SAFETY DATA SHEET



MOBIL CENTAUR XHP 461

Section 1. Identification

: MOBIL CENTAUR XHP 461 **Product name**

: base oil and additives **Product description**

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

Identified uses : grease

Uses advised against : This product is not recommended for any industrial, professional or consumer use

other than the Identified Uses above.

Supplier : ExxonMobil Petroleum & Chemical BV

POLDERDIJKWEG

Antwerpen B-2030 Belgium

24 Hour Emergency

Telephone

: +44 20 3885 0382 / +1-703-527-3887 (CHEMTREC)

Supplier General Contact : +20 2 279 16 390

E-Mail : SDS-DS@exxonmobil.com

Section 2. Hazard identification

Classification of the substance or mixture : Not classified.

Supplemental label

elements

: EUH208 - Contains benzene sulfonic acids, c10-16 alkyl derivs.. ca salts and benzenesulfonic acid, mono-c16-24-alkyl derivs, calcium salts. May produce an

allergic reaction.

EUH210 - Safety data sheet available on request.

Other hazards which do not : None known.

result in classification

Nota

: This material should not be used for any other purpose than the intended use in

Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% by weight	Identifiers
benzene sulfonic acids, c10-16 alkyl derivs., ca salts	≤3	REACH #: 01-2119492627-25 EC: 271-529-4 CAS: 68584-23-6
calcium dodecylbenzene sulfonate	≤3	REACH #: 01-2120122335-68 EC: 247-557-8 CAS: 26264-06-2
benzenesulfonic acid, mono-c16-24-alkyl derivs. calcium salts	≤3	REACH #: 01-2119492616-28

Date of issue/Date of revision Date of previous issue : 10/18/2023 Version: 1.01 1/9 : 9 August 2024

MOBIL CENTAUR XHP 461

Section 3. Composition/information on ingredients

EC: 274-263-7 CAS: 70024-69-0

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

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen

tight clothing such as a collar, tie, belt or waistband.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 10 minutes.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been

swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such

as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact: Causes mild skin irritation.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Date of issue/Date of revision : 9 August Date of previous issue : 10/18/2023 Version : 1.01 2/9 2024

Section 4. First-aid measures

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

Specific hazards arising from the chemical

Hazardous combustion products

: No specific fire or explosion hazard.

: Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, sulfur oxides

Special protective actions for fire-fighters

: Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Assure an extended cooling down period to prevent reignition. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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).

Methods and material for containment and cleaning up

Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Confine the spill immediately with booms. Skim from surface Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Date of issue/Date of revision : 10/18/2023 Version : 1.01 : 9 August Date of previous issue 3/9 2024

Section 6. Accidental release measures

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Static Accumulator

: This material is not a static accumulator.

including any incompatibilities

Conditions for safe storage, : 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. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
residual oils (petroleum), solvent-dewaxed	ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined]
distillates (petroleum), solvent-refined heavy paraffinic	TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Appropriate engineering controls

Environmental exposure controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : 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.

Individual protection measures

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 8. Exposure controls/personal protection

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Nitrile, minimum 0.38 mm thickness or comparable protective barrier material

Body protection

: 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.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

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

Appearance

Physical state : Solid. [Semi-fluid]

Colour : Amber

Odour : Characteristic
Odour threshold : Not available.

pH : Not applicable.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling

range

: >315.56°C (>600°F) [Estimated]

Flash point : Open cup: >200°C (>392°F) [EST. FOR OIL, ASTM D-92 (COC)]

Evaporation rate : Not available.
Flammability : Ignitable
Lower and upper explosion : Not applicable.

limit/flammability limit

Vapour pressure : <0.1 mm Hg [20 °C] [Estimated]

Relative vapour density : Not applicable.

Relative density : 1

Solubility in water : Negligible

Partition coefficient: n-

octanol/water

: >3.5 [Estimated]

Auto-ignition temperature: Not applicable.

Date of issue/Date of revision : 9 August Date of previous issue : 10/18/2023 Version : 1.01 5/9

Section 9. Physical and chemical properties and safety characteristics

Decomposition temperature : Not available. **Viscosity** : 460 cSt [40 °C]

Particle characteristics

Median particle size : Not available.

DMSO Extract (mineral oil : <3 % by weight

only), IP-346

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : High energy sources of ignition. Excessive heat.

Incompatible materials : Strong oxidisers

Hazardous decomposition products

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Species	Result	Duration
calcium dodecylbenzene sulfonate	LD50 Oral	Rat	1300 mg/kg	-

Conclusion/Summary

Inhalation : Minimally Toxic. No end point data for material. Based on assessment of the

components.

Dermal : Minimally Toxic. No end point data for material. Based on assessment of the

components.

Oral : Minimally Toxic. No end point data for material. Based on assessment of the

components.

Irritation/Corrosion

Conclusion/Summary

Skin : Mildly irritating to skin with prolonged exposure. No end point data for material. Based

on assessment of the components.

Eyes : May cause mild, short-lasting discomfort to eyes. No end point data for material.

Based on assessment of the components.

Respiratory : Negligible hazard at ambient/normal handling temperatures. No end point data for

material.

Respiratory or skin sensitization

Conclusion/Summary

Skin : Not expected to be a skin sensitizer. No end point data for material. Based on

assessment of the components.

Respiratory: Not expected to be a respiratory sensitizer. No end point data for material.

Mutagenicity

Date of issue/Date of revision : 9 August Date of previous issue : 10/18/2023 Version : 1.01 6/9

Section 11. Toxicological information

Conclusion/Summary

: Not expected to be a germ cell mutagen. No end point data for material. Based on assessment of the components.

Carcinogenicity

Conclusion/Summary

: Not expected to cause cancer. No end point data for material. Based on assessment of the components.

Reproductive toxicity

Conclusion/Summary

: Not expected to be a reproductive toxicant. No end point data for material. Based on assessment of the components.

Specific target organ toxicity (single exposure)

Conclusion/Summary

: Not expected to cause organ damage from a single exposure. No end point data for material.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
MOBIL CENTAUR XHP 461	Not applicable.	-

Conclusion/Summary

: Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

Aspiration hazard

Conclusion/Summary

: Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. Data available.

Other information

Contains

: Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitising in test animals.

Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

Toxicity

Conclusion/Summary

Acute toxicity

: Not expected to be harmful to aquatic organisms.

Chronic toxicity

: Not expected to demonstrate chronic toxicity to aquatic organisms

Persistence and degradability

Biodegradability

: Base oil component -- Expected to be inherently biodegradable

Bioaccumulative potential

Conclusion/Summary

: Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Mobility in soil

Mobility

: Base oil component -- Expected to partition to sediment and wastewater solids. Low solubility and floats and is expected to migrate from water to the land.

Other ecological information

Other adverse effects : No known significant effects or critical hazards.

Date of issue/Date of revision : 9 August Date of previous issue : 10/18/2023 Version : 1.01 7/9

Section 13. Disposal considerations

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.

Section 14. Transport information

	ADR	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according : Not applicable.

to IMO instruments

Section 15. Regulatory information

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.

Inventory list

Australia inventory (AIIC) : All components are listed or exempted.

Canada inventory (DSL-NDSL) : Restrictions Apply **China inventory (IECSC)** : Restrictions Apply

Japan inventory (CSCL) : All components are listed or exempted. : All components are listed or exempted.

Japan inventory (Industrial Safety and

Health Act)

Date of issue/Date of revision Version : 1.01 : 9 August Date of previous issue :10/18/2023 2024

MOBIL CENTAUR XHP 461

Section 15. Regulatory information

New Zealand Inventory of Chemicals

(NZIoC)

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

Korea inventory (KECI) : All components are listed or exempted.

Taiwan Chemical Substances Inventory

(TCSI)

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

Section 16. Other information

History

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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

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)

: All components are listed or exempted.

: All components are listed or exempted.

N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

	Classification	
Not classified.		Justification
References	: Not available.	

V Indicates information that has changed from previously issued version.

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Date of issue/Date of revision : 9 August Date of previous issue : 10/18/2023 Version : 1.01 9/9