



INFORMATION NOTE ABOUT PRODUCT SAFETY

REPSOL MOTO DOT 5.1 BRAKE FLUID

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

1.1 Product identifier

Commercial name	REPSOL MOTO DOT 5.1 BRAKE FLUID
Chemical name	Brake fluid.
Synonyms	N/A
CAS	N/A
EC (EINECS)	N/A
Index No (annex VI Regulation EC No 1272/2008)	N/A
Registration Number	N/A
Authoritation Number	N/A
Material Code	RP713B

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

Hydraulic fluid for use in automotive brake and clutch systems.

1.3 Details of the supplier of the information note about product safety

Company	REPSOL LUBRICANTES Y ESPECIALIDADES, S.A.
Address	Méndez Álvaro, 44 28045 - MADRID, Spain
Phone	+34 917538000 /+34 917538100
Fax	+34 902303145

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture	2.2 Label elements	
CLASSIFICATION Reg.(CE)1272/2008(CLP)	LABELLING	
N/A	Pictograms	N/A
	Signal word	N/A
	Hazard statements	N/A
	supplemental information	N/A

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	Precautionary statements	N/A
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2.3 Supplementary elements which must be displayed on the labels

N/A

2.4 Special packaging requirements
Containers which must be provided with a child safety seal:

Not applicable

Tactile hazard warning:

Not applicable

2.5 Other hazards

Results of the assessment of PBT and vPvB in the product, in accordance with the criteria set out in Annex XIII of REACH, can be found in Section 12.5 of this information note about product safety.

Please refer to Sections 5, 6 and 7 of this information note about product safety for information on other dangers, different from classification dangers but which may contribute to the overall hazards of the product.

SECTION 3. Composition/information on ingredients

Mixture of polyglycol, glycol ether, inhibitors and glycol ether borate.

Dangerous components Reg. (CE) 1272/2008 (CLP)	Concentration (%)	Hazard statements
Triethylene glycol monobutyl ether CAS: 143-22-6 EC (EINECS): 205-592-6 Registration Number: 01-2119531322-53-XXXX	<20	H318
Diethylene glycol CAS: 111-46-6 EC (EINECS): 203-872-2 Registration Number: 01-2119457857-21-XXXX	<10	H302, H373
Diethylene glycol monomethyl ether CAS: 111-77-3 EC (EINECS): 203-906-6 Registration Number: 01-2119475100-52-XXXX	<3	H361d
Diethylene glycol monobutyl ether CAS: 112-34-5 EC (EINECS): 203-961-6 Registration Number: 01-2119475104-44-XXXX	<3	H319

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SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation: Move the person to fresh air.
Keep victim still.

Ingestion/Aspiration: Only induce vomiting under the guidance of a physician.
Call for immediate medical attention.

Contact skin: Remove shoes and contaminated clothing and wash affected areas with soap and water.
If symptoms persist seek medical care.

Contact eyes: In case of contact with eyes wash, with plenty of water for at least 10 minutes.
If symptoms persist seek medical care.

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

Inhalation: Exposures to product vapors may cause nose and throat irritation, and respiratory tract irritation.

Ingestion/Aspiration: Swallowing may cause dizziness, drowsiness, nausea and vomiting.

Contact skin: Liquid may cause conjunctive irritation and may possibly damage the cornea.
Direct contact with skin may cause irritation.
Repeated or prolonged contact may cause removal of natural fats from the skin, causing irritation and dermatitis.

Contact eyes: Liquid may cause conjunctive irritation and may possibly damage the cornea.

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

If the symptoms do not disappear, seek medical care.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Dry chemical powder, anti-alcohol foam, CO₂ and water spray.

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Unsuitable extinguishing media: Water jets.

5.2. Special hazards arising from the substance or mixture

Combustion products: Combustion products may contain harmful or irritating fumes.

Special measures: Move container from fire area if it can be done without risk. Water spray applied to surface leads to foam formation which helps to extinguish the fire. Consult and follow existing safety and emergency standard procedures.

Special hazards: The product should be pre-heated for ignition to occur. Fire may produce irritating gases.

5.3. Advice for firefighters:

Suit and gloves resistant to heat. Self-contained breathing apparatus in case of high concentrations of fumes or thick smoke.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with liquid and inhalation of product vapors.

Personal protection: Use respiratory protection mask if necessary if vapors are present. Safety goggles, waterproof gloves and other product resistant protective clothing to avoid contact with liquid.

6.2. Environmental precautions

Avoid spillage into sewers and public waterways.
Avoid product dispersion.

6.3. Methods and material for containment and cleaning up

Ventilate area of leak or spill.
Isolate and remove spilled material with dry sand or other inert material.
Large quantities: pump the product.

6.4. Reference to other sections

Section 8 contains more detailed advice on personal protective equipment and section 13 on waste disposal.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

General precautions: Do not smoke, drink, or eat during handling of product.
Wear appropriate protective equipment to avoid contact or inhalation of the product.
Wash hands using soap.

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Eliminate all ignition sources from areas where the product is handled or used: no sparks, flames or static electricity.

Specific conditions: Good local exhaust ventilation system.

7.2. Conditions for safe storage, including any incompatibilities

Temperature and decomposition products: N/A

Dangerous reactions: N/A

Storage conditions: Store at room temperature in cool and well-ventilated places. Eliminate all possible sources of ignition. Suitable storage materials are stainless steel and mild steel (low carbon content).

Incompatible materials: Oxidizing substances.

7.3. Specific end use(s)

See section 1 or exposure scenario

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

<p>Diethylene glycol (CAS: 111-46-6): INSHT (Spain):VLA-ED: 10 ppm (44 mg/m³) / VLA-EC: 40 ppm (176 mg/m³). GKV_MAK (Austria): TWA: 10 ppm (44 mg/m³) / STEL: 40 ppm (176 mg/m³). Arbejdstilsynet (Denmark): TWA: 2,5 ppm (11 mg/m³) / STEL: 5 ppm (22 mg/m³). TRGS900 AGW (Germany): TWA: 10 ppm (44 mg/m³) / STEL: 40 ppm (176 mg/m³). NAOSH (Ireland): TWA: 23 ppm (100 mg/m³). LV Nat. Standardisation and Meterological Centre (Latvia): TWA: 10 mg/m³. AFS 2005:17 (Sweden): NGV: 10 ppm (45 mg/m³) / KTV: 20 ppm (90 mg/m³). EH40/2005 WELs (UK): OEL-TWA: 23 ppm (101 mg/m³).</p> <p>Diethylene glycol monomethyl ether (CAS: 111-77-3): INSHT (Spain): VLA-ED: 10 ppm (50,1 mg/m³). Diethylene glycol monobutyl ether (CAS:112-34-5): INSHT (Spain): VLA-ED: 10 ppm (67,5 mg/m³) / VLA-EC: 15 ppm (101,2 mg/m³). ACGIH (USA): TLV-TWA: 10 ppm (67,5 mg/m³).</p>
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DNEL

CAS No.: 143-22-6
DNELs for workers
Long term exposure, systemic effects, dermal (mg/kg/day): 50
Long term exposure, systemic effects, inhalation (mg/m³): 195

DNELs for consumers
Long term exposure, systemic effects, dermal (mg/kg/day): 25

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Long term exposure, systemic effects, inhalation (mg/m³): 117
Long term exposure, systemic effects, oral (mg/kg/day): 2.5
CAS No.: 112-34-5
DNELs for workers
Short term exposure, local effects, inhalation (mg/m³): 101.2
Long term exposure, systemic effects, dermal (mg/kg/day): 20
Long term exposure, systemic effects, inhalation (mg/m³): 67

DNELs for consumers
Short term exposure, local effects, inhalation (mg/m³): 50.6
Long term exposure, systemic effects, dermal (mg/kg/day): 10
Long term exposure, systemic effects, inhalation (mg/m³): 34
Long term exposure, systemic effects, oral (mg/kg/day): 1.25
CAS No.: 111-46-6
DNELs for workers
Long term exposure, systemic effects, dermal (mg/kg/day): 106
Long term exposure, systemic effects, inhalation (mg/m³): 60

DNELs for consumers
Long term exposure, systemic effects, dermal (mg/kg/day): 53
Long term exposure, systemic effects, inhalation (mg/m³): 12
CAS: 111-77-3
DN(M)ELs for workers
Long-term exposure - systemic effects, Dermal (mg/kg bw /day):0,53
Long-term exposure - systemic effects, Inhalation (mg/m³):50,1

DN(M)ELs for the general population
Long-term exposure - systemic effects, Dermal (mg/kg bw /day): 0,27
Long-term exposure - systemic effects, Inhalation (mg/m³):25
Long-term exposure - systemic effects, Oral (µg/kg bw /day): 1,5

PNEC

CAS No.: 143-22-6
PNEC water
PNEC fresh water (mg/L): 1.5
PNEC seawater (mg/L): 0.25
PNEC intermittent leaks (mg/L): 5.0

PNEC for waste water treatment plant
PNEC STP (mg/L): 200

PNEC sediments
PNEC fresh water (mg/kg): 5.77
PNEC seawater (mg/kg): 0.13

PNEC soil
PNEC soil (mg/kg): 0.45

PNEC Secondary oral poisoning
PNEC oral (mg/kg): 111

CAS No.: 112-34-5
PNEC water
PNEC fresh water (mg/L): 1.0
PNEC fresh water (mg/L): 0.1
PNEC intermittent leaks (mg/L): 3.9

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PNEC for waste water treatment plant
PNEC STP (mg/L): 200

PNEC sediments
PNEC fresh water (mg/kg): 4,0
PNEC seawater (mg/kg): 0.4

PNEC soil
PNEC soil (mg/kg): 0.4

PNEC Secondary oral poisoning
PNEC oral (mg/kg): 56

CAS No.: 111-46-6
PNEC water
PNEC fresh water (mg/L): 10
PNEC fresh water (mg/L): 1
PNEC intermittent leaks (mg/L): 10

PNEC for waste water treatment plant
PNEC STP (mg/L): 195.5

PNEC sediments
PNEC fresh water (mg/kg): 20.9

PNEC soil
PNEC soil (mg/kg): 1.53

CAS No.: 111-77-3
PNEC water
PNEC fresh water (mg/L): 12
PNEC fresh water (mg/L): 1.2
PNEC intermittent leaks (mg/L): 12

PNEC for waste water treatment plant
PNEC STP (mg/L): 10,000

PNEC sediments
PNEC fresh water (mg/kg): 44,4
PNEC seawater (mg/kg): 0.44

PNEC soil
PNEC soil (mg/kg): 2,44

PNEC Secondary oral poisoning
PNEC oral (mg/kg): 0.9

8.2 Exposure controls

Local appropriate ventilation. Do not smoke and avoid all ignition sources. Avoid prolonged contact and inhalation of vapors.

Individual protection measures, such as personal protective equipment

Respiratory protection: Efficient ventilation. In case of inadequate ventilation wear

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respiratory protection mask with A/P2 filter.

Skin protection: Gloves (rubber or PVC) and appropriate protective clothing.

Eye/face protection: Safety goggles to avoid splashes.

Other protective equipment: Showers and eye-washers in the work area.

Specific hygiene measures: Good work practices and the adoption of good personal hygiene measures reduce unnecessary exposures. Hot showers should be used. Use soap and no other solvents. Grossly contaminated clothing and tools should be changed immediately and dry cleaned. Grossly contaminated clothing should be changed immediately. Gloves should be reviewed to prevent internal contamination. Use skin reconditioning cream after work.

Medical Conditions Aggravated by Exposure: N/A

Environmental exposure controls:

Product should not reach the environment through wastewater or sewage. Measures to take in case of accidental release can be found in Section 6 of this information note about product safety.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Transparent yellowish.

Odour: Characteristic.

Odour threshold : N/A

Colour: Colorless.

pH: 7-8.5

Melting point/freezing point : < -50°C

Initial boiling point and boiling range : 260 °C

Flash point : > 130°C

Evaporation rate : N/A

Flammability (solid, gas) : N/A

Upper/lower flammability or explosive limits : N/A

Vapour pressure : < 1 mbar at 20°C

Vapour density : N/A

Density : 1.069 g/cm³ (20°C) ASTM D 1298

Solubility(ies) : Toluene, alcohol, ether

Partition coefficient: n-octanol/water : N/A

Auto-ignition temperature : > 200°C

Decomposition temperature : N/A

Viscosity : (-40 °C) 900 cSt max. ASTM D 445 (100 °C) 1.5 cSt min. ASTM D 445

Explosive properties : N/A

Oxidising properties : N/A

9.2 Other information

Water solubility: Very soluble

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SECTION 10. Stability and reactivity

- 10.1. **Reactivity:** N/A
- 10.2. **Chemical stability:** Stable material at room temperature. Hygroscopic.
- 10.3. **Possibility of hazardous reactions:** Oxidizing substances.
- 10.4. **Conditions to avoid:** High temperatures. Water or moisture.
- 10.5. **Incompatible materials:** Strong oxidizing substances.
- 10.6. **Hazardous decomposition products:** N/A

SECTION 11. Toxicological information

11.1. Information on toxicological effects

The provided toxicological information results from the application of Annexes VII to XI of Regulation 1907/2006 (REACH).

Acute toxicity: The product has a relatively low acute toxicity. DL50 (oral) rat = > 5000 mg/kg; DL50 (skin) rabbit = > 3000 mg/kg.

Skin corrosion/irritation: Available data indicates that classification criteria are not met. Repeated or prolonged contact with the preparation, may cause the removal of fat from the skin and dermatitis.

Serious eye damage/irritation: Studies according to OECD guideline 405 generally cause moderate eye irritation.

Respiratory or skin sensitisation: N/A

Germ cell mutagenicity: N/A

Carcinogenicity: N/A

Product rating corresponds to the comparison of the results from the toxicological studies with the criteria set out in Regulation (EC) No 1272/2008 for CMR, categories 1A and 1B.

Reproductive toxicity: N/A

STOT-single exposure: N/A

STOT-repeated exposure: N/A

Aspiration hazard: N/A

SECTION 12. Ecological information

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- 12.1. Toxicity:** There are no bioconcentration processes and it is expected that the product would not be toxic to aquatic organisms. Leuciscus idus/LC50 (96 h): < 100 mg/l.
- 12.2. Persistence and degradability:** The product is expected to be readily biodegradable in soil and water.
- 12.3. Bioaccumulative potential:** Product is not expected to be bioaccumulate.
- 12.4. Mobility in soil:** The product is non-volatile and soluble in water. The product will dissolve rapidly in water. If released to soil it will evaporate at a low rate.
- 12.5. Results of PBT and vPvB assessment:** This mixture contains no substance considered to be PBT or vPvB.
- 12.6. Other adverse effects:** N/A

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Disposal: Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with fume treatment. Recycle material when possible.

Handling: Containers properly labeled and closed.

Provisions: Establishments and companies which recover, dispose, store, transport or handle waste should comply with Dir. 2008/98/EC on waste, or other local, national or community provisions.

SECTION 14. Transport information

14.1. UN number: N/A

14.2. UN proper shipping name:
N/A

14.3. Danger identification number: N/A

14.4. Packing group

ADR/RID: N/A

IATA-DGR: N/A

IMDG: N/A

14.5. Environmental hazards

ADR/RID: N/A

IATA-DGR: N/A

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IMDG: N/A

14.6. Transport in bulk in accordance with appendix II of the Marpol agreement 73/78 and the IMSBC code

No category assigned for the IMSBC code.

14.7. Special precautions for user

Stable at room temperature during transport. To avoid spills, transport in secure, properly sealed and labeled tanks.

SECTION 15. Regulatory information

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

COMMISSION REGULATION (EU) No 453/2010 : REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 concerning Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

European Agreement concerning the international carriage of dangerous goods by road (ADR).

Regulation on the international transport of dangerous goods on the railway. (RID)

International maritime code of dangerous goods. (IMDG)

International Air Transport Association (IATA) regulation pertaining to air shipment.

International Bulk Chemical Code (IMSBC Code), MARPOL 73/78.

Commission Regulation Other hazards

N/A

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16. Other information

Glossary

CAS: Chemical Abstract Service

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists.

TLV: Threshold Limit Value

TWA: Time Weighted Average

STEL: Short-term Exposure Level

REL: Recommendable Exposure Limit

PEL: Permissible Exposure Limit

INSHT: Instituto Nacional de Seguridad e Higiene en el Trabajo.

VLA-ED: Environmental limit value - daily exposure

VLA-EC: Limit environmental value - short exposure

DNEL/DMEL: Derived no-effect level / Derivation of minimal effects levels

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PNEC: Predicted No Effect Concentration
LD50: Lethal Dose Medium
LC50: Lethal Concentration Medium
EC50: Effective Concentration Medium
IC50: Inhibitory Concentration Medium
BOD: Biological Oxygen Demand.
NOAEL: No observable adverse effect level
NOEL: No observed effect level
NOAEC: No observed adverse effect concentration
NOEC: No observed effect concentration
N/A: Not applicable
|| : Changes from the last revision

Data Bases consulted

EINECS: European Inventory of Existing Commercial Substances.
TSCA: Toxic Substances Control Act, US Environmental Protection Agency.
HSDB: US National Library of Medicine.
RTECS: US Dept. of Health & Human Services.
EINECS: European Inventory of Existing Commercial Substances.
TSCA: Toxic Substances Control Act, US Environmental Protection Agency.
HSDB: US National Library of Medicine.
RTECS: US Dept. of Health & Human Services.

Hazard Class-and-Category shown in the document

H318: Causes serious eye damage.
H302: Harmful if swallowed.
H373: May cause damage to organs through prolonged or repeated exposure.
H361d: Suspected of damaging the unborn child.
H319: Causes serious eye irritation.

Purchasing companies have an obligation to ensure that their employees are properly trained on the safe handling and use of the product in accordance with the guidelines contained in this information note about product safety.

Furthermore, companies purchasing this product are required to inform their employees, and individuals who could manipulate or use it within their facilities, about all indications included in the INFORMATION NOTE ABOUT PRODUCT SAFETY, in particular those relating to the product's risks to the health and safety of people and to the environment.

Safety Information Sheet/Fact Sheet prepared in compliance with Article 32 of Regulation (EC) 1907/2006 (REACH), in order to communicate information down the supply chain for substances on their own or in mixtures for which a safety data sheet is not required in the SDS format. Therefore, this document does not constitute a Material Safety Data Sheet (MSDS/SDS) according to Article 31 of REACH, given that for the purposes of REACH, it is not compulsory to provide a MSDS/SDS for the substance or mixture covered under this Safety Information Sheet/Fact Sheet.

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