

## 1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND COMPANY/ UNDERTAKING

**Material Name** : ShellSol A150  
**Uses** : Industrial Solvent.  
**Product Code** : Q7493  
**Supplier** : Chemisol Inc.  
 3/F Johnson Bldg. #5 D. Muñoz St.  
 Tandang Sora, Quezon City  
 Philippines  
**Telephone** : (632) 9385388  
**Fax** : (632) 9383818  
**Emergency Telephone Number** : (632) 9385388  
**Other Information** : SHELLSOL is a trademark owned by Shell Trademark Management B.V. and Shell Brands Inc. and used by affiliates of Royal Dutch plc.

## 2. HAZARDS IDENTIFICATION

**GHS Classification** : Flammable liquids, Category 4  
 Aspiration hazard, Category 1  
 Specific target organ toxicity - single exposure, Category 3,  
 Narcotic effects.  
 Carcinogenicity, Category 2  
 Acute hazards to the aquatic environment, Category 2  
 Hazardous to the aquatic environment - Long-term Hazard,  
 Category 2

**GHS Label Statements Symbol** :



**Signal Words** : Danger

**GHS Hazards Statements** : PHYSICAL HAZARDS:  
 H227: Combustible liquid.  
  
 : HEALTH HAZARDS:  
 H316: Causes mild skin irritation.  
 H351: Suspected of causing cancer.  
 H336: May cause drowsiness or dizziness.  
 H304: May be fatal if swallowed and enters airways.  
  
 : ENVIRONMENTAL HAZARDS:  
 H401: Toxic to aquatic life.  
 H411: Toxic to aquatic life with long lasting effects.

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**GHS Precautionary statements****Prevention**

: P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P243: Take precautionary measures against static discharge.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P281: Use personal protective equipment as required.  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271: Use only outdoors or in a well-ventilated area.  
P273: Avoid release to the environment.

**Response**

: P370+P378: In case of fire: Use appropriate media for extinction.  
P332+P313: If skin irritation occurs: Get medical advice/attention.  
P308+P313: IF exposed or concerned: Get medical advice/attention.  
P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P331: Do NOT induce vomiting.  
P391: Collect spillage.

**Storage**

: P403+P235: Store in a well-ventilated place. Keep cool.  
P233: Keep container tightly closed.  
P405: Store locked up.

**Disposal**

: P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

**Other Hazards which do not result in classification**

: In use, may form flammable/explosive vapour-air mixture. This material is a static accumulator. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Repeated exposure may cause skin dryness or cracking.

**Aggravated Medical Condition**

: Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Respiratory system.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

**Chemical Identity** : Solvent naphtha (petroleum), heavy aromatic  
**CAS No.** : 64742-94-5  
**EINENCS No.** : 265-198-5

**Classification of components according to GHS**

Chemical Name	Synonyms	CAS	Hazard Class (category)	Hazard statement	Conc.
Benzene		71-43-2	Flam. Liq. 2; Skin Corr. 2; Eye Dam. 2A; Asp. Tox. 1; Muta. 1B; Carc. 1A; STOT RE. 1; Aquatic Acute 2	H225; H315; H319; H304; H340; H350; H372; H401	>=0.00 – <0.10% W
Naphthalene		91-20-3	Carc. 2; Aquatic Acute. 1; Aquatic Chronic.2	H351; H400; H410	>=0.00 – <10.00% W
1,3,5-Trimethyl benzene		108-67-8	Flam. Liq. 3; STOT SE. 3; Aquatic Chronic.2	H226; H335; H411	>=1.00 – <=1.50% W
1,2,4-Trimethyl benzene		95-63-6	Flam. Liq. 3; Acute Tox.4; Eye Dam. 2; STOT SE. 3; Skin Corr. 2; Aquatic Chronic 2	H226; H332; H319; H335; H315; H411	>=10.00 – <=12.00% W
1,2,3-Trimethyl benzene		526-73-8	None, None	None	>=5.50 – <=7.00% W

**4. FIRST AID MEASURES**

**General advice** :

**If inhaled** : Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

**In case of skin contact** : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.

**In case of eye contact** : Flush eyes with water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persist, transport to the nearest medical facility for additional treatment.

**If swallowed** : If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within

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the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3° C), shortness of breath, chest congestion or continued coughing or wheezing. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

**Notes to physician**

: : Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing. Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.

**Immediate medical attention, special treatment**

: Potential for chemical pneumonitis. Call a doctor or poison control center for guidance. Causes central nervous system depression. Dermatitis may result from prolonged or repeated exposure.

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**5. FIRE FIGHTING MEASURES**
**Suitable 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.

**Specific hazards during Firefighting**

: 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.

**Special protective Equipment for firefighters**

: Wear full protective clothing and self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions,  
Protective equipment and  
emergency procedures**

: 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 Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

**Environmental  
Precautions**

: 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.

**Methods and materials  
for containment and  
cleaning up**

: 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 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 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 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.

**Advice on safe handling**

: Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Avoid contact with skin, eyes and clothing. Even with proper grounding and bonding, this material

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can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge ( $\leq 1$  m/s until fill pipe submerged to twice its diameter, then  $\leq 7$  m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

**Product Transfer**

: Keep containers closed when not in use. Refer to guidance under Handling section.

**Storage Conditions for safe storage**

: Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk. The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable. Must be stored in a diked (bunded) area. Bulk storage tanks should be diked (bunded). Keep away from flammables, oxidizing agents, and corrosives. Storage Temperature: Ambient.

**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

**Occupational Exposure Limits**

In the absence of occupational exposure standards for this product, it is recommended that the following are adopted.

Material	Source	Type	ppm	mg/m <sup>3</sup>	Notation
RCP Aromatic solvents 180-215	EU HSPA	TWA (8 h)		100 mg/m <sup>3</sup>	
1,3,5-Trimethyl benzene	ACGIH	TWA	25 ppm		
	SG OEL	TWA	25 ppm	123 mg/m <sup>3</sup>	
1,2,4-Trimethyl benzene	ACGIH	TWA	25 ppm		
	SG OEL	TWA	25 ppm	123 mg/m <sup>3</sup>	
1,2,3-Trimethyl benzen	ACGIH	TWA	25 ppm		
	SG OEL	TWA	25 ppm	123 mg/m <sup>3</sup>	

**Additional Information:** Wash hands before eating, drinking, smoking and using the toilet.

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**Biological Exposure Index (BEI)**

Material	Determinant	Sampling time	BEI	Reference
Benzene	t,t-Muconic acid in Creatinine in urine	Sampling time: End of shift	500 µg/g	ACGIH BEL (2011)
	S-Phenylmercapturic acid in Creatinine in urine	Sampling time: End of shift	25 µg/g	ACGIH BEL (2011)
Naphthalene	1-Naphthanol, with hydrolysis + 2-Naphthanol, with hydrolysis	Sampling time: End of shift		ACGIH BEL (02 2013)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	: Colourless Liquid.
<b>Odour</b>	: Aromatic
<b>Odour Threshold</b>	: Data not available.
<b>pH</b>	: Not applicable
<b>Initial Boiling point and boiling range</b>	: 179-214°C / 354-417°F
<b>Pour point</b>	: Typica -20°C / -4°F
<b>Flash point</b>	: Typical 62-65.6°C / 144-150.1°F (ASTM D-93 / PMCC)
<b>Upper / lower Flammability Or explosion limits</b>	: 0.6-7% (V)
<b>Auto-ignition temperature</b>	: 449-510°C / 840-950°F (ASTM D-4052)
<b>Flammability (solid, gas)</b>	: Yes, in certain circumstances product can ignite due to static electricity
<b>Vapour pressure</b>	: <1.3 kPa at 20°C / 68°F
<b>Relative density</b>	: 0.88-0.91 at 20°C / 68°F
<b>Density</b>	: Typical 893 kg/m <sup>3</sup> at 15°C / 59°F (ASTM D-4052)
<b>Solubilities:</b>	
<b>Water solubility</b>	: Insoluble
<b>Solubility in other solvents n-octanol/water partition coefficient (log Pow)</b>	: Data not available
<b>Decomposition Temperature</b>	: Note: Stable under normal conditions of use
<b>Viscosity, dynamic</b>	: Data not available
<b>Viscosity, kinematic</b>	: Data not available
<b>Vapour density (air=1)</b>	: 4.8
<b>Electrical conductivity</b>	: Low conductivity: <100 pS/m. The conductivity of this material makes it a static accumulator. A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m. Whether a liquid is nonconductive or semi-conductive, the precautions are the same. A number of factors, for example, liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid.
<b>Volatile organic carbon</b>	: 90% (EC/1999/13)
<b>Evaporation rate (nBuAc=1)</b>	: <1.0 (ASTM D 3539, nBuAc=1)

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**10. STABILITY AND REACTIVITY**

<b>Chemical stability</b>	: Stable under normal conditions of use.
<b>Possibility of hazardous Reactions</b>	: Data not available.
<b>Conditions to avoid</b>	: Avoid heat, sparks, open flames and other ignition sources.
<b>Incompatible materials</b>	: Strong oxidising agents.
<b>Hazardous decomposition Products</b>	: 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**

<b>Basis for assessment</b>	: Information given is based on product data and on data on the components and the toxicology of similar products.
<b>Information on likely routes of Exposure</b>	: Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion
<b>Acute toxicity Product</b>	
<b>Acute oral toxicity</b>	: Low toxicity: LD50 >5000 mg/kg, Rat
<b>Acute inhalation toxicity</b>	: Expected to be of low toxicity if inhaled. High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea.
<b>Acute dermal toxicity</b>	: Low toxicity
<b>Skin corrosion/irritation Product</b>	: Not irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
<b>Serious eye damage/ eye irritation Product</b>	: Not irritating to eye
<b>Respiratory or skin sensitization Product</b>	: Not a skin sensitiser
<b>Germ cell mutagenicity Product</b>	: Not mutagenic
<b>Carcinogenicity</b>	



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**Product**

: Limited evidence of carcinogenic effect (Naphthalene)

Naphthalene:	ACGIH Group A4: Not classifiable as a human carcinogen.
Naphthalene:	NTP: Reasonably Anticipated to be a Human Carcinogen.
Naphthalene:	IARC 2B: Possibly carcinogenic to humans.
Naphthalene:	GHS/CLP: Carcinogenicity Category 2
1,3,5-Trimethyl benzene:	GHS/CLP: No carcinogenicity classification
1,2,4-Trimethyl benzene:	GHS/CLP: No carcinogenicity classification
1,2,3-Trimethyl benzene:	GHS/CLP: No carcinogenicity classification

**Reproductive toxicity****Product**: Not expected to impair fertility.  
Causes foetotoxicity in animals at doses which are maternally toxic.**STOT - single exposure****Product**

: May cause drowsiness or dizziness.

**STOT - repeated exposure****Product**

: Kidney: caused kidney effects in male rats which are not considered relevant to humans

**Aspiration toxicity****Product**

which can be fatal.

: Aspiration into the lungs when swallowed or vomited may cause nchemical pneumonitis

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**12. ECOLOGICAL INFORMATION****Basis for assessment**: Incomplete ecotoxicological data are available for this product.  
The information given below is based partly on a knowledge of the components and the ecotoxicology of similar products.**Ecotoxicity****Product :****Toxicity to fish****(Acute toxicity)**: Toxic:  $1 < LC/EC/IC50 \leq 10 \text{ mg/l}$ 

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**Toxicity to crustacean****(Acute toxicity)**: Toxic:  $1 < LC/EC/IC50 \leq 10 \text{ mg/l}$ **Toxicity to algae/****aquatic plants****(Acute toxicity)**: Toxic:  $1 < LC/EC/IC50 \leq 10 \text{ mg/l}$ **Toxicity to microorganisms****(Acute toxicity)**: Expected to be toxic:  $1 < LC/EC/IC50 \leq 10 \text{ mg/l}$

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**Persistence and degradability****Product** : Readily biodegradable.**Biodegradability** : Oxidises rapidly by photo-chemical reactions in air.**Bioaccumulative potential****Product** :**Bioaccumulation** : Has the potential to bioaccumulate.**Mobility** : Floats on water.

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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 courses. 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 recoverer 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 than regional or national requirements and must be in compliance

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**14. TRANSPORT CONSIDERATIONS****Land (as per ADR classification): Regulated**

Class : 9

Packing group : III

Hazard identification no. : 90

UN number : 3082

Danger label (primary risk) : 9

UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (Naphthalene)

Environmental hazards : Yes

**IATA-DGR**

UN number : 3082

UN proper shipping name : Environmentally hazardous substances, liquid, n.o.s.

Technical name : (Naphthalene )

Class / Division : 9

Packing group : III

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**IMDG-Code**

Identification number : UN 3082  
 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
 N.O.S.  
 Technical name : (Naphthalene)  
 Class / Division : 9  
 Packing group : III  
 Marine Pollutant : Yes (Naphthalene)

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**Pollution category** : Annex I  
**Ship type** : 2  
**Product name** : Aromatic naphtha (having less than 10% benzene)

**Special precautions for user**

**Remarks** : Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

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**15. REGULATORY INFORMATION**

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

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Product Classification, Labelling and SDS: DOLE Administrative Order 136-14 Guidelines for the Implementation of GHS in Chemical Safety Program in the Workplace.

Other international regulations

The components of this product are reported in the following inventories:

**DSL** : Listed  
**ENCS** : Listed  
**KECI** : Listed KE-31656  
**PICCS** : Listed  
**EINECS** : Listed  
**TSCA** : Listed

**Local Regulations**

Workplace Safety and Health Act & Workplace Safety and Health (General Provision) Regulations : This product is subject to the SDS, Labelling, PEL and other requirements in the Act/Regulations

Environmental Protection and Management (Hazardous Substances) Regulations : This product is not subject to control under this Act/Regulation.

Effective Date: 25.01.2017

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Maritime and Port  
Authority of Singapore  
(Dangerous Goods,  
Petroleum and Explosives)  
Regulations

: This product is subject to the SDS, Labelling, PEL and other requirements in the Act/Regulations.

Fire Safety Act and  
Fire Safety (Petroleum &  
Flammable Materials)  
Regulations

: This product is subject to the SDS, Labelling, PEL and other requirements in the Act/Regulations.

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**16. OTHER INFORMATION**

**Full text of H-Statements**

H227: Combustible liquid.

H316: Causes mild skin irritation.

H351: Suspected of causing cancer.

H336: May cause drowsiness or dizziness.

H304: May be fatal if swallowed and enters airways.

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