MSDS Material Safety Data Sheet

TAPMATIC # 2

1. Product Identification

Product: Shellsol D60
CAS No.: 64742-48-9
EC No: 265-150-3

SHELLSOL D60 consists predominantly of C11-C12 paraffins and naphthenes. Deep hydrogenation gives this solvent a very low aromatic content, negligible amount of reactive impurities and low, sweet odour.

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2. Composition/Information on Ingredients

Ingredients	CAS No.	Percent	Hazardous
Shellsol D60	64742-48-9	> 75%	Yes

Product Name : Tapmatic Dual Action Plus #2
Product Use : Tapping & Cutting Fluid Aid. Packaging: 500ml, 5ℓ & 25ℓ

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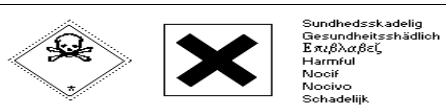
3. Hazards Identification

Material Formal Name: Naphtha (petroleum), hydrotreated heavy
CAS No.: 64742-48-9
INDEX No.: 649-327-00-6
EINECS No.: 265-150-3
Additional Information: Refer to chapter 16 for full text of EC R-phrases.



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4. First Aid Measures

Skin Contact: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
Eye Contact: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion: If swallowed, DO NOT INDUCE VOMITING. Transport to nearest medical facility for additional treatment.

5. Fire Fighting Measures

Specific Hazards: Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.
Unsuitable Extinguishing Media: Do not use water in a jet.
Protective Equipment for Firefighters: Wear full protective clothing and self-contained breathing apparatus.
Additional Advice: Keep adjacent containers cool by spraying with water.

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6. Accidental Release Measures

Protective measures: Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance of disposal of spilled material see Chapter 13 of this Material Safety Data Sheet. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator.
Clean Up Methods: For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as a vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
Additional Advice: See Chapter 13 for information on disposal. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

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7. Handling and Storage

General Precautions: Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. On guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
Handling: Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Avoid contact with skin, eyes and clothing. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1m/sec until fill pipe submerged to twice its diameter, then (<=7 m/sec). Avoid splash filling. Do NOT use compressed air for filling.
Storage: Must be stored in a diked (bunded) area. Bulk storage tanks should be diked (bunded).
Product Transfer: Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. If positive displacement pumps are used, these must be fitted with a non-integral pressure relief valve.
Recommended Materials: For containers, or container linings use mild steel, stainless steel. For container paints, use epoxy paint, zinc silicate paint.
Unsuitable Materials: Avoid prolonged contact with natural, butyl or nitrile rubbers.
Container Advice: Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.
Additional Information: Ensure that all local regulations regarding handling and storage facilities are followed.

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8. Exposure Controls/Personal Protection

Exposure Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Eye washes and showers for emergency use.
Personal Protective Equipment: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Respiratory Protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select and appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [boiling point >65ºC (149ºF)] meeting EN141. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.
Hand Protection: Longer term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC or neoprene rubber gloves. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hand should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Eye Protection: Chemical splash goggles (chemical monogoggles).
Protective Clothing: Use protective clothing which is chemical resistant to this material. Safety shoes and

boots should also be chemical resistant.
Monitoring Methods: Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may be appropriate. Examples of sources of recommended air monitoring methods are given below or contact supplier. Further national methods may be available. National Institute of Occupational Safety and Health (NIOSH), USA: Manual of analytical Methods: https://www.cdc.gov/niosh/nmam/default.html Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods https://www.osha.gov/dts/sltc/methods/toc.html Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances https://www.hsl.gov.uk/

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9. Physical and Chemical Properties

Appearance: Colourless liquid.
Odour: Hydrocarbon.
pH: Not applicable
Boiling Point: Typical 179 – 213.9ºC/ 354 – 417.0ºF
Pour point: <-25º/-13ºF
Flash point: Typical 61 - 66ºC / 142 - 151ºF (ASTM D-93 / PMCC)
Explosion / Flammability limits in air: 0.7 – 6%(V)
Auto-ignition temperature: 235 - 315ºC / 455 - 599ºF (ASTM E-659)
Vapor Pressure: Typical 30-93 Pa at 0ºC / 32ºF
Specific gravity: 0.78 – 0.81
Density: Typical 0.780 g/cm³ at 15ºC / 59ºF (AST D-4052)
Water solubility: Insoluble
Solubility in other solvents: Hydrocarbon solvent(s) Soluble
Vapour density (air=1): Data not available
Volatile organic carbon content: 85% (EC/1999/13)
Evaporation Rate (nBuAc=1): 0.04 (ASTM D-3539, nBuAc=1)

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10. Stability and Reactivity

Stability: Stable under normal conditions of use.
Conditions to Avoid: Avoid heat, sparks, open flames and other ignition sources.

Materials to Avoid: Strong oxidising agents.
Hazardous Decomposition Products: Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

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11. Toxicological Information

Basis for Assessment: Information given is based on product testing, and/or similar products, and/or components.
Acute Oral Toxicity: Expected to be of low toxicity: LD50>2000 mg/kg, Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Acute Dermal Toxicity: Expected to be of low toxicity: LD50>2000 mg/kg, Rat.
Acute Inhalation Toxicity: Low toxicity: LC50 greater that near-saturated vapour concentration. /4 hours, Rat.
Skin Irritation: May cause moderate skin irritation (but insufficient to classify). Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
Eye Irritation: Essentially non-irritating to eyes.
Respiratory Irritation: Not expected to be a respiratory irritant.
Sensitisation: Not expected to be a skin sensitiser.
Repeated Dose Toxicity: Kidney: caused kidney effects in male rats which are not considered relevant to humans.
Mutagenicity: No evidence of mutagenic activity.
Carcinogenicity: Repeated exposure may cause skin tumour promotion in experimental animals. An increased tumour incidence has been observed in experimental animals; the significance of this finding to man is unknown. (Stoddard solvent IIC) Not classified as a carcinogen.
Reproductive and Developmental Toxicity: Not expected to be a developmental toxicant. Not expected to impair fertility.

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12. Ecological Information

Acute Toxicity Fish: Low toxicity: LC/EC/IC50>1000 mg/l.
Aquatic Invertebrates: Low toxicity: LC/EC/IC50>1000 mg/l.
Algae: Low toxicity: LC/EC/IC50>1000 mg/l.
Mobility: Floats on water. Absorbs to soil and has low mobility.
Persistence/degradability: Expected to be readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.
Bioaccumulation: Has the potential to bioaccumulate.

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13. Disposal Considerations

Material Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water course. Waste product should not be allowed to contaminate soil or water.
Container Disposal: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard if heated above the flash point. Do not puncture, cut or weld uncleaned drums. Send to drum recovered or metal reclaimer.
Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent that regional or national requirements and must be complied with.

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14. Transport Information

ADG: This material is not classified as dangerous according to the Australian Dangerous Goods Code.
IMDG: This material is not classified as dangerous under IMDG regulations.
IATA (Country variations may apply): This material is not classified as dangerous under IATA regulations.

15. Regulatory Information

The regulator information is not intended to be comprehensive. Other regulations may apply to this material.
SUSDP Schedule: 5 DSL: Listed
INV (CN): Listed
TSCA: Listed
EINECS: Listed. 265-150-3
KECI (KR): Listed. KE-25622
PICCS (PH): Listed.
Other Information: 94/69/EC (21st ATP). The benzene content of this product is less than 0.1%. Nota P applies. Classification and labelling as carcinogen (R45) is not required.

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16. Other Information

R-phrase(s) R65 Harmful: May cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
MSDS Regulation: Uses and Restrictions: Industrial Solvent

Disclaimer:

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