

Safety Data Sheet

IMPORTANT: Read this SDS before handling or disposing of this product and pass this information on to employees, customers, and users of this product

SDS NO. : 018169
REVISION DATE : 1/3/2023
PAGES : 6

Physical State: Liquid
Color : Bright and Clear Brown
Odor : Mild petroleum odor

WARNING:
Keep away from all sources of
Spills may create a slipping hazard

Protective Clothing



SECTION 1. PRODUCT IDENTIFICATION

PRODUCT NAME	: PREMIUM ENGINE FLUSH
PRODUCT FAMILY	: GASOLINE ENGINE OIL
TRADENAMES AND SYNONYMS	: NOT AVAILABLE
IDENTIFICATION OF THE PREPARATION	: BASE OIL / ADDITIVES
SUPPLIER MANUFACTURING	: TDC AUTOMOBILE SDN. BHD.
EMERGENCY TELEPHONE NO	: +6019-235 5285

SECTION 2. COMPOSITION/ INFORMATION ON INGREDIENTS

The above-mentioned product is a Petroleum, solvent-refined heavy paraffinic oil. Based on available information, the components of this preparation are not expected to impart hazardous properties to this product.

SECTION 3. HAZARDS IDENTIFICATION

MAJOR ROUTE(S) OF ENTRY	: Skin contact
EYE	: Contact may cause mild eye irritation including stinging, watering, and redness.
INGESTION (SWALLOWING)	: No harmful effects are expected from ingestion.
SIGNS AND SYMPTOMS	: Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea, and diarrhea.
POTENTIAL HEALTH EFFECTS	: Inadequate evidence available to evaluate the cancer hazard of this material. See Section 11 for carcinogenicity information of individual components, if any.

Also, see Emergency overview and hazard ratings on the top of Page 1 of this SDS

ENVIRONMENTAL : It is not readily biodegradable and is expected to have a high potential to bioaccumulate.

OTHER HAZARDS : These products are not classified as flammable but will burn. They are not classified as dangerous for supply or conveyance.

SECTION 4. FIRST AID MEASURE

EYE : If irritation or redness develops, move the victim away from exposure and into fresh air. Flush your eyes with clean water. If symptoms persist, seek medical attention.

SKIN : Wipe material from the skin, remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If the skin surface is damaged, apply a clean dressing and seek medical attention. If the skin surface is not damaged, cleanse the affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops, seek medical attention.

INHALATION (BREATHING) : If respiratory symptoms develop, move the victim away from the source of exposure and into fresh air. If symptoms persist, seek medical attention. If the victim is not breathing, clear the airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION (SWALLOWING) : First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

NOTE TO PHYSICIANS : High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. Often these injuries require extensive emergency surgical debridement and all injuries should be evaluated by a specialist to assess the extent of injury.
Acute aspirations of large amounts of oil-laden material may produce serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

SECTION 5. FIRE-FIGHTING MEASURES

SPECIFIC HAZARDS : Combustion is likely to give rise to a complex mixture of airborne solid and liquid particulars and gases including carbon monoxide, oxides of sulfur, and unidentified organic and inorganic compounds.

EXTINGUISHING MEDIA : Use the foam and dry chemical powder. Carbon dioxide, sand, or earth may be used for small fires only. These are unsuitable extinguishing media: water in a jet and Halon extinguishers.

PROTECTIVE EQUIPMENT : Proper protective equipment and breathing apparatus must be worn when approaching a fire in a confined space.

SECTION 6. ACCIDENTAL RELEASE MEASURES

This material may burn but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons downwind of the spill/release, isolate immediate hazard areas, and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended.

PERSONAL AND ENVIRONMENTAL PRECAUTIONS:

Avoid contact with skin and eyes, and wear impermeable gloves and boots. Prevent from spreading or entering into drains, ditches, or rivers by using sand, earth, or other appropriate barriers. Inform local authorities if this cannot be prevented.

CLEAN-UP FOR SMALL SPILLAGE:

Absorb liquid with sand or earth. Sweep up and remove to a suitable, clearly marked container for disposal by local regulations.

CLEAN-UP FOR LARGE SPILLAGE:

Prevent it from spreading by making a barrier with sand, earth, or other containment material. Reclaim liquid directly or in an absorbent. Dispose of as for small spills.

SECTION 7. HANDLING AND STORAGE

When handling products in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages. Keep in a cool, dry, well-ventilated place. Use properly labeled and closable containers. Avoid direct sunlight, heat sources, and strong oxidizing agents.

STORAGE TEMPERATURE : 0 degrees C minimum to 60 degrees C maximum.

RECOMMENDED MATERIALS : For containers or container linings, use mild steel or high-density polyethylene. For containers or container linings, avoid PVC. Polyethylene containers should not be exposed to high temperatures because of the possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING CONTROL MEASURES:

Use local exhaust ventilation if there is a risk of inhalation of vapors.

PERSONAL PROTECTION EQUIPMENT:



Personal protective equipment should be selected based on the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional under OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required for mists or aerosols.

OCCUPATIONAL EXPOSURE STANDARDS:

Threshold limit values are given below. Lower exposure limits may apply locally:

<u>Component name</u>	<u>Limit</u>	<u>Type</u>	<u>Value</u>	<u>Unit</u>	<u>Other information</u>
Oil mist, Mineral	8-hour	TWA	5	mg/m ³	ACGIH
	15 min	stel	10	mg/m ³	ACGIH

HYGIENE MEASURES : Wash hands before eating and drinking.

RESPIRATORY PROTECTION : Not normally required. If the oil mist cannot be controlled, a respirator fitted with an organic vapor cartridge combined with a particular pre-filter should be used.

HAND PROTECTION : PVC or nitrile rubber gloves.

EYE PROTECTION : When handling this product, it is recommended to wear splash-resistant goggles and a face shield.

SKIN/ BODY PROTECTION : When handling this product, it is recommended to wear a chemical resistance apron, jacket, and rubber boots.

ATTENTION: Used motor oil is a possible skin cancer hazard based on animal data. Repeated exposure to oil mist over the OSHA limit (5mg/m³) can result in the accumulation of oil droplets in pulmonary tissue.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	:	Bright & Clear Brown
ODOR	:	Petroleum-mild
PHYSICAL STATE	:	Liquid
BOILING POINT	:	Not available.
MELTING POINT	:	NA
FLASH POINT (PMCC)	:	Typical 200 °C
VISCOSITY	:	Kinematic: 32.00 cst at 40 °C; 5.50 cst at 100 °C
SOLUBILITY	:	Insoluble In Water
DENSITY	:	0.8300 to 0.8500 kg/L @ 15°C

The above data are typical values and do not constitute a specification.

SECTION 10. STABILITY AND REACTIVITY

STABILITY : Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

CONDITIONS TO AVOID : Avoid all possible sources of ignition (see Sections 5 and 7). Extended exposure to high temperatures can cause decomposition

HAZARDOUS DECOMPOSITION PRODUCTS:
Combustion can yield carbon, nitrogen sulfur oxides, and hydrogen sulfide.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

- BASIC FOR ASSESSMENT** : Toxicological data have not been determined specifically for this product. The information given is based on a knowledge of the components and the toxicology of similar products.
- ACUTE TOXICITY – ORAL** : LD50 is expected to be above 2000 mg/ kg.
- ACUTE TOXICITY – DERMAL** : LD50 is expected to be above 2000 mg/kg.
- EYE IRRITATION** : Expected to be slightly irritant.
- SKIN IRRITATION** : Expected to be slightly irritant.
- RESPIRATORY IRRITATION** : If mists are inhaled, slight irritation of the respiratory tract may occur.
- SKIN SENSITIZATION** : Not expected to be a skin sensitizer.
- CARCINOGENICITY** : The product is based on mineral oils of the type shown to be noncarcinogenic in animal skin-painting studies other components are not known to be associated with carcinogenic effects.
- MUTAGENICITY** : Not considered to be a mutagenic hazard.

SECTION 12. ECOLOGICAL INFORMATION

- ENVIRONMENTAL MOBILITY** : This is a preparation and environmental assessment is based on component data and that of similar products. A mineral oil component of this preparation floats and can migrate from water to land. This preparation contains a substance or substances classified as Dangerous for the Environment.
- ENVIRONMENTAL DEGRADABILITY** : This preparation is not expected to be “readily” biodegradable. A component (s) of this preparation is expected to be “inherently” biodegradable according to OECD guidelines.
- ECOTOXICITY AND BIOACCUMULATION** : Expected to be harmful to aquatic organisms. Long term adverse effects on aquatic organisms are possible if continuous exposure is maintained.

SECTION 13. DISPOSAL CONSIDERATIONS

- WATER DISPOSAL** : Used or waste oil should be recycled or disposed of by prevailing regulations, preferable to a recognized collector or contractor. The competence of the contractor to deal satisfactorily with used oil should be established beforehand. Used or waste oil should not be allowed to contaminate soil or water.
- PRODUCT DISPOSAL** : As for waste disposal.
- CONTAINER DISPOSAL** : 200-litre drums should be emptied and returned to the supplier or sent to a drum reconditioner without removing or defacing markings or labels. Non-reusable small metal and plastic containers should be recycled where possible or disposed of as domestic refuse.

SECTION 14. TRANSPORT INFORMATION

Not dangerous for conveyance under UN, IMO, ADR/RID, and IATA/ICAO codes.

SECTION 15. REGULATORY INFORMATION

EC CLASSIFICATION : Not classified as dangerous under EC criteria.
EINECS (EC) : All components comply.
TSCA (USA) : Please consult suppliers.
Other information : For listing on other inventories, eg MITI (Japan), AICS (Australia) and DSL (Canada), please consult suppliers.

SECTION 16. OTHER INFORMATION

USES AND RESTRICTIONS : Lubricants
TECHNICAL CONTACT POINT : Chemist
TECHNICAL CONTACT NUMBER : **Telephone** : +6019-235 5285
Address : TDC AUTOMOBILE SDN. BHD.
202 , Block B, Phileo Damansara 2, 15, Jalan
16/11, Off Jalan Damansara, 46350 Petaling
Jaya, Selangor.

Disclaimer: These characteristics are typical specifications of the current product. Whilst future production will conform to DashOil specifications, variations may occur.
