

**Material Safety Data Sheet MSDS**

Date: 06/04

Type:
PreparationProduct:
CARTER EP 220**1 Product Information**

Trade Name	Carter EP 220
Product Application	Industrial gear oil
Manufacturer/Supplier	TOTAL UK LIMITED Lubricants Division, Pottery Lane, Ferrybridge, West Yorkshire, WF11 8JY
Emergency Telephone Number	01923 694000
Telephone Number For Information	01977 636200

2 Composition/Information On Components

Chemical nature: Petroleum-derived severely refined mineral-based product
Content in PAH according to IP 346 method < 3%

Substances contributing to hazards None to our knowledge under normal conditions of use

3 Hazard Identification

Main Hazards	
Adverse human health effects	Under normal conditions of use, the product holds no danger of intoxication
Environmental effects	Do not release this product into the environment
Physical and chemical hazards	No specific risk of fire or explosion under normal conditions of use

4 First Aid Measures

General Advice	
Inhalation	Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of the throat. Transport the person into fresh air, keep warm and allow to rest
Skin Contact	Immediately remove all soiled or stained clothing Wash the affected area immediately and repeatedly with soap and water. If the skin is exposed to high-pressure spray, the product may enter the human organism. In all such cases the affected person must be taken to hospital, even if no sign of injury can be detected.
Eye Contact	Flush eyes with water for at least 10 minutes. Seek medical advice if symptoms persist.
Ingestion	Possible risk of vomiting and diarrhoea Do not induce vomiting to avoid the risk of aspiration into the respiratory tract Give nothing to drink If the product is believed to have entered the lungs (in case of vomiting, for example), take the person to hospital for immediate care.

5 Fire Fighting Methods

Extinguishing Media	In case of fire use foam, dry powder or CO ₂ .
Unsuitable Extinguishing Media	Do not use water jets.
Special Hazards	Take precautionary measures against static discharge during blending and transfer operations.



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Special Protective Equipment

Protective clothing, including impervious gloves, should be worn if skin contact is anticipated.

Wear face visor or goggles if eye contact can accidentally occur.

NOTE: Product spilt on clothing may give rise to delayed evaporation and subsequent fire hazard.

6 Accidental Release Measures

Personal Precautions

Wear protective clothing and impermeable gloves. If there is a splash risk also wear chemical splash goggles.

Environmental Precautions

Use all practical means to prevent water or soil contamination.

Clean-Up Methods

Contain and absorb product with sand or other non-combustible material. Report any escape to public drainage or water courses to the Local Authority/Water Authority immediately.

Additional Advice

Surfaces on which the product has been spilled may become slippery. Recovered and waste liquid which cannot be recycled must be disposed of safely.

7 Handling And Storage

Storage

Technical measures

Make the necessary arrangements and take all measures to prevent water and ground pollution

Storage conditions

Store at room temperature, protected against contact with water and moisture, and away from any source of ignition Keep containers closed when not in use

To be avoided

Do not store exposed to the elements

Incompatible products

Dangerous reaction with strong oxidizing agents

Packaging materials

Recommended Use only hydrocarbon-resistant containers, joints, pipes, etc. Keep in original container if possible

Handling

Technical measures

Prevention of user exposure Provide adequate ventilation in case of the potential formation of vapour, fumes, mist or spray

Take all measures to reduce the risk of exposure, in particular to used or waste product

Keep away from flammable material; keep away from food and beverages

Prevention of fire and explosion

Empty containers may contain flammable or explosive vapours

There is a fire hazard associated with rags, paper or any other material used to remove spills which become soaked with product

Avoid accumulate of these: they are to be disposed off safely after use

Precautions

Avoid static electricity build up with connection to earth.

Set up machinery and equipment so as to avoid the risk of accidental spills or splashes onto hot machine parts and electrical contacts (on joint failure, for example)

Safe handling advice

Avoid contact with strong oxidizers.

Use only hydrocarbon-resistant containers, joints, pipes etc...

8 Exposure Controls/Personal Protection



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General Protection And Hygiene Measures

Use the product in a well-ventilated atmosphere, wear protective clothing if contact is likely.

Respiratory Protection

Wear appropriate equipment. Do not enter tanks or other confined spaces where vapour may be present unless breathing apparatus is used.

Hand Protection

Hand and skin protection - Not essential in normal use but recommended. Where prolonged exposure is likely protective clothing must be worn, including nitrile gloves approved to BS EN 374 with a breakthrough time of >360 minutes.

Eye Protection

Eye protection - Eye protection approved to BS EN 166 is recommended at all times

Occupational Exposure Limit

Unlikely to be required in normal use. Note occupational exposure limits for Oil Mist Mineral (HSE Guidance Note EH 40/Latest Issue

Long term exposure limit (8 hr TWA reference period) 5mg/m³

9 Physical And Chemical Properties

Appearance:

- Physical state: Liquid
- Colour: Yellow to brown.

Odour:

Characteristic

pH:

Not applicable

Specific temperatures of change in state

- Flow point: Not applicable
- Flash point: $\geq 230^{\circ}\text{C}$ (ASTM D 92)
- Auto-ignition temperature: $> 250^{\circ}\text{C}$ (ASTM E 659)
This temperature may be significantly lower under particular conditions (oxidation on high surface areas)

Explosion limits:

Not determined

Density:

About 896kg/m³ at 15°C

Solubility:

- in water: Insoluble and immiscible.
- in organic solvents: Soluble in many common solvents

Viscosity:

Kinematic viscosity at 40 °C : approx 220 mm²/s.

Log P n-octanol / water at 20°C

Mineral oil > 6

10 Stability And Reactivity

Stability

The product is stable under normal temperatures of storage, handling and use

Conditions To Avoid

Protect from all forms of heat and ignition sources.

Materials To Avoid

Oxidising agents, strong acids/alkalis and halogens.

Hazardous Decomposition Products

Combustion will produce toxic gases.

Further Information

Product is stable at normal stocking, handling and usage temperatures.

11 Toxicological Information



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-Inhalation: -Contact with skin: -Ingestion: Sensitisation: -Contact with skin: Chronic toxicity or long term toxicity: -Inhalation: -Contact with skin:	<p>Risk is improbable under normal conditions of use. Strong concentrations of vapour and spray may be irritating to respiratory tract and mucous membranes</p> <p>Risk is improbable under normal conditions of use</p> <p>Risk is improbable under normal conditions of use, ingestion of large amounts may cause abdominal pain, diarrhoea etc.</p> <p>May cause sensitisation by skin contact</p> <p>Vapour and spray may be irritate the respiratory tract and mucous membranes.</p> <p>Characteristic skin infections (oil blisters) may develop following prolonged and repeated exposure through contact with contaminated clothing.</p>
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12 Ecological Information	
Mobility: <ul style="list-style-type: none"> - Air: - Ground: - Water: - Persistence and degradability: Ecotoxicity:	<p>There is a slow loss by evaporation.</p> <p>Given its physical and chemical characteristics, the product generally shows little mobility in the ground</p> <p>The product is insoluble; it spreads on the surface of the water</p> <p>Experimental data on the finished product are not available However, the "mineral oil" portion of the virgin product is intrinsically biodegradable. Particular ingredients may not be biodegradable</p> <p>The virgin product is considered to present no danger for land-growing organisms. It is considered to present a little danger for aquatic life. No information available for used product</p>

13 Disposal Considerations	
Recommendations On Product Disposal	<p>By incineration or by use in landfill at a suitable tip approved by local authorities. Recovered and waste material which cannot be recycled must be disposed of safely. Do not dispose material into a drain, sink or immediate environment. It is an offence to discharge into public drains, marine or inland waters. In case of query contact specialist waste disposal contractor for advice.</p>

14 Transport Information	
Symbol UN Number (Substance Identification Number) UN Packing Group ICAO Hazard Class IMCO Hazard Class IATA Hazard Class ADR Hazard Class RID Hazard Class	<p>None</p> <p>Unregulated</p> <p>NC</p> <p>NC</p> <p>NC</p> <p>NC</p> <p>NC</p> <p>NC: Non-classified.</p>

15 Regulatory Information	
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EEC Hazard Classification
Supply Symbol

None

Contains

Alkyl dithiothiadiazole
May produce an allergic reaction

Risk Phrases

None

Safety Phrases

None

16 Other Information

Other Information

Further information through HSE Infoline : Tel 08701 545500
: Minicom 02920 808537
For Immediate Medical Advice: NHS Direct : Tel 0845 46 47
: Textphone 0845 606 46 47
This data sheet conforms to standards defined by directives 91/155,
93/112/EEC & 2001/58/EC Data sheet required pursuant to Art.14 of directive
1999/45/EC.

R Phrase(s)(heading 2):

None

Revision date: 16/06/2004
Previous revision: 30/07/2003
Original source revision : FBP

17 Exclusion Of Liability

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Where third party products are used in conjunction with or instead of products produced or supplied by TOTAL UK LIMITED or its subsidiary companies, the customer should himself obtain all necessary technical, health and safety information about such products from the third party.

**Material Safety Data Sheet MSDS**

Date: 06/04

Type:
Preparation**Product:**
RUBIA H 10W/30

1 Product Information	
Trade Name	Rubia H10W/30
Product Application	Engine Oil
Manufacturer/Supplier	TOTAL UK LIMITED Lubricants Division, Pottery Lane, Ferrybridge, West Yorkshire, WF11 8JY
Emergency Telephone Number	01923 694000
Telephone Number For Information	01977 636200
2 Composition/Information On Components	
Chemical nature:	Petroleum-derived severely refined mineral-based product Content in PAH according to IP 346 method < 3%
Substances contributing to hazards	Zinc alkyldithiophosphate (R38, R41, R51/53) EINECS 272-028-3, Max 1.5%
3 Hazard Identification	
Main Hazards	
Adverse human health effects	Under normal conditions of use, the product holds no danger of intoxication
Environmental effects	Do not release this product into the environment
Physical and chemical hazards	No specific risk of fire or explosion under normal conditions of use
4 First Aid Measures	
General Advice	
Inhalation	Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of the throat. Transport the person into fresh air, keep warm and allow to rest
Skin Contact	Immediately remove all soiled or stained clothing Wash the affected area immediately and repeatedly with soap and water. If the skin is exposed to high-pressure spray, the product may enter the human organism. In all such cases the affected person must be taken to hospital, even if no sign of injury can be detected.
Eye Contact	Flush eyes with water for at least 10 minutes. Seek medical advice if symptoms persist.
Ingestion	Possible risk of vomiting and diarrhoea Do not induce vomiting to avoid the risk of aspiration into the respiratory tract Give nothing to drink If the product is believed to have entered the lungs (in case of vomiting, for example), take the person to hospital for immediate care.
5 Fire Fighting Methods	
Extinguishing Media	In case of fire use foam, dry powder or CO ₂ .
Unsuitable Extinguishing Media	Do not use water jets.
Special Hazards	Take precautionary measures against static discharge during blending and transfer operations.



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Special Protective Equipment

Protective clothing, including impervious gloves, should be worn if skin contact is anticipated.

Wear face visor or goggles if eye contact can accidentally occur.

NOTE: Product spilt on clothing may give rise to delayed evaporation and subsequent fire hazard.

6 Accidental Release Measures

Personal Precautions

Wear protective clothing and impermeable gloves. If there is a splash risk also wear chemical splash goggles.

Environmental Precautions

Use all practical means to prevent water or soil contamination.

Clean-Up Methods

Contain and absorb product with sand or other non-combustible material. Report any escape to public drainage or watercourses to the Local Authority/Water Authority immediately.

Additional Advice

Surfaces on which the product has been spilled may become slippery Recovered and waste liquid, which cannot be recycled, must be disposed of safely.

7 Handling And Storage

Storage

Technical measures

Make the necessary arrangements and take all measures to prevent water and ground pollution

Storage conditions

Store at room temperature, protected against contact with water and moisture, and away from any source of ignition Keep containers closed when not in use

To be avoided

Do not store exposed to the elements

Incompatible products

Dangerous reaction with strong oxidizing agents

Packaging materials

Recommended Use only hydrocarbon-resistant containers, joints, pipes, etc. Keep in original container if possible

Handling

Technical measures

Prevention of user exposure Provide adequate ventilation in case of the potential formation of vapour, fumes, mist or spray

Take all measures to reduce the risk of exposure, in particular to used or waste product

Keep away from flammable material; keep away from food and beverages

Prevention of fire and explosion

Empty containers may contain flammable or explosive vapours

There is a fire hazard associated with rags, paper or any other material used to remove spills which become soaked with product

Avoid accumulate of these: they are to be disposed off safely after use

Precautions

Avoid static electricity build up with connection to earth.

Set up machinery and equipment so as to avoid the risk of accidental spills or splashes onto hot machine parts and electrical contacts (on joint failure, for example)

Safe handling advice

Avoid contact with strong oxidizers.

Use only hydrocarbon-resistant containers, joints, pipes etc.

8 Exposure Controls/Personal Protection



Material Safety Data Sheet MSDS
Product:
RUBIA H 10W/30

Date: 06/04

Type:
Preparation

General Protection And Hygiene Measures

Use the product in a well-ventilated atmosphere, wear protective clothing if contact is likely.

Respiratory Protection

Wear appropriate equipment. Do not enter tanks or other confined spaces where vapour may be present unless breathing apparatus is used.

Hand Protection

Hand and skin protection - Not essential in normal use but recommended. Where prolonged exposure is likely protective clothing must be worn, including nitrile gloves approved to BS EN 374 with a breakthrough time of >360 minutes.

Eye Protection

Eye protection - Eye protection approved to BS EN 166 is recommended at all times

Occupational Exposure Limit

Unlikely to be required in normal use. Note occupational exposure limits for Oil Mist Mineral (HSE Guidance Note EH 40/Latest Issue

Long term exposure limit (8 hr TWA reference period) 5mg/m³

9 Physical And Chemical Properties

Appearance:

- Physical state: Liquid
- Colour: Amber.

Odour:

Characteristic

pH:

Not applicable

Specific temperatures of change in state

- Flow point: Not applicable
- Flash point: $\geq 200^{\circ}\text{C}$ (ASTM D 92)
- Auto-ignition temperature: $> 250^{\circ}\text{C}$ (ASTM E 659)
This temperature may be significantly lower under particular conditions (oxidation on high surface areas)

Explosion limits:

Not determined

Density:

About 883 kg/m³ at 15°C

Solubility:

- in water: Insoluble and immiscible.
- in organic solvents: Soluble in many common solvents

Viscosity:

Kinematic viscosity at 100 °C : approx 11 mm²/s.

Log P n-octanol / water at 20°C

Mineral oil > 6

10 Stability And Reactivity

Stability

The product is stable under normal temperatures of storage, handling and use

Conditions To Avoid

Protect from all forms of heat and ignition sources.

Materials To Avoid

Oxidising agents, strong acids/alkalis and halogens.

Hazardous Decomposition Products

Combustion will produce toxic gases.

Further Information

Product is stable at normal stocking, handling and usage temperatures.

11 Toxicological Information



Material Safety Data Sheet MSDS Product: RUBIA H 10W/30	Date: 06/04	Type: Preparation
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-Inhalation: -Contact with skin: -Ingestion: Sensitisation: -Contact with skin: Chronic toxicity or long term toxicity: -Inhalation: -Contact with skin:	<p>Risk is improbable under normal conditions of use. Strong concentrations of vapour and spray may be irritating to respiratory tract and mucous membranes</p> <p>Risk is improbable under normal conditions of use</p> <p>Risk is improbable under normal conditions of use, ingestion of large amounts may cause abdominal pain, diarrhoea etc.</p> <p>May cause an allergic reaction</p> <p>Vapour and spray may be irritate the respiratory tract and mucous membranes.</p> <p>Characteristic skin infections (oil blisters) may develop following prolonged and repeated exposure through contact with contaminated clothing.</p>
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12 Ecological Information

Mobility: <ul style="list-style-type: none"> - Air: - Ground: - Water: - Persistence and degradability: Ecotoxicity:	<p>There is a slow loss by evaporation.</p> <p>Given its physical and chemical characteristics, the product generally shows little mobility in the ground</p> <p>The product is insoluble; it spreads on the surface of the water</p> <p>Experimental data on the finished product are not available However, the "mineral oil" portion of the virgin product is intrinsically biodegradable. Particular ingredients may not be biodegradable</p> <p>The virgin product is considered to present no danger for land-growing organisms. It is considered to present a little danger for aquatic life. No information available for used product</p>
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13 Disposal Considerations

Recommendations On Product Disposal	<p>By incineration or by use in landfill at a suitable tip approved by local authorities. Recovered and waste material, which cannot be recycled, must be disposed of safely. Do not dispose material into a drain, sink or immediate environment. It is an offence to discharge into public drains, marine or inland waters. In case of query contact specialist waste disposal contractor for advice.</p>
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14 Transport Information

Symbol UN Number (Substance Identification Number) UN Packing Group ICAO Hazard Class IMCO Hazard Class IATA Hazard Class ADR Hazard Class RID Hazard Class	<p>None</p> <p>Unregulated</p> <p>NC</p> <p>NC</p> <p>NC</p> <p>NC</p> <p>NC</p> <p>NC</p> <p>NC: Non-classified.</p>
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15 Regulatory Information

EEC Hazard Classification



Material Safety Data Sheet MSDS Product: RUBIA H 10W/30	Date: 06/04	Type: Preparation
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Supply Symbol

None

Contains

Calcium sulphonate
May produce an allergic reaction

Risk Phrases

None

Safety Phrases

None

16 Other Information

Other Information

Further information through HSE Infoline : Tel 08701 545500
: Minicom 02920 808537
For Immediate Medical Advice: NHS Direct : Tel 0845 46 47
: Textphone 0845 606 46 47
This data sheet conforms to standards defined by directives 91/155,
93/112/EEC & 2001/58/EC Data sheet required pursuant to Art.14 of directive
1999/45/EC.

R Phrase(s)(heading 2):

R38: Irritating to skin
R41: Risk of serious damage to eyes.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in
the aquatic environment.

Revision date: 22/06/2004
Previous revision: 25/11/2003
Original source revision : FBP

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