

SAFETY DATA SHEET

2316410 | 2316430 | ShellSol D40

info@deffner-johann.de | +49 (0)9723 9350-0

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Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)

Shellsol® D 40

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1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Shellsol® D 40

Article No.: 2316 401

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Industrial application

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Deffner & Johann GmbH

Address: Mühlackerstr.13, 97520 Rötthlein, Germany

Tel./Fax.: +49 9723 9350-0 / +49 9723 9350-25

Internet: www.deffner-johann.de

E-Mail: info@deffner-johann.de

Importer:

1.4. Emergency No.

+49 9723 9350-0

Emergency No.:

Giftnotruf (Berlin): +49 (0) 30 3068 6790

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

*Classification according to Regulation
(EC) No. 1272/2008 (CLP/GHS)*

Flammable liquids, hazard category 3

Aspiration hazard, hazard category 1

Specific Target Organ Toxicity (single exposure), hazard category 3

Chronic aquatic toxicity, hazard category 2

H226 Flammable liquid and vapour.

Cat.: 3

H304 May be fatal if swallowed and enters airways.

Cat.: 1

H336 May cause drowsiness or dizziness.

Cat.: 3

H411 Toxic to aquatic life with long lasting effects.

Cat.: 2

Possible Environmental Effects:

See Section 12.

2.2. Label Elements

*Classification according to Regulation
(EC) No. 1272/2008 (CLP/GHS)*

Hazard designation:

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GHS02



GHS07



GHS08-2



GHS09

Signal word:

Danger

Hazard designation:

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Safety designation:

P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/ clothing/ eye/ face protection.
P301+P310	If swallowed: Immediately call a poison center or physician.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P331	Do not induce vomiting.
P403+P235	Store in a well ventilated place. Keep cool.

Hazardous components for labelling:

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics
Hydrocarbons, C9-C11, isoalkanes, cycloalkanes, <2% aromatics

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Mixture of paraffinic and naphthenic hydrocarbons C9-C11.

Information on Components / Hazardous Ingredients:

Hydrocarbons, C11-C14, n-Alkanes, Isoalkanes,

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Cyclenes, <2 % Aromatics (H226-336-304); REACH Reg. No.: 01-2119463258-33-0000	0 - 100 %	CAS-Nr: 64742-48-9 EINECS-Nr: 919-857-5 EC-Nr:
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Hydrocarbons, C9-C11, Isoalkanes, Cyclics, <2 % Aromatics (H226-304-336-411); REACH Reg. No. 01-2119480153-44-xxxx	0 - 100 %	CAS-Nr: EINECS-Nr: 920-134-1 EC-Nr:
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Additional information:

Benzol concentration < 0.1 weight%

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

*Take person away from hazardous area.
Remove contaminated clothes immediately.
First aiders have to protect themselves.*

After inhalation:

*Take affected person to fresh air.
Give artificial respiration in case breathing is not regular or if it has stopped.
In case of unconsciousness place patient stable in side position for transportation.*

After skin contact:

Wash off with plenty of water and soap. Consult a physician if irritation persists.

After eye contact:

*Rinse open eye for several minutes under running water.
Seek medical attention if irritation persists.*

After ingestion:

*Do not induce vomiting.
Risk of aspiration!
Immediately get medical help.
In case of spontaneous vomiting, bring unconsciousness person in a stable side position.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

*Headache, dizziness, unconsciousness, dry skin.
Impairment of the central nervous system.*

Effects:

If vomiting occurs after ingestion, aspiration into the lungs can occur. Aspiration can cause pulmonary edema and pneumonia.

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

5. Fire-Fighting Measures

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5.1. Extinguishing Media

Suitable extinguishing media:

Water mist, extinguishing powder, foam, carbon dioxide.

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

Flammable liquid.

Product floats on water surface and does not dissolve.

Fumes can form an explosive mixture with air.

The vapor is heavier than air, spreads along the ground and distant ignition is possible.

In case of fire: formation of carbon oxides.

5.3. Advice for Firefighters

Protective equipment:

Further information:

Cool closed containers exposed to fire with water mist.

Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear appropriate protective equipment. Keep spectators away.

Ensure adequate ventilation.

Keep away from sources of heat and ignition.

Avoid contact with skin and eyes. Do not ingest or inhale.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

Contact local authorities if product pollutes soil or vegetation.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Remove large amounts with a pump.

Contain with absorbent material (sand, diatomaceous earth, acid binder, universal absorbent) and dispose accordingly.

6.4. Reference to other Sections

Protective clothing, see Section 8.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Keep containers tightly closed.

Provide adequate ventilation.

Hygienic measures:

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Take off contaminated clothing immediately.

Avoid contact with eyes and skin.

Do not inhale gas/fumes/vapours/aerosols.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry and cool room.

Store product in a well ventilated area.

Protect against heat.

Requirements for storage areas and containers:

Store in a room with a solvent-proof floor.

Suitable container material: stainless steel, carbon steel, polyvinyl chloride, polyester.

Unsuitable container material: natural rubber, butyl rubber, polystyrol, polyethylene.

Information on fire and explosion protection:

Combustible liquid.

Vapors may form an explosive mixture with air. Vapor is heavier than air and spreads along the ground.

Do not store together with ignitable sources, heat and fire.

Take measures to prevent electrostatic discharge.

Do not store together with: strong oxidants.

Storage class:

3; Flammable liquids (TRGS 510)

Further Information:

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900

Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, <2% aromatics: 250 mg/m³ (TWA)

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Hydrocarbons, C11-C14, n-Alkanes, Isoalkanes, Cyclenes, <2 % Aromatics:

208 mg/kg bw/d (worker, skin contact, long-term exposition - systemic effects)

871 mg/m³ (worker, inhalation, long-term exposition - systemic effects)

125 mg/kg bw/d (consumer, skin contact/swallowing, long-term exposition - systemic effects)

185 mg/m³ (consumer, inhalation, long-term exposition - systemic effects)

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effects)
Hydrocarbons, C9-C11, Isoalkanes, Cyclics, <2 % Aromatics:
871 mg/m³ (worker, inhalation, long-term exposition - systemic effects)
77 mg/m³ bw/d (worker, skin contact, long-term exposure - systemic effects)
185 mg/m³ (consumer, inhalation, long-term exposition - systemic effects)
46 mg/kg bw/d (consumer, skin contact/swallowing, long-term exposition - systemic effects)

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

No further measures, see Section 7 and 8.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

Respiratory equipment required in case of insufficient ventilation, filter type A (organic gases and vapors).

Hand protection:

Solvent resistant protective gloves.

Protective glove material:

*Nitrile rubber (480 min, 0.4 mm)
Fluoro carbon rubber - FKM (480 min; > 0.4 mm).*

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

*Prevent contamination of open water ways and sewage system.
Avoid contamination of ground water.*

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: liquid
Color: colorless
Odor: gasoline-like
Odor threshold: No information available.
pH-Value:

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not applicable

Melting temperature:

-20°C

Boiling temperature:

130 - 193°C

Flash point:

> 23°C

Evaporation rate:

0.2 (Butylacetat=1)

Flammability (solid, gas):

not applicable

Upper explosion limit:

7 Vol.-%

Lower explosion limit:

0.6 Vol.-%

Vapor pressure:

0.3 - 0.6 kPa (20°C)

Vapor density:

No information available.

Density:

0.75 - 0.8 g/cm³ (15°C)

Solubility in water:

negligible

Coefficient of variation (n-Octanol/Water):

no information available

Auto-ignition temperature:

> 200°C

Decomposition temperature:

No data available.

Viscosity, dynamic:

Explosive properties:

An explosive vapor/air mixture can be formed.

Oxidizing properties:

none

Bulk density:

not applicable

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

0.7 - 2 mm²/s (20°C)

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

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10.2.	Chemical Stability	<i>No decomposition if used according to specifications.</i>
10.3.	Possibility of Hazardous Reactions	<i>Formation of explosive vapor-air-mixtures possible.</i>
10.4.	Conditions to Avoid	
	<i>Conditions to avoid:</i>	<i>Avoid contact with heat, sparks and open fire.</i>
	<i>Thermal decomposition:</i>	<i>No data available.</i>
10.5.	Incompatible Materials	<i>Strong oxidizing agents.</i>
10.6.	Hazardous Decomposition Products	<i>Carbon oxides</i> <i>Thermal decomposition may yield toxic or irritating gases.</i>
10.7.	Further Information	
11.	Toxicological Information	
11.1.	Information on Toxicological Effects	
	<i>Acute Toxicity</i>	
	<i>LD50, oral:</i>	<i>Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, aromatic (< 2 %): > 5000 mg/kg (rat)</i> <i>Hydrocarbons, C9-C11, Isoalkanes, Cycloalkanes, aromatic (< 2 %): > 5000 mg/kg (rat; OECD 401)</i>
	<i>LD50, dermal:</i>	<i>Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, aromatic (< 2 %): > 5000 mg/kg (rabbit)</i> <i>Hydrocarbons, C9-C11, Isoalkanes, Cycloalkenes, aromatic (< 2 %): > 3160 mg/kg (rabbit, m/f; OECD 402)</i>
	<i>LC50, inhalation:</i>	<i>Hydrocarbons, C9-C11, Isoalkanes, Cycloalkanes, aromatic (< 2 %): > 5 mg/kg (rat; OECD 403)</i>
	<i>Primary effects</i>	
	<i>Irritant effect on skin:</i>	<i>Prolonged skin contact may defat the skin and produce dermatitis.</i>
	<i>Irritant effect on eyes:</i>	<i>Causes eye ailments, however does not damage the eye tissue.</i>
	<i>Inhalation:</i>	<i>No information available.</i>
	<i>Ingestion:</i>	<i>No information available</i>
	<i>Sensitization:</i>	<i>No sensitizing effects known.</i>
	<i>Mutagenicity:</i>	

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No mutagenic effects observed.

Reproductive toxicity:

Does not contain any component classified as toxic for reproduction.

Carcinogenicity:

Does not contain any component classified as carcinogenic.

Teratogenicity:

Not considered to be teratogenic.

Specific target organ toxicity (STOT):

Single exposure: may cause drowsiness or dizziness.

Repeated exposure: the substance or mixture is not classified as specific target organ toxicant.

Additional toxicological information:

Aspiration toxicity: may be fatal if swallowed and enters airways.

Inhalation: Long-term overexposure may cause headache, dizziness, tiredness, nausea and vomiting.

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

*Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, aromatic (< 2 %): LL50: > 1000 mg/l (96h, *Oncorhynchus mykiss*)*

*Hydrocarbons, C9-C11, Isoalkanes, Cycloalkanes, aromatic (< 2 %): LL50: 3.6 mg/l (96h, *Oncorhynchus mykiss*; OECD 203)*

Daphnia toxicity:

*Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, aromatisch (< 2 %): EL0: 1000 mg/l (48h, *Daphnia magna*)*

*Hydrocarbons, C9-C11, Isoalkanes, Cycloalkanes, aromatic (< 2 %): EL50: 22 - 46 mg/l (48h, *Daphnia magna*; OECD 202)*

Bacteria toxicity:

no information available

Algae toxicity:

*Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, aromatic (< 2 %): EL50: > 1000 mg/l (*Pseudokirchneriella subcapitata*); NOELR: 100 mg/l (*Pseudokirchneriella subcapitata*)*

*Hydrocarbons, C9-C11, Isoalkanes, Cycloalkanes, aromatisch (< 2 %): EL50: 1000 mg/l (72h, *Pseudokirchneriella subcapitata*; OECD 201)*

12.2. Persistency and Degradability

The product floats on the water surface and does not dissolve.

The product evaporates easily from water surface.

The individual components are readily biodegradable.

Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, aromatic (< 2 %): 80 % (28d); readily biodegradable

Hydrocarbons, C9-C11, Isoalkanes, Cycloalkanes, aromatic (< 2

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%) : readily biodegradable

12.3. Bioaccumulation

No information available.

12.4. Mobility

*Product floats on water and is not soluble in water.
Product is readily volatile.*

12.5. Results of PBT- und vPvP Assessment

The contents of the preparation do not comply with the criteria for the classification as PBT or vPvB.

12.6. Other Adverse Effects

Water hazard class:

*1, slightly hazardous
Do not let product contaminate ground water, waterways or sewage system.*

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

*Must not be disposed together with household garbage.
Do not let product enter water systems.
Product can be incinerated, when in compliance with local regulations.*

European Waste Code (EWC):

Uncleaned packaging:

*Empty container completely. Residues may cause an explosion hazard.
Do not puncture, cut or weld uncleaned drums. Risk of explosion.
Empty containers should be taken to an approved waste handling site for recycling or disposal.*

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA 3295

14.2. UN Proper Shipping Name

*ADR/RID: KOHLENWASSERSTOFFE, FLÜSSIG, N.A.G. (Kohlenwasserstoffe)
IMDG/IATA: HYDROCARBONS, LIQUID, N.O.S. (Hydrocarbons, C9-C11, isoalkanes, cyclics, <2% aromatics)*

14.3. Transport Hazard Classes

ADR Class: 3

Hazard no.: 3

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	<i>Classification code:</i>	<i>F1</i>
	<i>Tunnel restriction code:</i>	<i>D/E</i>
	<i>IMDG Class (sea):</i>	<i>3</i>
	<i>Hazard no.:</i>	<i>3</i>
	<i>EmS No.:</i>	<i>F-E, S-D</i>
	<i>IATA Class:</i>	<i>3</i>
	<i>Hazard no.:</i>	<i>3</i>
14. 4.	Packaging Group	
	<i>ADR/RID:</i>	<i>III</i>
	<i>IMDG:</i>	<i>III</i>
	<i>IATA:</i>	<i>III</i>
14. 5.	Environmental Hazards	
		<i>Labelling according 5.2.1.8 ADR/RID: fish and tree</i>
		<i>Labelling according 5.2.1.6.3 IMDG: fish and tree</i>
		<i>Classification as environmentally hazardous according 2.9.3</i>
		<i>IMDG: yes</i>
		<i>Labelled with "P" according 2.10 IMDG: yes</i>
14. 6.	Special Precautions for User	
		<i>not applicable</i>
14. 7.	Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code	
		<i>IMDG: not applicable</i>
14. 8.	Further Information	
15.	Regulatory Information	
15. 1.	Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture	
	<i>Water hazard class:</i>	<i>1, slightly hazardous for water (according to the German Regulation AwSV)</i>
	<i>Local regulations on chemical accidents:</i>	<i>Underlies the Accident Ordinance 2.3</i>
	<i>Employment restrictions:</i>	<i>The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline are to be observed.</i> <i>The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed.</i>
	<i>Restriction and prohibition of application:</i>	<i>EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 3, 40.</i>
	<i>Technical instructions on air quality:</i>	
15. 2.	Chemical Safety Assessment	
		<i>A Chemical Safety Assessment has been carried out for this</i>

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product.

15.3. Further Information

EU. Directive 2010/75/EU, VOC content 100 %

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.