SAFETY DATA SHEET

Castrol Transmax ATF DX III Multivehicle

In accordance with the Standard for Classification and Labeling of Chemical Substance and Safety Data Sheet, Article 10 Paragraph 1

Section 1. Chemical product and company identification

A. Product name Castrol Transmax ATF DX III Multivehicle

Product code 469689-DE01

SDS # 469689

B. 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.

Identified uses

Not applicable.

Uses advised against

Not applicable.

C. Manufacturer

Supplier

BP Korea Ltd.
19F., 302, Teheran-ro, Gangnam-gu, Seoul, 06210
Republic of Korea

Tel: +82 -1577-1904

EMERGENCY TELEPHONE NUMBER Carechem: +65 3158 1074 (24/7)

Section 2. Hazards identification

A. Hazard classification Not classified.

This product was evaluated in accordance with the Industrial Safety and Health Act and the Chemical Control Act, and determined to be 'not classified'.

B. GHS label elements, including precautionary statements

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

General

Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

Section 2. Hazards identification

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

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Other means of identification Not available.

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

Hazardous ingredients

Ingredient name	Synonym	CAS number	%
Distillates (petroleum), hydrotreated heavy paraffinic	Baseoil - unspecified; Mineral oil; Paraffin oil;	64742-54-7	62.135
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Baseoil - unspecified; Distillates, petroleum, solvent dewaxed heavy paraffinic; Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic; Paraffin oil; Distillates, petroleum, solvent-dewaxed heavy paraffinic; Distillate (Pet.) solvent-dewaxed heavy paraffinic; SOLVENT REFINED PARAFFINIC MINERAL OIL; OILS, PARAFFINIC, HEAVY, SOLVENT DEWAXED; Solvent dewaxed heavy paraffinic petroleum oil; PARAFFINIC PETROLEUM DISTILLATES; Distillates (petroleum), solvent-dewaxed heavy paraffinic, Baseoil - unspecified	64742-65-0	28.325
Distillates (petroleum), hydrotreated light paraffinic	Baseoil - unspecified; Distillates, petroleum, hydrotreated light paraffinic; Mineral oil, petroleum distillates, hydrotreated light paraffinic; Mineral oil, petroleum distillates, hydrotreated (mild) light paraffinic; Distillates (petroleum), hydro-treated light paraffinic; Paraffin oil; DISTILLATES (PETROLEUM) HYDROTREATED LIGHT PARAFFINIC; DISTILLATES, HYDROTREATED LIGHT PARAFFINIC; ALIPHATIC	64742-55-8	2.975

	HYDROCARBON, SULFURIZED; Distillates (petroleum), hydrotreated light paraffinic, Baseoil - unspecified		
Distillates (petroleum), hydrotreated heavy paraffinic	Baseoil - unspecified; Mineral oil; Paraffin oil;	64742-54-7	1.19
Bis (2-hydroxyethyl) tallow alkylamine	Ethanol, 2,2'-iminobis-, N-tallow alkyl derivatives; PEG-2 Tallow Amine; Amines, tallow alkyl, ethoxylated; Alkyl* N,N-bis (2-hydroxyethyl)amine; N-(Tallow-alkyl) derivatives of 2,2'-iminodiethanol; N,N-Dipolyoxyalkylene-N-alkyl (or alkenyl) (C6-28) amine; 2,2'-Iminobisethanol, N-tallow alkyl derivs.; BIS TALLOW (2-HYDROXYETHYL) AMINE; ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVE; DERIVATIVES, ETHANOL, 2,2'-IMINOBIS, N-TALLOW ALKYL; Ethanol,2,2'-iminobis-,N-tallow alkyl dervis.	61791-44-4	0.2499
3-(isodecyloxy)propylamine	1-Propanamine, 3-(isodecyloxy)-; Isodecyloxypropylamine; 3-Isodecyloxypropylamine; Propylamine, 3-isodecoxy-; 3-(Isodecyloxy)propan-1-amine; Alkyl(C1-20) -3-aminopropyl ether; 3-(Isodecyloxy) -1-propanamine; 3-(8-methylnonoxy)propan-1-amine	30113-45-2	0.0595

Non-hazardous ingredients

Ingredient name	Synonym	CAS number	%
Trade secret.	Trade secret.	Trade secret.	2.38 - 2.975
Trade secret.	Trade secret.	Trade secret.	1.19 - 1.785
Trade secret.	Trade secret.	Trade secret.	0.595 - 1.1781
Trade secret.	Trade secret.	Trade secret.	0.357 - 0.5831
Trade secret.	Trade secret.	Trade secret.	0.119 - 0.357
Trade secret.	Trade secret.	Trade secret.	0.119 - 0.357
Trade secret.	Trade secret.	Trade secret.	0.119 - 0.357
Trade secret.	Trade secret.	Trade secret.	0.119 - 0.357
Trade secret.	Trade secret.	Trade secret.	0.119 - 0.357
Trade secret.	Trade secret.	Trade secret.	0.0595 - 0.11781
Trade secret.	Trade secret.	Trade secret.	0.0595 - 0.11781

Section 3. Composition/information on ingredients

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

A. 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.

B. 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. If skin irritation or rash occurs: Get medical advice/attention.

C. Inhalation

If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

D. Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

E. Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

No specific treatment.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

A. Extinguishing media

Suitable

In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

Not suitable

Do not use water jet.

B. 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:
carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide)
nitrogen oxides (NO, NO_2 etc.)

C. Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Special precautions 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.

Section 6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

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.

B. 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).

C. 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. Contaminated work clothing should not be allowed out of the workplace. 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

A. Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	**ACGIH TLV (United States) [Mineral Oil, pure, highly and severely refined]** A4. TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. Issued/Revised: 11/2009.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**ACGIH TLV (United States) [Mineral Oil, pure, highly and severely refined]** A4. TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. Issued/Revised: 11/2009.
Distillates (petroleum), hydrotreated light paraffinic	**ACGIH TLV (United States) [Mineral Oil, pure, highly and severely refined]** A4. TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. Issued/Revised: 11/2009.

Distillates (petroleum), hydrotreated heavy paraffinic	**ACGIH TLV (United States) [Mineral Oil, pure, highly and severely refined]** A4. TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. Issued/Revised: 11/2009.

Biological exposure indices

No exposure indices known.

B. 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.

C. Personal protective equipment

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.

Eye protection

Safety glasses with side shields.

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.

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.

Section 8. Exposure controls/personal protection

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

A. Appearance

Physical state Liquid.

Colour Red.

B. Odour Not available.

C. Odour threshold Not available.

D. pH Not applicable.

E. Melting/freezing point Not available.

F. Boiling point or initial boiling point and boiling range Not available.

G. Flash point Open cup: >210°C (>410°F) [Cleveland]

H. Evaporation rate Not available.

I. Flammability (solid, gas) Not available.

J. Lower and upper explosive (flammable) limits Not available.

K. Vapour pressure >0.01 kPa

	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
Distillates (petroleum), hydrotreated heavy paraffinic	<0.07501	<0.01	ASTM D 5191			
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.07501	<0.01	ASTM D 5191			
Distillates (petroleum), hydrotreated light paraffinic	<0.07501	<0.01	ASTM D 5191			
Distillates (petroleum), hydrotreated heavy paraffinic	<0.07501	<0.01	ASTM D 5191			

L. Solubility(ies)

Media	Result
water	Not soluble

M. Vapour density Not available.

N. Relative density Not available.

Density <1000 kg/m³ (<1 g/cm³) at 15°C

O. Partition coefficient: n-octanol/water Not applicable.

P. Auto-ignition temperature Not available.

Section 9. Physical and chemical properties

Q. Decomposition temperature Not available.

R. Viscosity Kinematic: 35 mm^2/s (35 cSt) at 40°C
Kinematic: 6.8 to 8 mm^2/s (6.8 to 8 cSt) at 100°C

Particle characteristics

Median particle size Not applicable.

Section 10. Stability and reactivity

A. 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.

B. Conditions to avoid No specific data.

C. Incompatible materials No specific data.

D. Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

A. Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion No known significant effects or critical hazards.

Skin contact Defatting to the skin. May cause skin dryness and irritation.

Eye contact No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

Ingestion No specific data.

Skin contact Adverse symptoms may include the following:
irritation
dryness
cracking

Eye contact No specific data.

B. Health hazards

Acute toxicity

Product/ingredient name	Result

Distillates (petroleum), hydrotreated heavy paraffinic	**Rat - Oral - LD50** >5000 mg/kg OECD 401 **Rabbit - Dermal - LD50** >5000 mg/kg OECD 402 **Rat - Inhalation - LC50 Dusts and mists** >5 mg/l [4 hours] OECD 403
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**Rat - Oral - LD50** >5000 mg/kg OECD 401 **Rat - Dermal - LD50** >2000 mg/kg OECD 402 **Rat - Inhalation - LC50 Dusts and mists** >5.53 mg/l [4 hours] OECD 403
Distillates (petroleum), hydrotreated light paraffinic	**Rat - Oral - LD50** >5000 mg/kg OECD 401 **Rabbit - Dermal - LD50** >5000 mg/kg OECD 402 **Rat - Inhalation - LC50 Dusts and mists** >5.53 mg/l [4 hours] OECD 403
Distillates (petroleum), hydrotreated heavy paraffinic	**Rat - Oral - LD50** >5000 mg/kg OECD 401 **Rabbit - Dermal - LD50** >5000 mg/kg OECD 402 **Rat - Inhalation - LC50 Dusts and mists** >5 mg/l [4 hours] OECD 403
Bis (2-hydroxyethyl) tallow alkylamine	**Rat - Oral - LD50** 1350 mg/kg OECD 401
3-(isodecyloxy)propylamine	**Rat - Oral - LC50** 500 to 2000 mg/kg OECD 401 **Rabbit - Dermal - LC50** >2000 mg/kg OECD 402

Skin corrosion/irritation

Product/ingredient name	Result

Distillates (petroleum), hydrotreated heavy paraffinic	**Rabbit - Skin - Mild irritant** OECD 404
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**Rabbit - Skin - Non-irritant to skin.**
Distillates (petroleum), hydrotreated light paraffinic	**Rabbit - Skin - Non-irritant to skin.**
Distillates (petroleum), hydrotreated heavy paraffinic	**Rabbit - Skin - Mild irritant** OECD 404
Bis (2-hydroxyethyl) tallow alkylamine	**Rabbit - Skin - Corrosive** OECD 404
3-(isodecyloxy)propylamine	**Rabbit - Skin - Corrosive** OECD 404

Serious eye damage/eye irritation

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
Distillates (petroleum), hydrotreated light paraffinic	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
Distillates (petroleum), hydrotreated heavy paraffinic	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
3-(isodecyloxy)propylamine	**BCOP - Eyes - Severe irritant** OECD 437

Respiratory corrosion/irritation

Not available.

Respiratory or skin sensitization

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Guinea pig - skin** OECD 406 Result: Not sensitising
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**Guinea pig - skin** OECD 406 Result: Not sensitising
Distillates (petroleum), hydrotreated light paraffinic	**Guinea pig - skin** OECD 406 Result: Not sensitising
Distillates (petroleum), hydrotreated heavy paraffinic	**Guinea pig - skin** OECD 406 Result: Not sensitising
Bis (2-hydroxyethyl) tallow alkylamine	**Guinea pig - skin** OECD 406 Result: Not sensitising

Section 11. Toxicological information

CMR - ISHA Article 42 Occupational Exposure Limits

Not available.

Germ cell mutagenicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**In vitro - Bacteria** Bacterial Reverse Mutation Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Chromosomal Aberration Test Result: Negative **In vivo - Mammal - species unspecified** Mammalian Erythrocyte Micronucleus Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Cell Gene Mutation Test Result: Negative
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative
Distillates (petroleum), hydrotreated light paraffinic	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative
Distillates (petroleum), hydrotreated heavy paraffinic	**In vitro - Bacteria** Bacterial Reverse Mutation Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Chromosomal Aberration Test Result: Negative **In vivo - Mammal - species unspecified** Mammalian Erythrocyte Micronucleus Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Cell Gene Mutation Test Result: Negative
Bis (2-hydroxyethyl) tallow alkylamine	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Cell Gene Mutation Test] Result: Negative **In vitro - Mammalian-Human** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative
3-(isodecyloxy)propylamine	**In vitro - Bacteria** OECD 471 Result: Negative **In vivo - Mammal - species unspecified** OECD 474 Result: Negative

Section 11. Toxicological information

Carcinogenicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Mouse - Dermal - Unspecified** OECD 451 Result: Negative
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**Mouse - Dermal - Unspecified** OECD 451 Result: Negative
Distillates (petroleum), hydrotreated heavy paraffinic	**Mouse - Dermal - Unspecified** OECD 451 Result: Negative

Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	-	A4
Distillates (petroleum), solvent-dewaxed heavy paraffinic	-	-	-	A4
Distillates (petroleum), hydrotreated light paraffinic	-	-	-	A4
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	-	A4

Reproductive toxicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Rat - Oral** OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**Rat - Oral** OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Distillates (petroleum), hydrotreated light paraffinic	**Rat - Oral** OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Distillates (petroleum), hydrotreated heavy paraffinic	**Rat - Oral** OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Bis (2-hydroxyethyl) tallow alkylamine	**Rat - Oral** OECD 422 Maternal toxicity: Positive Fertility effects: Equivocal

3-(isodecyloxy)propylamine	Developmental: Equivocal **Rat - Oral** OECD 422 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed heavy paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1

Potential chronic health effects

Not available.

Conclusion/Summary[Product] Not available.

General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	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.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Castrol Transmax ATF DX III Multivehicle (Neuhof) - Parent	87197.4	N/A	N/A	N/A	N/A
Bis (2-hydroxyethyl) tallow alkylamine	500	N/A	N/A	N/A	N/A
3-(isodecyloxy)propylamine	500	N/A	N/A	N/A	N/A

Section 12. Ecological information

A. Ecotoxicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Acute - EL50** OECD 201 Algae >100 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >10000 mg/l [48 hours] **Acute - LL50** OECD 203 Fish >100 mg/l [96 hours] **Chronic - NOEL** OECD 201 Algae ≥100 mg/l [72 hours] **Chronic - NOEL** OECD 211 Daphnia 10 mg/l [21 days]
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**Acute - EL50** OECD 201 Algae >100 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >10000 mg/l [48 hours] **Acute - LL50** OECD 203 Fish >100 mg/l [96 hours] **Chronic - NOEL** OECD 201 Algae ≥100 mg/l [72 hours] **Chronic - NOEL** OECD 211 Daphnia 10 mg/l [21 days]
Distillates (petroleum), hydrotreated light paraffinic	**Acute - EL50** OECD 201 Algae >100 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >10000 mg/l [48 hours] **Acute - LL50** OECD 203 Fish

	>100 mg/l [96 hours] **Chronic - NOEL** OECD 201 Algae ≥100 mg/l [72 hours] **Chronic - NOEL** OECD 211 Daphnia 10 mg/l [21 days]
Distillates (petroleum), hydrotreated heavy paraffinic	**Acute - EL50** OECD 201 Algae >100 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >10000 mg/l [48 hours] **Acute - LL50** OECD 203 Fish >100 mg/l [96 hours] **Chronic - NOEL** OECD 201 Algae ≥100 mg/l [72 hours] **Chronic - NOEL** OECD 211 Daphnia 10 mg/l [21 days]
Bis (2-hydroxyethyl) tallow alkylamine	**Acute - EC50** OECD 201 Algae 0.0538 mg/l [72 hours] **Acute - EC50** OECD 202 Daphnia 0.043 mg/l [48 hours] **Acute - LC50** OECD 203 Fish 0.1 mg/l [96 hours] **Chronic - EC10** OECD 201 Algae 0.0156 mg/l [72 hours] **Chronic - EC10** OECD 211 Daphnia 0.0107 mg/l [21 days]
3-(isodecyloxy)propylamine	**Acute - EC50** OECD 201 Algae 0.0544 mg/l [72 hours] **Acute - EC50** OECD 202 Daphnia

1.05 mg/l [48 hours]
Acute - LC50
OECD 203
Fish
2.14 mg/l [96 hours]
Chronic - ErC10
OECD 201
Algae
0.0421 mg/l [72 hours]
Chronic - EC10
OECD 211
Daphnia
0.738 mg/l [21 days]

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

B. Persistence and degradability

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F 31% [28 days] - Not readily
Distillates (petroleum), solvent-dewaxed heavy paraffinic	OECD 301F 31% [28 days] - Not readily
Distillates (petroleum), hydrotreated light paraffinic	OECD 301F 31% [28 days] - Not readily
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F 31% [28 days] - Not readily
Bis (2-hydroxyethyl) tallow alkylamine	OECD 301D 61 to 65% [28 days] - Readily
3-(isodecyloxy)propylamine	OECD 301D 68% [28 days]

C. Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Bis (2-hydroxyethyl) tallow alkylamine	3.6	-	Low

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

D. Mobility in soil

Soil/water partition coefficient Not available.

Mobility Spillages may penetrate the soil causing ground water contamination.

E. Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

A. Disposal methods

The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

B. Disposal precautions

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
A. UN number	Not regulated.	Not regulated.
B. UN proper shipping name	-	-
C. Transport hazard class(es)	-	-
D. Packing group	-	-
E. Environmental hazards	No.	No.
F. Additional information	-	-

Special precautions for user Not available.

Section 15. Regulatory information

A. Regulation according to ISHA

ISHA article 117 (Harmful substances prohibited from manufacture) None of the components are listed.

ISHA article 118 (Harmful substances requiring permission) None of the components are listed.

Article 2 of Youth Protection Act on Substances Hazardous to Youth Not applicable.

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:

Distillates (petroleum), hydrotreated heavy paraffinic
Distillates (petroleum), solvent-dewaxed heavy paraffinic
Distillates (petroleum), hydrotreated light paraffinic
Distillates (petroleum), hydrotreated heavy paraffinic

ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors)	The following components are listed: ethylene oxide, toluene
ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work Environment Measurement)	None of the components are listed.
ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check-up)	The following components are listed: metal working fluids: oil mist, mineral
Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control)	None of the components are listed.

B. Regulation according to Chemicals Control Act

Article 11 (TRI)	None of the components are listed.
Article 18 Prohibited (K-Reach Article 27)	None of the components are listed.
Article 19 Candidate substances subject to authorization (K-Reach Article 25)	The following components are listed: Benzene
Article 19 Subject to authorization (K-Reach Article 25)	None of the components are listed.
Article 20 Toxic Chemicals (K-Reach Article 20)	Not applicable
Article 20 Restricted (K-Reach Article 27)	None of the components are listed.

Article 39 (Accident Precaution Chemicals)

Not listed.

MoE 2021-51 - Regulations on the quantity of toxic substances, restricted substances, prohibited substances and permitted substances

Section 15. Regulatory information

Ingredient name	Higher regulated quantity	Lower regulated quantity
ethyl acrylate	200 tonnes	5 tonnes
naphthalene	400 tonnes	20 tonnes
Propylene oxide	20 tonnes	2 tonnes
Ethylene oxide	20 tonnes	2 tonnes
1,4-dioxane	200 tonnes	5 tonnes
Toluene	400 tonnes	2 tonnes
Benzene	20 tonnes	2 tonnes

Existing Chemical Substances Subject to Registration The following components are listed: 2-Methyl-2-propenoic acid dodecyl ester, Naphthalene, Methyl oxirane, Oxirane, 1,4-Diethylene dioxide, Toluene, Benzene

C. Dangerous Materials Safety Management Act

Class: Class 4 - Flammable Liquid
Item: 6. Class 4 petroleums
Threshold: 6000 L
Danger category: III
Signal word: Contact with sources of ignition prohibited

D. Wastes regulation Dispose of contents and container in accordance with all local, regional, national and international regulations.

E. Regulation according to other foreign laws

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Regulation according to other foreign laws

Australia inventory (AIIC) At least one component is not listed.

Canada inventory At least one component is not listed in DSL but all such components are listed in NDSL.

China inventory (IECSC) All components are listed or exempted.

REACH Status The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

Japan inventory (CSCL) At least one component is not listed.

Korea inventory (KECI) At least one component is not listed.

Philippines inventory (PICCS) All components are listed or exempted.

Taiwan inventory (TCSI) All components are listed or exempted.

United States inventory (TSCA 8b) All components are active or exempted.

Section 16. Other information

A. References - Registry of Toxic Effects of Chemical Substances
- United States Environmental Protection Agency ECOTOX

B. Date first prepared 15/01/2021

C. Date of issue/Date of revision 10/7/2025

D. Version 4

Date of printing **10/7/2025**

Product Stewardship

E. Other

Indicates information that has changed from previously issued version.

Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.