

SAFETY DATA SHEET



Castrol TFC 410

Section 1. Identification

GHS product identifier Castrol TFC 410

Product code 453857-TH01

SDS no. 453857

Relevant identified uses of the substance or mixture and uses advised against

**Use of the substance/
mixture** Automatic transmission fluid
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

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Section 2. Hazards identification

GHS Classification Not classified.

GHS label elements

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

**Other hazards which do not
result in classification** Defatting to the skin.

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥25 - ≤50	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≥25 - ≤50	64742-65-0
Phenol, dodecyl-, sulphurised, carbonates, calcium salts, overbased	≤3	68784-26-9
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	≤3	4259-15-8
Distillates (petroleum), hydrotreated light paraffinic	≤3	64742-55-8
Phenol, dodecyl-, branched	<0.3	74499-35-7 / 121158-58-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

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

Specific treatments	No specific treatment.
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.

Specific hazards arising from the chemical In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products	Combustion products may include the following: phosphorus oxides carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide) sulphur oxides (SO, SO ₂ , etc.)
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Special protective actions for fire-fighters No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for fire-fighters Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction
Distillates (petroleum), solvent-dewaxed heavy paraffinic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction
Distillates (petroleum), hydrotreated light paraffinic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Eye protection

Safety glasses with side shields.

Skin protection

Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 8. Exposure controls/personal protection

Skin protection

Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Colour	Amber.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Boiling point	Not available.
Drop Point	Not available.
Flash point	Open cup: >200°C (>392°F) [Cleveland.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Density	<1000 kg/m ³ (<1 g/cm ³) at 15°C
Solubility	insoluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 41.28 mm ² /s (41.28 cSt) at 40°C Kinematic: 6 to 7 mm ² /s (6 to 7 cSt) at 100°C

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.
Inhalation Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
Skin contact Defatting to the skin. May cause skin dryness and irritation.
Ingestion No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.
Inhalation May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.
Skin contact Adverse symptoms may include the following:
irritation
dryness
cracking
Ingestion No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Eye contact Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Skin contact Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Ingestion Ingestion of large quantities may cause nausea and diarrhoea.

Potential chronic health effects

General No known significant effects or critical hazards.
Carcinogenicity No known significant effects or critical hazards.
Mutagenicity No known significant effects or critical hazards.
Teratogenicity No known significant effects or critical hazards.
Developmental effects No known significant effects or critical hazards.
Fertility effects No known significant effects or critical hazards.

Section 12. Ecological information

Environmental effects No known significant effects or critical hazards.

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility Spillages may penetrate the soil causing ground water contamination.

Other adverse effects No known significant effects or critical hazards.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	IMDG	IATA
UN number	Not regulated.	Not regulated.
UN proper shipping name	-	-
Transport hazard class(es)	-	-
Packing group	-	-
Environmental hazards	No.	No.
Additional information	-	-

Special precautions for user Not available.

Transport in bulk according to Annex II of Marpol and the IBC Code Not available.

Section 15. Regulatory information

Regulation according to other foreign laws

Australia inventory (AICS)	All components are listed or exempted.
Canada inventory status	All components are listed or exempted.
China inventory (IECSC)	At least one component is not listed.
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
United States inventory (TSCA 8b)	☒ All components are active or exempted.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.
Harmful Chemicals List	Not listed

Section 16. Other information

History

Date of issue/Date of revision	22/10/2020.
Date of previous issue	13/07/2018.
Prepared by	Product Stewardship

Key to abbreviations

ACGIH = American Conference of Industrial Hygienists
CAS Number = Chemical Abstracts Service Registry Number
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
OEL = Occupational Exposure Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
SDS = Safety Data Sheet
STEL = Short term exposure limit
TWA = Time weighted average
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods. Varies = may

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Section 16. Other information

contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

References

Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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