



SAFETY DATA SHEET

Hiperflo 300

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Hiperflo 300
Product number	2010568
Synonyms; trade names	Gasoline
REACH registration notes	This material is a mixture. All components have been registered under REACH by the Manufacturer or Supplier or are exempt.

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

Identified uses	Use as a fuel
Uses advised against	Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier	Haltermann Carless UK Ltd Head Office - Grove House, Guildford Road, Leatherhead, Surrey KT22 9DF United Kingdom +44(0)1372 360000 +44(0)1372 380400
Contact person	MSDSTeam@h-c-s-group.com
Manufacturer	Haltermann Carless UK Ltd Head Office - Grove House, Guildford Road, Leatherhead, Surrey KT22 9DF United Kingdom +44(0)1372 360000 +44(0)1372 380400

1.4. Emergency telephone number

Emergency telephone	Please contact SHE Department on +44(0) 1255 502372
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 1 - H224
Health hazards	Skin Irrit. 2 - H315 Repr. 2 - H361fd STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram



Signal word

Danger

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Hazard statements	H224 Extremely flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. P273 Avoid release to the environment. P280 Wear protective clothing, gloves, eye and face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting.
Contains	Gasoline (CLP13), Ethyl Tertiary Butyl Ether
Supplementary precautionary statements	P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing vapour/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/doctor if you feel unwell. P370+P378 In case of fire: Use alcohol resistant foam, carbon dioxide or dry powder to extinguish. P391 Collect spillage. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container in accordance with international regulations.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Gasoline (CLP13)		>60-100%
CAS number: 86290-81-5	EC number: 289-220-8	REACH registration number: 01-2119471335-39-0007
Classification		
Flam. Liq. 1 - H224		
Skin Irrit. 2 - H315		
Repr. 2 - H361fd		
STOT SE 3 - H336		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		

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Ethyl Tertiary Butyl Ether	>10-<30%	
CAS number: 637-92-3	EC number: 211-309-7	REACH registration number: 01-2119452785-29-XXXX
Classification		
Flam. Liq. 2 - H225		
STOT SE 3 - H336		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments UVCB Substance This gasoline contains: benzene <0.1%, n-hexane <3%, and toluene ≥3%

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion	Aspiration of product into the lungs can cause fatal chemical pneumonitis
Skin contact	Skin irritation. Prolonged contact may cause redness, irritation and dry skin.
Eye contact	No specific symptoms known.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Stop flow of material to fire. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m ³ . Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours may form explosive mixtures with air. Containers can burst violently or explode when heated, due to excessive pressure build-up.
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Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Use water to keep fire exposed containers cool and disperse vapours. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Do not use in confined spaces without adequate ventilation and/or respirator. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Avoid contact with skin and eyes. Avoid spilling. Avoid inhalation of vapours. Static electricity and formation of sparks must be prevented. Storage tanks and other containers must be earthed.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ethyl Tertiary Butyl Ether

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Long-term exposure limit (8-hour TWA): ACGIH 5 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.

PNEC No PNEC available
Substance is a hydrocarbon UVCB substance that poses a chronic marine hazard.

Gasoline (CLP13) (CAS: 86290-81-5)

DNEL Industry - Inhalation; Short term systemic effects: 1300 mg/m³
Industry - Inhalation; Short term local effects: 1100 mg/m³
Industry - Inhalation; Long term local effects: 840 mg/m³
Consumer - Inhalation; Short term systemic effects: 1200 mg/m³
Consumer - Inhalation; Short term local effects: 640 mg/m³
Consumer - Inhalation; Long term local effects: 180 mg/m³
Industry - Dermal; Long term local effects: 23.4 mg/kg/day

PNEC No PNEC available
Substance is a hydrocarbon UVCB substance that poses a chronic marine hazard.

Ethyl Tertiary Butyl Ether (CAS: 637-92-3)

DNEL Industry - Inhalation; Short term systemic effects: 2800 mg/m³
Industry - Inhalation; Long term systemic effects: 352 mg/m³
Industry - Dermal; Long term systemic effects: 6767 mg/kg/day
Industry - Inhalation; Long term local effects: 105 mg/m³
Consumer - Inhalation; Short term systemic effects: 1680 mg/m³
Consumer - Inhalation; Long term systemic effects: 105 mg/m³
Consumer - Dermal; Long term systemic effects: 4060 mg/kg/day
Consumer - Oral; Long term systemic effects: 12.5 mg/kg/day
Consumer - Inhalation; Long term local effects: 63 mg/m³

PNEC - Fresh water; 0.51 mg/l
- Marine water; 0.017 mg/l
- Intermittent release; 1.1 mg/l
- Sediment (Freshwater); 28.5 mg/kg
- Sediment (Marinewater); 1.45 mg/kg
- Soil; 2.41 mg/kg
- STP; 12.5 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

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Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Do not smoke in work area. Do not eat, drink or smoke when using this product.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.
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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Pungent.
Melting point	<-60°C
Initial boiling point and range	35-197°C @ 760 mm Hg
Flash point	< -30°C Pensky-Martens closed cup.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.4 Upper flammable/explosive limit: 7.6
Vapour pressure	67 kPa @ 37.8°C
Relative density	0.742 @ 15°C
Solubility(ies)	No information required. Soluble in the following materials: Organic solvents. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Partition coefficient	No information required. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Auto-ignition temperature	300°C
Viscosity	0.75 cSt @ 20°C
Explosive properties	Not applicable Low boiling point naphtha's (gasolines) are not considered explosive based on structural and oxygen balance considerations.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Particle size	No information required. In accordance with column 2 of REACH Annex VII, the particle size distribution study (granulometry) does not need to be conducted because the substance is not marketed or used in any solid or granular form.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Strong oxidising agents.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Avoid the following conditions: Heat, sparks, flames.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Information given is applicable to the major ingredient.

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat (OECD 401)
Conclusive data but not sufficient for classification.

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rabbit (OECD 402)
Conclusive data but not sufficient for classification.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ 7630 +/- 900 mg/m³, Inhalation, Rat (OECD 403)
Conclusive data but not sufficient for classification.

Skin corrosion/irritation

Animal data Erythema/eschar score: Moderate to severe erythema (3). Oedema score: Slight oedema - edges of area well defined by definite raising (2). (OECD 404) Irritating. Not corrosive to skin.

Extreme pH

Not corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. (OECD 405)

Skin sensitisation

Skin sensitisation Buehler test: - Guinea pig: Not sensitising. (OECD 406)

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation:: Negative. (Method equivalent or similar to OECD 471) This substance has no evidence of mutagenic properties.

Genotoxicity - in vivo

Chromosome aberration: Negative. OECD Guideline 475 This substance has no evidence of mutagenic properties. Although the data do not support classification of gasoline per se for genotoxic potential, there is a regulatory requirement to classify as genotoxic gasoline and naphtha streams containing >0.1% benzene

Carcinogenicity

Carcinogenicity NOAEL ~10000 mg/m³, Inhalation, Rat (OECD 453) NOAEL 0.05 ml, Dermal, Mouse Method equivalent to OECD 451 The data do not support the classification of gasoline per se for carcinogenic potential, however there is a regulatory requirement to classify as carcinogenic gasoline and naphtha streams containing >0.1% benzene

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Target organ for carcinogenicity	Kidneys Liver
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEC ≥ 20000 mg/m ³ , Inhalation, Rat F1 (OECD 416) It should be noted that, although the data do not support classification of gasoline per se for reproductive toxicity potential according to EU regulation (EC no. 1272/2008), there is a regulatory requirement to classify as reprotoxic gasoline and naphtha streams containing >3% toluene and / or n-hexane
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 23900 mg/m ³ , Inhalation, Rat (OECD 414) It should be noted that, although the data do not support classification of gasoline per se for reproductive toxicity potential according to EU regulation (EC no. 1272/2008), there is a regulatory requirement to classify as reprotoxic gasoline and naphtha streams containing >3% toluene and / or n-hexane
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL ~3750 mg/kg, Dermal, Method: OECD TG 410 under occlusive conditions
<u>Aspiration hazard</u>	
Aspiration hazard	Kinematic viscosity ≤ 20.5 mm ² /s. May be fatal if swallowed and enters airways.
Inhalation	Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Irritating to skin. Not a skin sensitiser.
Eye contact	No specific health hazards known.
Route of exposure	Inhalation Oral Skin and/or eye contact

SECTION 12: Ecological Information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Information given is applicable to the major ingredient.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 10 mg/l, Oncorhynchus mykiss (Rainbow trout) (OECD 203)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 4.5 mg/l, Daphnia magna (OECD 202)

Acute toxicity - aquatic plants EC₅₀, 72 hours: 3.1 mg/l, Selenastrum capricornutum (OECD 201)

Acute toxicity - microorganisms LL₅₀, 72 hours: 15.41 mg/l, Tetrahymena pyriformis (QSAR modeled data)

Acute toxicity - terrestrial Scientifically unjustified.

Chronic aquatic toxicity

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Chronic toxicity - fish early life stage Read-across data.
(OECD 211)
NOELR, 21 days: 2.6 mg/l, Daphnia magna

Chronic toxicity - aquatic invertebrates Read-across data.
(OECD 211)
NOELR, 21 days: 2.6 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability Inherently biodegradable.

Phototransformation No information required.

Stability (hydrolysis) Scientifically unjustified.
The available data and weight of evidence demonstrate that this substance is resistant to hydrolysis because it lacks a functional group that is hydrolytically reactive. Therefore, this fate process will not contribute to a measurable degradable loss of this substance from the environment.

Biodegradation Water - Degradation (%) 94: 25 days
Non-guideline research method using a closed-system shake flask apparatus
Inherently biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

Partition coefficient No information required. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

12.4. Mobility in soil

Adsorption/desorption coefficient Scientifically unjustified. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance

Henry's law constant Not applicable. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

Surface tension No information required. In line with REACH Annex VII, data on surface tension is not required, as based on structural considerations, surface activity is not expected or predicted, and surface activity is not a desired property of the material.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. The generation of waste should be minimised or avoided wherever possible. External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/or national regulations.

Disposal methods Dispose of waste via a licensed waste disposal contractor. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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Waste class This material and container must be disposed of as a HAZARDOUS WASTE. According to the European Waste Code, the code is not related to the product but to its application. It is therefore for the user to choose the relevant code. The one mentioned in this section is a suggestion only. Waste Code 13 07 02* (Petrol)

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1203
UN No. (IMDG)	1203
UN No. (ICAO)	1203
UN No. (ADN)	1203

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	MOTOR SPIRIT (Gasoline)
Proper shipping name (IMDG)	MOTOR SPIRIT (Gasoline)
Proper shipping name (ICAO)	MOTOR SPIRIT (Gasoline)
Proper shipping name (ADN)	MOTOR SPIRIT (Gasoline)

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

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EmS	F-E, S-E
ADR transport category	2
Emergency Action Code	3YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Dangerous Preparations Directive 1999/45/EC.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	Minor changes made
Issued by	HCS Group Technical Team
Revision date	07/02/2018
Revision	5
Supersedes date	03/06/2015
SDS number	12172
SDS status	Approved.
Hazard statements in full	H224 Extremely flammable liquid and vapour. H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.