcinogenicity:** The material is not considered a carcinogen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Reproductive Toxicity:** The material is not considered a reproductive toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Specific Target Organ Toxicity - Single Exposure:** The material is not considered a target organ toxicant (single exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Specific Target Organ Toxicity - Repeated Exposure:** The material is not considered a target organ toxicant (repeated exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Aspiration Hazard:** This material is considered an aspiration hazard based on the kinematic viscosity of the material.

#### **ADDITIONAL TOXICOLOGY INFORMATION:**

This package contains 2-Ethylhexanol.

**SUBCHRONIC EFFECTS:** Rats were treated with 0 - 500 mg/kg/day 2-EH by gavage for 3 months. At 250 mg/kg/day, effects included changes in serum chemistry and decreased fat deposition in liver cells of males. At 500 mg/kg/day, additional findings included changes in serum cholesterol, increased liver reticulocytes, and forestomach lesions. Mice dosed by gavage with 0 - 500 mg/kg/ day, 5 days/week for 13 weeks, also had forestomach lesions in high-dose animals. In a 90-day subchronic inhalation toxicity study on Wistar rats, no treatment-related findings occurred at the highest concentration tested (120 ppm).

**REPRODUCTION AND BIRTH EFFECTS:** In an oral exposure study in rats treated on Gestational Day 12 (GD 12) at 833 or 1666 mg/kg, 2-EH was reported to cause malformations and growth retardation without maternal toxicity. However, a multiple-dose oral exposure study in rats on GD 6-15 at 0 - 1300 mg/kg/day, resulted in significant maternal toxicity, including deaths at 650 and 1300 mg/kg/day. In inhalation exposures (GD 1-19, 850 mg/cu m) or dermal exposures of pregnant rats (GD 6-15 at 0 - 2520 mg/kg/day), 2-EH caused neither maternal nor developmental toxicity. Oral exposure of mice (GD 0-17 at

0 - 191 mg/kg/day) did not induce maternal or developmental toxicity. In mice dosed on GD 6-13 at 1525 mg/kg/day, developmental toxicity occurred concurrent with severe maternal toxicity including deaths.

The weight-of-evidence from studies in laboratory animals suggests that 2-EH is not a selective developmental toxicant, but can cause adverse developmental effects at dose levels that cause significant toxicity in the pregnant adult.

## SECTION 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

This material is expected to be very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

The product has not been tested. The statement has been derived from the properties of the individual components.

### MOBILITY

No data available.

### PERSISTENCE AND DEGRADABILITY

This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

### POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.

Partition coefficient n-octanol/water (logarithmic value): No data available

### Other adverse effects

No other adverse effects identified.

## SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by international, country, or local laws and regulations.

## SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**UN Shipping Description:** UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ETHYLHEXYL NITRATE), 9, III

**IMO/IMDG Shipping Description:** UN3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ETHYLHEXYL NITRATE), 9, III, MARINE POLLUTANT (2-ETHYLHEXYL NITRATE)

**ICAO/IATA Shipping Description:** UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ETHYLHEXYL NITRATE), 9, III

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**REGULATORY LISTS SEARCHED:**

01-1=IARC Group 1  
01-2A=IARC Group 2A  
01-2B=IARC Group 2B

No components of this material were found on the regulatory lists above.

**CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AIIC (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States).

**SECTION 16 OTHER INFORMATION**

**REVISION STATEMENT:** SECTION 02 - Environmental Classification information was added.  
SECTION 02 - Hazard Statements information was added.  
SECTION 02 - Pictogram information was modified.  
SECTION 02 - Precautionary Statements information was added.  
SECTION 02 - Precautionary Statements information was modified.  
SECTION 03 - Composition information was modified.  
SECTION 05 - Fire Fighters Protection Measures information was modified.  
SECTION 06 - Personal Precautions, Protective Equipment and Emergency Procedures information was modified.  
SECTION 07 - General Handling Information information was modified.  
SECTION 08 - Eye/Face Protection information was modified.  
SECTION 08 - General Considerations information was modified.  
SECTION 08 - Occupational Exposure Limit Table information was modified.  
SECTION 08 - Personal Protective Equipment List information was deleted.  
SECTION 08 - Personal Protective Equipment information was added.  
SECTION 08 - Respiratory Protection information was added.  
SECTION 08 - Respiratory Protection information was modified.  
SECTION 08 - Skin Protection information was modified.  
SECTION 09 - Physical/Chemical Properties information was modified.  
SECTION 11 - Carcinogenicity information was added.  
SECTION 11 - Germ Cell Mutagenicity information was added.  
SECTION 11 - Reproductive Toxicity information was added.  
SECTION 11 - Specific Target Organ Toxicity - Repeated Exposure information was added.  
SECTION 11 - Specific Target Organ Toxicity - Single Exposure information was added.  
SECTION 11 - Toxicological Information information was added.  
SECTION 12 - Ecological Information information was modified.  
SECTION 14 - ICAO Classification information was modified.  
SECTION 14 - IMO Classification information was modified.  
SECTION 14 - UN Classification information was modified.  
SECTION 15 - Chemical Inventories information was deleted.  
SECTION 15 - Chemical Inventories information was modified.

**Revision Date:** December 11, 2024

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet



CVX - Chevron	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

Prepared according to the Singapore Standard SS 586:3 2022

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