SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended

Version #: 01
Issue date: 14-December-2021
Revision date: -
Supersedes date: -

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

1.1. Product identifier

Trade name or designation of the mixture	MAKER HYDROFLUX EP 100
Registration number	-
Synonyms	None.
Product code	RP_6008J

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

Identified uses	Industrial applications.
Uses advised against	All other uses.

1.3. Details of the supplier of the safety data sheet

Company name	REPSOL LUBRICANTES Y ESPECIALIDADES, S.A.
Address	Méndez Álvaro, 44 28045 - MADRID, Spain
Telephone	+34 917538000 /+34 917538100
Fax	+34 902303145
Email address	FDSRLESA@repsol.com

1.4. Emergency telephone number

Carechem 24	+34 91 114 2520 / +44 1235 239670

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.

Precautionary statements

Prevention	Not assigned.
Response	Not assigned.
Storage	Not assigned.
Disposal	Not assigned.

Supplemental information on the label	EUH210 - Safety data sheet available on request.
2.3. Other hazards	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Please refer to Sections 5, 6 and 7 of this SDS for information on other hazards, different from classification hazards but which may contribute to the overall hazards of the product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
2,6-Di-tert-butylphenol	< 0,15	128-39-2 204-884-0	01-2119490822-33-XXXX	-	

Classification: Skin Irrit. 2;H315, Aquatic Acute 1;H400, Aquatic Chronic 1;H410

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed Exposure may cause temporary irritation, redness, or discomfort.

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

SECTION 5: Firefighting measures

General fire hazards Will burn if involved in a fire.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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 During fire, gases hazardous to health may be formed such as: Carbon monoxide, carbon dioxide, oxides of sulphur, zinc and phosphorus.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Follow standard emergency procedure. Wear appropriate personal protective equipment (See Section 8).

For emergency responders Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure safe systems of work or equivalent arrangements are in place to manage risks. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid prolonged exposure. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s)

Industrial applications.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Spain. Occupational Exposure Limits

Product	Type	Value	Form
Oil mist, mineral	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General Population

Components	Value	Assessment factor	Notes
2,6-Di-tert-butylphenol (CAS 128-39-2)			
Long-term, Systemic, Inhalation	20,9 mg/m3	10	Repeated dose toxicity
Long-term, Systemic, Oral	6,75 mg/kg bw/day	40	Repeated dose toxicity

Workers

Components	Value	Assessment factor	Notes
2,6-Di-tert-butylphenol (CAS 128-39-2)			
Long-term, Systemic, Dermal	11,25 mg/kg bw/day	24	Repeated dose toxicity
Long-term, Systemic, Inhalation	70,61 mg/m3	6	Repeated dose toxicity

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
2,6-Di-tert-butylphenol (CAS 128-39-2)			
Freshwater	0,001 mg/l	50	
Marine water	0 mg/l	500	
Secondary poisoning	60 mg/kg	90	Oral
Sediment (freshwater)	0,317 mg/kg		
Sediment (marine water)	0,032 mg/kg		
Soil	0,697 mg/kg	10	
STP	10 mg/l	100	

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information

The choice of the most appropriate personal protective equipment in each case depends, among other factors, on the nature of the work to be done and the conditions in which it is carried out. To do so, take the relevant risk analyses into account and consult the safety officer and/or equipment suppliers, if necessary, to make the right choice. In any case, the equipment must comply with the currently applicable CEN standards. Workers using this equipment must have received the required training in the use of the same.

Eye/face protection

Wear safety glasses with side shields (or goggles). Eye protection should meet standard EN 166.

Skin protection

- Hand protection	Wear appropriate chemical resistant gloves. Always wear chemical-resistant protective gloves that comply with EN 374 to handle this product. Observe good industrial hygiene practices and wash gloves with soap and water before removing them. Assess the working conditions and always consult your glove supplier for information on the most suitable type of glove for each task and the required material, thickness, and breakthrough time specifications. The use of type-B gloves in accordance with EN 374 is recommended as a minimum protection against intermittent or splash contact. Consult your supplier to find the most suitable option for the product in question. The requirements of EN 388 must be taken into account for applications involving mechanical hazards with the risk of abrasion or incision. The requirements outlined in EN 407 must be taken into consideration for tasks involving thermal hazards.
- Other	Wear suitable protective clothing.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with combination filter (type A2/P2) can be used. Respiratory protection should meet standard EN 14387. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. Appropriate respirator selection should be made by a qualified professional.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels. 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 SDS.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Form	Liquid.
Colour	L2
Odour	Property has not been measured.
Melting point/freezing point	-21 °C (-5,8 °F)
Boiling point or initial boiling point and boiling range	Property has not been measured.
Flammability	Will burn if involved in a fire.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Property has not been measured.
Explosive limit – upper (%)	Property has not been measured.
Flash point	250 °C (482 °F) (Typical)
Auto-ignition temperature	Property has not been measured.
Decomposition temperature	Property has not been measured.
pH	Property has not been measured.
Kinematic viscosity	100 mm²/s (40 °C (104 °F)) 11,1 mm²/s (100 °C (212 °F))
Solubility	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water) (log value)	Property has not been measured.
Vapour pressure	Property has not been measured.
Density and/or relative density	
Density	0,887 g/cm³
Relative density	Property has not been measured.
Vapour density	Property has not been measured.
Particle characteristics	Not applicable, material is a liquid.

9.2. Other information

9.2.1. Information with regard to physical hazard classes	No relevant additional information available.

9.2.2. Other safety characteristics No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid Contact with incompatible materials.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous decomposition products No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion May cause discomfort if swallowed.

Symptoms Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product	Species	Test Results
MAKER HYDROFLUX EP 100 (CAS Mixture)		
Acute		
Dermal		
ATE		> 5000 mg/kg
Oral		
ATE		> 5000 mg/kg

Components	Species	Test Results
2,6-Di-tert-butylphenol (CAS 128-39-2)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory sensitisation Due to partial or complete lack of data the classification is not possible.

Skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Carcinogenicity Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Highly refined mineral oil (CAS -) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Based on available data, the classification criteria are not met.

Mixture versus substance information No information available.

11.2. Information on other hazards

Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other information	Prolonged or repeated contact with used oil may cause serious skin diseases. Unless otherwise stated, the health effects of this product are assessed on the basis of the applicable calculation methods for classification.

SECTION 12: Ecological information

12.1. Toxicity Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

Components		Species	Test Results
2,6-Di-tert-butylphenol (CAS 128-39-2)			
Aquatic			
Crustacea	EC50	Daphnia magna	0,45 mg/l, 48 hours
	NOEC	Daphnia magna	0,035 mg/l, 21 days

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

2,6-Di-tert-butylphenol (CAS 128-39-2)	4,92

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects Oil spills are generally hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.
14.3. Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
Hazard No. (ADR)	Not assigned.
Tunnel restriction code	Not assigned.
14.4. Packing group	Not assigned.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not assigned.

RID

14.1. UN number	Not regulated as dangerous goods.
14.2. UN proper shipping name	Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group Not assigned.

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

ADN

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group Not assigned.

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

IATA

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group Not assigned.

14.5. Environmental hazards No.

14.6. Special precautions for user Not assigned.

IMDG

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

14.4. Packing group Not assigned.

14.5. Environmental hazards

Marine pollutant No.

EmS Not assigned.

14.6. Special precautions for user Not assigned.

14.7. Maritime transport in bulk according to IMO instruments Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute toxicity estimate.
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
EC50: Effective Concentration, 50%.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
IMO: International Maritime Organization.
LD50: Lethal Dose, 50%.
NOEC: No Observed Effect Concentration.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
STP: Sewage treatment plant.
TWA: Time Weighted Average.
vPvB: Very persistent and very bioaccumulative.

References	ECHA CHEM HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H315 Causes skin irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
Training information	Follow training instructions when handling this material.

Disclaimer

This Safety Data Sheet (SDS) refers exclusively to the substance/product specified in section 1 of this document.

The information provided in this SDS has been obtained according to the best information available on the basis of technical data that is considered reliable at the time of its preparation, and in accordance with the legal requirements in force concerning classification, packaging and labelling of dangerous substances, not involving the granting of any express or implied warranty or on the accuracy of the information contained therein or concerning its suitability for a particular use or specification.

The purchaser as the recipient of the substance/product specified in section 1 of this document to which this Safety Data Sheet (SDS) refers, is responsible for evaluating the information contained in the SDS, and for verifying that it is correct and appropriate for the intended use of the substance/product specified in section 1 of this document.

The purchaser, as the recipient of the substance/product specified in section 1 of this document referred to in this Safety Data Sheet (SDS) is also responsible for adequately managing the risks thereof in its place of work. Consequently, the purchaser is obliged, regarding its workers and representatives, as well as any other person who may handle, use or be exposed to the substance/product specified in section 1 of this document in their place of work to (i) facilitate access to the relevant information in this Safety Data Sheet (SDS), transmitting for this purpose the relevant indications included in the SDS, especially those relating to the risks of the product/substance specified in section 1 of this document for the safety and health of persons and for the environment. As well as (ii) ensuring that they receive and have adequate training in handling, using or being exposed to the product/substance specified in section 1 of this document in accordance with the guidance contained in the SDS.

Accordingly, no liability for damages to the recipient of the SDS arising out of the use of the information or the use of the substance/product specified in section 1 of this document shall be accepted.