

Chemical Safety Data Sheet



SECTION 1 Chemical and enterprise identification

Product Number(s): 540616

Product Name: VARTECH™ Industrial System Cleaner

Company Name: Chevron (China) Investment Co., Ltd.

Company Address:

Unit 2308, China World Tower Office 2

No. 1 Jianguomenwai Avenue

Beijing 100004

People's Republic of China

Phone Number: 86 10 -5812 6300

Fax number: (86-10) 5812 6599

Email Address: CNLubesWeb@chevron.com

Emergency Phone Number: China: National Registration Centre for Chemicals: 0532-83889090

Recommended Use of the Chemical and Restrictions on Use: Industrial Oil

SECTION 2 Hazard overview

EMERGENCY OVERVIEW: Clear Liquid

- CAUSES MILD SKIN IRRITATION
- MAY CAUSE AN ALLERGIC SKIN REACTION
- SUSPECTED OF DAMAGING FERTILITY
- HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS

GHS CLASSIFICATION:

Health Hazards:

- Reproductive toxicant (fertility): Category 2.
- Skin irritation: Category 3.
- Skin Sensitizer: Category 1.

Environment Hazards:

- Acute aquatic toxicant: Category 3.
- Chronic aquatic toxicant: Category 3.

Label elements

Pictogram(s):



Signal Word: Warning

HAZARD STATEMENTS:

- Causes mild skin irritation.
- May cause an allergic skin reaction.
- Suspected of damaging fertility.
- Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:

Prevention:

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid breathing fume, gas, mist, vapours, or spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective gloves, protective clothing, eye protection, and face protection.

Response:

- IF ON SKIN: Wash with plenty of soap and water.
- IF exposed or concerned: Get medical advice or attention.
- Specific treatment (see Notes to Physician on this label).
- If skin irritation or rash occurs: Get medical advice or attention.
- Wash contaminated clothing before reuse.

Storage:

- Store locked up.

Disposal:

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

Physical Hazards: Not Applicable

Health Hazards:

- Causes mild skin irritation.
- May cause an allergic skin reaction.
- Suspected of damaging fertility.

Environmental Hazards:

- Harmful to aquatic life with long lasting effects.

SECTION 3 Ingredients/Composition Information

COMPONENTS	CAS NUMBER	The concentration or the concentration range (mass fraction, wt%)
Highly refined mineral oil (C15 - C50)	Mixture	70 - 99 %wt/wt
Polyether amine	Trade secret	1 - 10 %wt/wt
Polyalkaryl aminoether	Trade secret	1 - 10 %wt/wt
Solvent naphtha (petroleum), light aromatic	64742-95-6	1 - 5 %wt/wt
1,2,4-trimethylbenzene	95-63-6	0.1 - < 2.5 %wt/wt
Polyalkyl arylamine	Trade secret	0.1 - < 1 %wt/wt
Polyalkaryl carbamoyl hydroxyamine	Trade Secret	0.1 - < 1 %wt/wt
Polyalkaryloxy hydroxyurea	Trade secret	0.1 - < 1 %wt/wt

SECTION 4 FIRST AID MEASURES

First Aid:

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 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.

Most important symptoms and effects

IMMEDIATE HEALTH EFFECTS:

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

Skin: Contact with the skin causes irritation. Contact with the skin may cause an allergic skin reaction. Skin contact may cause drying or defatting of the skin. Symptoms may include pain, itching, discoloration, swelling, and blistering.

Ingestion: May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER HEALTH EFFECTS:

Reproduction and Birth Defects: Swallowing this material may cause adverse reproductive effects based on animal data. See Section 11 for additional information. Risk depends on duration and level of exposure.

Note to Physicians: Not Applicable

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

UNSUITABLE EXTINGUISHING MEDIA: No data available

Special Hazards and Risks: 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.

FIRE PRECAUTIONS AND PROTECTIVE MEASURES:

Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

SECTION 6 Emergency treatment of leaks

Personal Precautions, Protective Equipment and Emergency Procedures:

Observe all relevant local and international regulations. Eliminate all sources of ignition in vicinity of spilled material. 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.

Environmental Precautions:

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.

Methods and Material For Containment and Cleaning Up:

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. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

Prevention Measures for Secondary Disasters: See above

SECTION 7 HANDLING AND STORAGE

Handling:

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.

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.

Storage: Not applicable

SECTION 8 Contact control and 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.

Occupational Exposure Limits:

Component	Country/ Agency	Form	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 -	ACGIH	--	5 mg/m3	10 mg/m3	--	--

C50)						
1,2,4-trimethylbenzene	ACGIH	--	10 ppm	--	--	--

Consult local authorities for appropriate values.

Biological Limit Values: No data available

Monitoring Methods: No data available

ENGINEERING CONTROLS:

Use general ventilation, local exhaust ventilation, or a combination of both.

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/Hand 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)
Nitrile	0.8	5
Polyvinyl Chloride (PVC)	1.1	13
Viton Butyl	0.3	120

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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance

Color: Clear

Physical State: Liquid

Odor: Hydrocarbon odor

Odor Threshold: No data available

pH: Not Applicable

Melting Point: No data available

Freezing Point: No data available

Initial Boiling Point: No data available **Boiling Range:** No data available

Flashpoint: (Cleveland Open Cup) 128 °C (262 °F) (Minimum)

Flammability (solid, gas): Not Applicable

Flammability (Explosive) Limits (% by volume in air):

Lower: No data available Upper: No data available

Vapor Pressure: No data available

Relative Vapor Density: No data available

Particle Characteristics: Not applicable

Density: 0.8803 kg/l @ 15°C (59°F) (Typical)

Solubility: Insoluble in water.

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

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Kinematic Viscosity: 47.51 mm²/s @ 40°C (104°F) (Minimum)

Evaporation Rate: No data available

SECTION 10 STABILITY AND REACTIVITY

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

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

Hazardous Polymerization: Hazardous polymerization will not occur.

Incompatibility With Other Materials: Not applicable

Hazardous Decomposition Products: None known (None expected)

SECTION 11 TOXICOLOGICAL INFORMATION

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.

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

Skin Irritation: This material causes mild skin irritation. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Sensitization: The material may cause an allergic skin reaction. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

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.

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: This material is suspected of damaging fertility. 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: The material is not considered an aspiration hazard.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

COMPONENT: Light Aromatic Solvent Naphtha (CAS 64742-95-6, also described as High-Flash Aromatic Naphtha, Type I, as defined by ASTM D-3734). **GENETIC TOXICITY:** No evidence of genetic toxicity was observed in the following tests: Salmonella typhimurium reverse mutation assay (Ames test), in vitro Chinese Hamster Ovary (CHO) cell HGPRT mutation assay, in vitro Chinese Hamster Ovary (CHO) cell chromosomal aberration assay, in vitro Chinese Hamster Ovary (CHO) cell sister chromatid exchange assay, and in vivo rat bone marrow chromosome aberration assay. **SUBCHRONIC TOXICITY:** In a 13-week rat inhalation study using dose levels of 0, 100, 500, and 1500 ppm for 6 hours/day, 5 days/week, no target organ toxicity including neurotoxicity was observed at any dose level. Slight general systemic toxicity (decreased body weight gain) was observed at 1500 ppm.

DEVELOPMENTAL TOXICITY: In a mouse inhalation study using dose levels of 0, 100, 500, and 1500 ppm for 6 hours/day on gestation days 6-15, no signs of maternal toxicity or developmental toxicity were observed at 100 ppm. At 500 ppm, maternal toxicity (decreased body weight gain) and developmental toxicity (decreased fetal body weight) were observed. Severe maternal toxicity (44% mortality, decreased body weight gain, clinical signs of toxicity) and developmental toxicity (decreased number of live fetuses per litter, increased post-implantation losses per dam, decreased fetal body weights, delayed ossification, cleft palate) were observed at 1500 ppm. In a rat inhalation study using dose levels of 600, 1000, and 2000 mg/m³ for 24 hours/day on gestation days 7-15, signs of maternal toxicity (decreased body weight gain) were observed at all dose levels. At 600 mg/m³, no signs of fetal or developmental toxicity were observed. Signs of fetal toxicity (decreased male fetal body weight) and developmental toxicity (delayed ossification) were observed at 1000 and 2000 mg/m³. **REPRODUCTIVE TOXICITY:** In a rat 3-generation inhalation study using dose levels of 0, 100, 500, and 1500 ppm for 6 hours/day, 5 days/week, no signs of

general systemic or reproductive toxicity were observed at 100 ppm. At 500 ppm, slight parental toxicity (decreased body weight gain) and postnatal toxicity (decreased pup body weight) were observed, but reproductive parameters were not affected. Severe parental toxicity (mortality, decreased body weight gain, clinical signs of toxicity) and postnatal toxicity (decreased pup body weight) were observed at 1500 ppm, but reproductive parameters were not affected.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

This material is expected to be harmful 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.

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

MOBILITY IN SOIL

No data available.

SECTION 13 Waste disposal

Waste treatment methods

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

Contaminated Packaging:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

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

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN Number or ID Number: Not applicable

14.2 UN proper shipping name: Not applicable

14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: Not applicable

ICAO / IATA

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN Number or ID Number: Not applicable

14.2 UN proper shipping name: Not applicable

14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: Not applicable

IMO / IMDG

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN Number or ID Number: Not applicable

14.2 UN proper shipping name: Not applicable

14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: Not applicable

14.7 Maritime Transport in Bulk according to IMO Instruments: 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), ENCS (Japan), TSCA (United States).

One or more components does not comply with the following chemical inventory requirements: IECSC (China), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan).

SECTION 16 OTHER INFORMATION

REVISION STATEMENT: SECTION 01 - Company SDS Address information was modified.

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 08 - Engineering Control Measures information was added.

SECTION 08 - Occupational Exposure Limit Table information was modified.

SECTION 08 - Personal Protective Equipment information was deleted.

SECTION 08 - Personal Protective Equipment information was modified.

SECTION 08 - Respiratory Protection information was added.

SECTION 08 - Respiratory Protection information was modified.

SECTION 08 - Skin Protection information was modified.
 SECTION 11 - Toxicological Information information was modified.
 SECTION 12 - Ecological Information information was added.
 SECTION 12 - Ecological Information information was deleted.
 SECTION 14 - IMO Classification information was added.
 SECTION 15 - Chemical Inventories information was added.
 SECTION 15 - Chemical Inventories information was deleted.
 SECTION 15 - Chemical Inventories information was modified.

Revision Date: August 20, 2025

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

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