

Material Safety Data Sheet

MSDS Number: 7670 - 13

24 Hour Emergency Assistance: CHEMTREC - Domestic: (800) 424-9300

24 Hour Emergency Assistance: CHEMTREC - International: (703) 527-3887

General Assistance Number: (713) 241-4819

SECTION 1

MATERIAL/COMPANY IDENTIFICATION

MATERIAL IDENTITY: SHELLSOL® D38

COMPANY ADDRESS: Shell Chemical Company, P.O. Box 4320, Houston, TX 77210-4320, USA

SECTION 2

COMPOSITION

COMPONENTS	CAS#	CONCENTRATION
Solvent Naphtha (Petroleum), Medium Aliphatic	64742-88-7	100 %weight

Comments:

Solvent naphtha (petroleum), medium aliphatic is a complex stream of predominately C9 to C12 hydrocarbons; the exact composition and concentrations will vary.

SECTION 3

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance & Odor: Light colored liquid. Hydrocarbon odor.

Health Hazards: Can cause severe lung damage and may be fatal if swallowed. Causes skin irritation. May cause CNS depression.

Physical Hazards: COMBUSTIBLE. Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Health Effects

Inhalation:

Vapors may be irritating to respiratory system. Breathing of high vapor 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.

Eye Contact:

May cause temporary discomfort or irritation to the eye.

Skin Contact:

Irritating to the skin causing a burning sensation, redness and/or swelling. Prolonged or repeated skin contact

can cause defatting and drying of the skin which may result in a burning sensation and a dried, cracked appearance.

Ingestion:

Liquid can directly enter the lungs (aspiration) when swallowed or vomited. Serious lung damage and possibly fatal chemical pneumonia (chemical pneumonitis) can develop if this occurs.

Aggravated Medical Conditions:

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

SECTION 4

FIRST AID MEASURES

Inhalation:

Move victim to fresh air. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Eye:

Flush eyes with water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persist, transport to nearest medical facility for additional treatment.

Skin:

Remove contaminated clothing. Wipe off excess material from exposed area. Flush with large amounts of water for at least 15 minutes, by the clock, and follow by washing with soap if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Ingestion:

DO NOT induce vomiting. Have victim rinse mouth out with water, then drink sips of water to remove taste from mouth. In general no treatment is necessary unless large quantities are swallowed, however, get medical advice. If the victim is coughing, choking, has shortness of breath, or difficulty breathing, transport to the nearest medical facility for additional treatment. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F, shortness of breath, chest congestion or continued coughing or wheezing. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

SECTION 5

FIRE FIGHTING MEASURES

Flash Point: 106°F / 41.11°C

Autoignition Temperature: 471°F / 243.89°C

Flammability in Air: 1 - 7 %volume

Extinguishing Media:

Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames. Do not use a direct stream of water. Material will float and can be re-ignited on surface of water.

Fire Fighting Instructions:

COMBUSTIBLE. Clear fire area of all non-emergency personnel. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus. Containers exposed to intense heat from fires should be cooled with large quantities of water to prevent weakening of container structure which could result in container rupture.

Unusual Fire Hazards:

Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

SECTION 6**ACCIDENTAL RELEASE MEASURES**

COMBUSTIBLE. Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Protective Measures:

Eliminate potential sources of ignition (no smoking, flares, sparks or flames in immediate area). Stay upwind and keep out of low areas.

Wear appropriate personal protective equipment (refer to Section 8) when responding to spills.

Spill Management:

Shut off source of leak if safe to do so. Dike and contain spill. Use water spray (fog) to reduce vapors or divert vapor cloud drift. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly. Flush area with water to remove trace residue. Contain run-off from residue flush and dispose of properly. Prevent entry into waterways, sewer, basements or confined areas. Remove contaminated soil to remove contaminated trace residues. Dispose of in same manner as material. For small spills: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

Disposal:

Proper disposal should be evaluated based on regulatory status of this material (refer to Section 13), potential contamination from subsequent use and spillage, and regulations governing disposal in the local area.

Reporting:

This material is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore, releases to the environment may not be reportable under CERCLA. Notify authorities if any exposures to the general public or environment occurs or is likely to occur.

SECTION 7**HANDLING AND STORAGE**

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Handling:

Surfaces that are sufficiently hot may ignite liquid material. Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Keep away from heat, sparks and flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors have dissipated. Use explosion-proof ventilation to prevent vapor accumulation while in use. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well-ventilated area before laundering. Static electricity may accumulate and create a fire hazard. Bond and ground handling equipment and transfer containers to prevent sparking.

Storage:

Keep containers closed when not in use.

Ground fixed equipment.

SECTION 8**EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Controls**

The level of protection and types of controls necessary will vary depending upon potential exposure

conditions. Appropriate measures include:

Adequate ventilation to control airborne concentrations.

Personal Protective Equipment

Eye Protection:

In accordance with good industrial hygiene practices, precautions should be taken to avoid eye contact.

Skin Protection:

Use protective clothing which is chemical resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection(s) should take into account such factors as job task, type of exposure and durability requirements.

Published literature, test data and/or glove and clothing manufacturers indicate protection is provided by:
Nitrile Rubber

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Types of respirator(s) to be considered in the selection process include:

Air-Purifying Respirator for Organic Vapors, Supplied-Air Respirator, Self-Contained Breathing Apparatus (SCBA) - for use in environments with unknown concentrations or emergency situations.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Light colored liquid. Hydrocarbon odor.

Autoignition Temperature	471 °F	Boiling Point	318 - 356 °F
Evaporation Rate	0.19 [vs. n-Butyl Acetate = 1]	Flammability in Air	1 - 7 %volume
Flash Point	106 °F [Tagliabue Closed Cup]	Solubility (in Water)	Negligible
Specific Gravity	0.77 @ 60 °F	Stability	Stable
Vapor Density (Air=1)	4.7	Vapor Pressure	1.3 mmHg @ 68 °F
VOC Content	100 % 6.4 lb/gal @ 60 °F		

SECTION 10

REACTIVITY AND STABILITY

Stability:

Material is stable under normal conditions.

Conditions to Avoid:

Prevent vapor accumulation. Avoid heat and open flames.

Materials to Avoid:

Avoid contact with strong oxidizing 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.

SECTION 11**TOXICOLOGICAL INFORMATION****Acute Toxicity**

Material Tested	Effects	Test Results
Solvent Naphtha (Petroleum), Medium Aliphatic	Dermal - LD50	approximately 5 ml/kg (Rabbit)
Solvent Naphtha (Petroleum), Medium Aliphatic	Inhalation - No deaths*	710 ppm (v) (Rat) 4 hour(s)
Solvent Naphtha (Petroleum), Medium Aliphatic	Oral - No deaths*	25 ml/kg (Rat)

* No deaths at highest tested dose.

Eye Irritation:

negligible irritation [Rabbit] Material Tested - Solvent Naphtha (Petroleum), Medium Aliphatic

Skin Irritation:

moderate [Rabbit] Material Tested - Solvent Naphtha (Petroleum), Medium Aliphatic

Carcinogenicity:

Animal data indicate that repeated dermal exposures that cause severe skin irritation may cause or promote skin cancer.

Neurotoxicity:

Repeated exposures which cause acute neurological effects may also cause long-term neurological deficits in humans.

Other Information:

Animal data suggest that slight anemia, adaptive liver changes, and kidney toxicity (male rat nephropathy) may be caused by repeated over exposure to some similar solvents. The significance of this to humans is unknown.

SECTION 12**ENVIRONMENTAL FATE AND EFFECTS**

This section will be updated as ecological reviews are completed.

SECTION 13**DISPOSAL CONSIDERATIONS****Product Disposal:**

Under EPA RCRA (40 CFR 261) if this material becomes a waste material, it would be an ignitable hazardous waste, hazardous waste number D001. Refer to the latest EPA or state regulations regarding proper disposal.

SECTION 14**TRANSPORT INFORMATION****US Department of Transportation Classification:**

Proper Shipping Name: Petroleum Distillates, N.O.S.

Technical Names (s): PETROLEUM NAPHTHA

Identification Number: UN1268

Hazard Class/Division: 3 (Flammable Liquid)

Packing Group: III

Oil: This material is an 'OIL' under 49 CFR Part 130 when transported in a container of 3500 gallon capacity or greater.

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International Air Transportation Association Classification:

Proper Shipping Name: Petroleum Distillates, N.O.S.

Technical Name (s): PETROLEUM NAPHTHA

Identification Number: UN1268

Hazard Class/Division: 3 (Flammable Liquid)

Packing Group: III

International Maritime Organization - IMDG:

Proper Shipping Name: Petroleum Distillates, N.O.S.

Technical Name (s): CONTAINS, PETROLEUM NAPHTHA

Identification Number: UN1268

Hazard Class/Division: 3 (Flammable Liquid)

Packing Group: III

SECTION 15**REGULATORY INFORMATION**

The regulatory information provided is not intended to be comprehensive. Other federal, state and local regulations may apply to this material.

Federal Regulatory Status**Resource Conservation & Recovery Act (RCRA) Classification:**

D001 (Ignitable Hazardous Waste).

Superfund Amendment & Reauthorization Act (SARA) Title III:**SARA Hazard Categories(311/312):**

Fire Hazard. Immediate (Acute) Health Hazard. Delayed (Chronic) Health Hazard.

Toxic Substances Control Act (TSCA) Inventory Status:

This material is listed on the EPA TSCA Inventory of Chemical Substances.

State Regulatory Status

This material is not regulated by the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65), New Jersey Right-to-Know Chemical List or Pennsylvania Right-To-Know Chemical List.

SECTION 16**OTHER INFORMATION**

HMIS Rating (Health, Fire, Reactivity): 1, 2, 0

NFPA Rating (Health, Fire, Reactivity): 1, 2, 0

Revision#: 13

Revision Date: 01/22/2002

Revisions since last change (discussion): This MSDS has been revised because Shell Chemical Company has made changes to the Material Safety Data Sheet document template. There are no changes to the health, safety, precautionary data, or regulatory data. We do, however, encourage you to take the opportunity to reread the sheet and review the information.

Product Codes: Q3380

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.

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