SAFETY DATA SHEET

ExonMobil

MOBIL DELVAC SUPER DH-2 15W-40

1. Product and company identification

Product name : MOBIL DELVAC SUPER DH-2 15W-40

Product description : base oil and additives

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

Identified uses : Engine oil

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

other than the identified uses above.

Supplier : ExxonMobil Japan Godo Kaisha

SHINAGAWA GRAND CENTRAL TOWER

2-16-4 KONAN, MINATO-KU, TOKYO 108-8218 Japan

24-Hour emergency telephone number

: 0800-300-5842/+1-703-527-3887 (CHEMTREC)

Supplier General Contact : 0120-016-313

SDS Internet Address : www.sds.exxonmobil.com

2. Hazards identification

GHS Classification : Not classified.

Contains : severely hydrotreated heavy paraffinic distillate and tetrapropenyl phenol

Note : 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.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	Identifiers
severely hydrotreated heavy paraffinic distillate	72	CAS: 64742-54-7
solvent refined light paraffinic distillate (petroleum)	≤10	CAS: 64741-89-5
hydrotreated light paraffinic distillates, petroleum	≤10	CAS: 64742-55-8
solvent dewaxed heavy paraffinic distillate	≤10	CAS: 64742-65-0
tetrapropenyl phenol	≤1.0	CAS: 74499-35-7

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. Get medical attention if irritation

occurs.

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

Get medical attention if symptoms occur.

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4. First aid measures

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Ingestion

: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Local necrosis as evidenced by delayed onset of pain and tissue damage a few

hours after injection.

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.

See toxicological information (Section 11)

5. Fire-fighting 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

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products

: 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 runoff 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.

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5. Fire-fighting measures

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

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 spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized 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 spilled 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 materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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.

7. Handling and storage

Handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid contact with used product.

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 a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

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7. Handling and storage

Storage

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
severely hydrotreated heavy paraffinic distillate	Japan Society for Occupational Health (Japan, 5/2023) [Oil mist, mineral]
	OEL-M 8 hours: 3 mg/m ³ . Form: Mist.
	ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and
	severely refined]
	TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.
solvent dewaxed heavy paraffinic distillate	Japan Society for Occupational Health (Japan, 5/2023) [Oil mist, mineral]
	OEL-M 8 hours: 3 mg/m ³ . Form: Mist.
	ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined]
	TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.
solvent refined heavy paraffinic distillate	Japan Society for Occupational Health (Japan, 5/2023) [Oil mist,
(petroleum)	mineral]
	OEL-M 8 hours: 3 mg/m ³ . Form: Mist.
	ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and
	severely refined]
	TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.
solvent refined light paraffinic distillate	Japan Society for Occupational Health (Japan, 5/2023) [Oil mist,
(petroleum)	mineral]
	OEL-M 8 hours: 3 mg/m³. Form: Mist.
	ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and
	severely refined]
hardwater at a distant or anothing a distillator	TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.
hydrotreated light paraffinic distillates, petroleum	Japan Society for Occupational Health (Japan, 5/2023) [Oil mist,
petroleum	mineral]
	OEL-M 8 hours: 3 mg/m³. Form: Mist. ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and
	severely refined]
	TWA 8 hours: 5 mg/m³. Form: Inhalable fraction.
solvent dewaxed heavy paraffinic distillate	Japan Society for Occupational Health (Japan, 5/2023) [Oil mist,
berreit derrated floary paramine distillate	mineral]
	OEL-M 8 hours: 3 mg/m³. Form: Mist.
	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

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

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8. Exposure controls/personal protection

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.

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.

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: safety glasses with side-shields.

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.

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.

9. Physical and chemical properties

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 : Liquid.
Color : Amber

Odor : Characteristic
Odor threshold : Not available.
pH : Not applicable.
Melting point/freezing point : Not available.
Boiling point or initial : Not available.

range

boiling point and boiling

Flash point : Open cup: 226°C (438.8°F) [ASTM D-92]

Evaporation rate : Not available.
Flammability : Ignitable
Lower and upper explosion
limit/flammability limit : Lower: 0.9%
Upper: 7%

Vapor pressure : <0.1 mm Hg [20 °C]

Relative vapor density: Not available.

Relative density : 0.88

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9. Physical and chemical properties

Solubility in water : Negligible Partition coefficient: n- : >3.5

octanol/water

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Kinematic viscosity : 107.5 cSt [40 °C] [ASTM D 445] 14.5 cSt [100 °C] [ASTM D 445]

Particle characteristics

Median particle size : Not applicable.

Pour point : -27°C

DMSO Extract (mineral oil

only), IP-346

: <3 % by weight

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 oxidizers

Hazardous decomposition

products

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

11. Toxicological information

Information on toxicological effects

Acute toxicity

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 : Negligible irritation to skin at ambient temperatures. 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.

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11. Toxicological information

Germ Cell Mutagenicity

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 DELVAC SUPER DH-2 15W-40	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

: Tetrapropenyl phenol (TPP). TPP was tested in a rat oral gavage one-generation reproductive toxicity study and a rat dietary two-generation reproductive toxicity study. Results from the one-generation study included reduced ovary weights and changes in male reproductive accessory organs. Results from the two-generation study included prolonged estrous cyclicity, reduced ovary weights, accelerated sexual maturation, decreased mean live litter size, decreased fertility rates, hypospermia, and reduced weights of male reproductive accessory organs. A classification threshold for reproductive effects of 1.5 wt% TPP was derived by the supplier based on the NOAEL (15 mg/kg/day) from the rat dietary two-generation study and was confirmed in supporting studies with other substances containing TPP as an impurity. 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 sensitizing in test animals.

Product

: Diesel engine oils: Not carcinogenic in animals tests. Used and unused diesel engine oils did not produce any carcinogenic effects in chronic mouse skin painting studies. Oils that are used in gasoline engines may become hazardous and display the following properties: Carcinogenic in animal tests. Caused mutations in vitro. Possible allergen and photoallergen. Contains polycyclic aromatic compounds (PAC) from combustion products of gasoline and/or thermal degradation products.

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.

Ecotoxicity

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

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12. Ecological information

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.

Hazardous to the ozone

<u>layer</u>

: Not applicable.

Other ecological information

Other adverse effects Note

: No known significant effects or critical hazards.

: One or more additive components of this material contains a branched alkylphenol impurity that is highly toxic to aquatic organisms. The components containing the impurity have been tested by the additive supplier and found to be no more than minimally toxic to aquatic organisms.

13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

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.

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14. Transport information

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

15. Regulatory information

Fire Service Law

Category	3.	Danger category		Designated quantity
Category IV	Class IV petroleums	III	Flammable - Keep Fire Away	6000 L

Industrial Safety and Health Act

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
Mineral oil	≥90	Listed	168, 2-581 (2025-04)

Chemicals requiring notification

Ingredient name	%		Reference number
Mineral oil	≥90	Listed	168, 2-581 (2025-04)

Chemical substances that cause skin disorders, etc. and other chemical substances that must be handled with impermeable protective equipment etc. based on special chemical regulations. (Article 594-2 Paragraph 1 of Ordinance on ISH)

Ingredient name	CAS	%	Status	Remarks
benzene	71-43-2	≤0.10	Ordinance on specified chemical substances, etc.	-

Chemical Substances Control Law (CSCL)

Ingredient name	%		Reference number
Ethylene glycol	≤0.10	Priority assessment	105

Poisonous and Deleterious Substances

None of the components are listed.

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

Inventory list

Australia inventory (AllC)

Canada inventory (DSL-NDSL)

China inventory (IECSC)

All components are listed or exempted.

Japan Inventory (CSCL) : All components are listed or exempted

Japan inventory (Industrial Safety and : All components are listed or exempted. Health Act)

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15. Regulatory information

New Zealand Inventory of Chemicals

(NZIoC)

: All components are listed or exempted.

Philippines inventory (PICCS)

: All components are listed or exempted.

Korea inventory (KECI)

: All components are listed or exempted.

Taiwan Chemical Substances Inventory

(TCSI)

: All components are listed or exempted.

United States inventory (TSCA 8b)

: All components are active or exempted.

16. Other information

History

Date of issue/Date of

: 21 May 2025

revision

Date of previous issue : 12 March 2025

Version

1.06

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)

N/A = Not available SGG = Segregation Group

UN = United Nations

Procedure used to derive the classification

Not classified.

References : Not available.

▼ Indicates information that has changed from previously issued version.

Product code : 201520508520_1167286

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