

SAFETY DATA SHEET

Canola Oil

Version 2.0

Revision Date 20.07.2023

Print Date 27.07.2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Canola Oil
Product code : X3609
CAS-No. : 120962-03-0

Manufacturer or supplier's details

Supplier : SHELL EASTERN CHEMICALS (S)
A REGISTERED BUSINESS OF SHELL EASTERN
TRADING (PTE) LTD (UEN:198902087C)
9 North Buona Vista Drive , #07-01
The Metropolis Tower 1
Singapore 138588
Singapore
Telephone : +65 6384 8269
Telefax : +65 6384 8454
Contact for Safety Data Sheet :

Emergency telephone number : +800 2537 8747 (ALERT SGS- toll Free) or +65 6542 9595 (ALERT SGS)

Recommended use of the chemical and restrictions on use

Recommended use : Feedstock in chemical industry.

Restrictions on use : This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

2. HAZARDS IDENTIFICATION

GHS Classification

Based on available data, the classification criteria are not met.

GHS label elements

Hazard pictograms : No Hazard Symbol required
Signal word : No signal word
Hazard statements : PHYSICAL HAZARDS:
Not classified as a physical hazard under GHS criteria.
HEALTH HAZARDS:

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Not classified as a health hazard under GHS criteria.

ENVIRONMENTAL HAZARDS:

Not classified as an environmental hazard under GHS criteria.

Precautionary statements

:

Prevention:

No precautionary phrases.

Response:

No precautionary phrases.

Storage:

No precautionary phrases.

Disposal:

No precautionary phrases.

Other hazards which do not result in classification

This material is a static accumulator. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Substance

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Canola oil	120962-03-0		100

4. FIRST-AID MEASURES

General advice

: Not expected to be a health hazard when used under normal conditions.

If inhaled

: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

In case of skin contact

: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

In case of eye contact

: If persistent irritation occurs, obtain medical attention. Flush eye with copious quantities of water. Remove contact lenses, if present and easy to do. Continue rinsing.

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- | | | |
|---|---|--|
| If swallowed | : | In general no treatment is necessary unless large quantities are swallowed, however, get medical advice. |
| Most important symptoms and effects, both acute and delayed | : | The onset of respiratory symptoms may be delayed for several hours after exposure.
If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.
Skin irritation signs and symptoms may include a burning sensation, redness, or swelling.
Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. |
| Protection of first-aiders | : | When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings. |
| Notes to physician | : | Treat symptomatically.
Call a doctor or poison control center for guidance. |

5. FIRE-FIGHTING MEASURES

- | | | |
|---|---|--|
| Suitable extinguishing media | : | Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. |
| Unsuitable extinguishing media | : | Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire.
Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. |
| Specific hazards during firefighting | : | A complex mixture of airborne solid and liquid particulates and gases (smoke).
Hazardous combustion products may include:
Carbon dioxide
Carbon monoxide may be evolved if incomplete combustion occurs.
Acrolein |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Keep adjacent containers cool by spraying with water.
If the fire cannot be extinguished the only course of action is to evacuate immediately.
Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways. |
| Special protective equipment for firefighters | : | Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in |

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a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Do not breathe fumes, vapour.
Material can create slippery conditions.
Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
- Environmental precautions : Prevent from spreading or entering into waterways, sewers, basements or confined areas.
- Methods and materials for containment and cleaning up : Prevent from spreading by making a barrier with sand, earth or other containment material.
Reclaim liquid directly or in an absorbent.
Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
- Avoid contact with skin, eyes and clothing.
Observe all relevant local and international regulations.

7. HANDLING AND STORAGE

- General Precautions : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.
Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
- Advice on safe handling : Ensure that all local regulations regarding handling and storage facilities are followed.
Avoid prolonged or repeated contact with skin.
Avoid inhaling vapour and/or mists.
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
When using do not eat or drink.
Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

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Avoidance of contact : Strong oxidising agents.
Strong bases.

Storage

Other data : Keep container tightly closed and in a cool, well-ventilated place.
Use properly labeled and closable containers.
Protect from light.
Store separately from oxidising agents.
Electrostatic charges will be generated during pumping.
Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk.
The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable.
Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.

Specific use(s) : Not applicable

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods
<http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods
<http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances
<http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany
<http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

Engineering measures : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select

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controls based on a risk assessment of local circumstances.
Appropriate measures include:
Adequate ventilation to control airborne concentrations.
Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:

Define procedures for safe handling and maintenance of controls.
Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.
Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.
Drain down system prior to equipment break-in or maintenance.
Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Do not ingest. If swallowed, then seek immediate medical assistance.

Personal protective equipment

Protective measures

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use.
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.
Check with respiratory protective equipment suppliers.
Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.
Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.

Select a filter suitable for the combination of organic gases and vapours and particles [Type A/Type P boiling point >65°C (149°F)].

Hand protection
Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Suitability and durability of a

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glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material.

- Eye protection : If material is handled such that it could be splashed into eyes, protective eyewear is recommended.
- Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.
It is good practice to wear chemical resistant gloves.
- Thermal hazards : Not applicable
- Hygiene measures : Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Environmental exposure controls

- General advice : Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.
Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.
Information on accidental release measures are to be found in section 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : Pale yellow
- Odour : Slight

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Odour Threshold	: Data not available
pH	: Not applicable
Melting point/freezing point	: Data not available
Boiling point/boiling range	: Data not available
Flash point	: $\geq 250\text{ }^{\circ}\text{C}$ / $\geq 482\text{ }^{\circ}\text{F}$
Evaporation rate	: Data not available
Flammability (solid, gas)	: Not applicable
Burning rate	: no data available
Upper explosion limit	: Data not available
Lower explosion limit	: Data not available
Vapour pressure	: 0.1 kPa (38 $^{\circ}\text{C}$ / 100 $^{\circ}\text{F}$)
Relative vapour density	: Data not available
Relative density	: Data not available
Density	: 870 - 940 kg/m ³
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: Data not available
Auto-ignition temperature	: ca. 261 $^{\circ}\text{C}$ / 502 $^{\circ}\text{F}$
Auto-ignition temperature	ca. 261 $^{\circ}\text{C}$ / 502 $^{\circ}\text{F}$
Viscosity	
Viscosity, dynamic	: Data not available
Viscosity, kinematic	: 57 mm ² /s (25 $^{\circ}\text{C}$ / 77 $^{\circ}\text{F}$)
Explosive properties	: Classification Code: Not classified.
Oxidizing properties	: Not applicable
Conductivity	: Low conductivity: < 100 pS/m, The conductivity of this material makes it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10,000 pS/m., Whether a liquid is nonconductive or semiconductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a

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liquid

10. STABILITY AND REACTIVITY

Reactivity	: Reacts with strong oxidising agents.
Chemical stability	: Stable under normal conditions of use.
Possibility of hazardous reactions	: Reacts with strong oxidising agents.
Conditions to avoid	: Extremes of temperature and direct sunlight. In certain circumstances product can ignite due to static electricity.
Incompatible materials	: Strong oxidising agents. Strong bases.
Hazardous decomposition products	: Hazardous decomposition products are not expected to form during normal storage. Combustion produces carbon monoxide, carbon dioxide along with thick smoke.

11. TOXICOLOGICAL INFORMATION

Basis for assessment	: Information given is based on product data, a knowledge of the components and the toxicology of similar products.
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Acute toxicity

Product:

Acute oral toxicity	: Remarks: Low toxicity LD50 > 5000 mg/kg
Acute inhalation toxicity	: Remarks: Low toxicity if inhaled. Based on available data, the classification criteria are not met.
Acute dermal toxicity	: Remarks: LD50 > 5000 mg/kg Low toxicity Based on available data, the classification criteria are not met.
Acute toxicity (other routes of administration)	: Remarks: Not a respiratory irritant

Skin corrosion/irritation

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Product:

Remarks: Not irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Not irritating to eye.

Respiratory or skin sensitisation

Product:

Remarks: Not a sensitiser.

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Product:

: Remarks: Non mutagenic

Carcinogenicity

Product:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

Material	GHS/CLP Carcinogenicity Classification
Rape oil	No carcinogenicity classification.

Reproductive toxicity

Product:

:
Remarks: Not a developmental toxicant., Based on available data, the classification criteria are not met., Does not impair fertility.

STOT - single exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

Aspiration toxicity

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Product:

Not an aspiration hazard.

Further information

Product:

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.
Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Ecotoxicity

Product:

Toxicity to fish (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to crustacean (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic plants (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity) : Remarks: Data not available

Toxicity to crustacean (Chronic toxicity) : Remarks: Data not available

Toxicity to microorganisms (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Persistence and degradability

Product:

Biodegradability : Remarks: Readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not have the potential to bioaccumulate significantly.

Mobility in soil

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Product:

Mobility

: Remarks: If product enters soil, one or more constituents will be highly mobile and may contaminate groundwater.

Other adverse effects

no data available

Product:

Additional ecological information

: Will exert oxygen demand when significant quantities enter watercourses and may cause damage to aquatic life.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues

: Recover or recycle if possible.
It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.
Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.
Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
Do not dispose into the environment, in drains or in water courses.
Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.
MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging

: Drain container thoroughly.
After draining, vent in a safe place away from sparks and fire.
Residues may cause an explosion hazard.
Do not, puncture, cut, or weld uncleaned drums.
Send to drum recoverer or metal reclaimer.
Do not pollute the soil, water or environment with the waste container.

14. TRANSPORT INFORMATION

International Regulations

ADR

Not regulated as a dangerous good

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IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Maritime transport in bulk according to IMO instruments

Pollution category : Y
Ship type : 2(k)
Product name : Rapeseed Oil

Special precautions for user

Not applicable

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Local Regulations

Workplace Safety and Health Act & Workplace Safety and Health (General Provision) Regulations	This product is not subject to the requirements in the Act/Regulations.
Fire Safety Act and Fire Safety (Petroleum & Flammable Materials) Regulations	This product is not subject to the requirements in the Act/Regulations.
Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives) Regulations	This product is not subject to the requirements in the Act/Regulations.
Environmental Protection and Management Act and Environmental Protection and Management (Hazardous Substances) Regulations	This product is not subject to the requirements in the Act/Regulations.

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Other international regulations

The components of this product are reported in the following inventories:

AIIC : Listed
DSL : All components listed.
IECSC : Listed
ENCS : Listed
KECI : Listed
NZIoC : Listed
PICCS : Listed
TSCA : Listed
TCSI : Listed
IECSC : Listed

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PICCS

: All components listed or polymer exempt.

16. OTHER INFORMATION

Abbreviations and Acronyms

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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