



Philippine Prosperity Chemicals, Inc.

# MATERIAL SAFETY DATA SHEET

Date Reviewed :  
November 09, 2009

## EXXSOL™ DSP 80/100 (SBP-1425)

### 1. PRODUCT AND COMPANY IDENTIFICATION

*Product Name:* EXXSOL™ DSP 80/100  
*Product Code:* SBP-1425  
*Product Type:* Chemical Solvent  
*Company:* Philippine Prosperity Chemicals, Inc.  
*Office Address:* U1201 Picadilly Star Building  
 4<sup>th</sup> Ave. cor 27<sup>th</sup> St. Fort Bonifacio Global City, Taguig  
*Plant Addresses:* (1) LMG Bulk Terminal – Pinamucan, Batangas  
 (2) Nagtahan Terminal Inc. – Pandacan, Manila  
 (3) PPCI In-land Bulk Terminal – Guiguinto, Bulacan  
*Contact Numbers:* Tel: (632) 621-3104 to 09  
 Fax: (632) 659-6874  
*Emergency Numbers:* Mobile: 0917.5845496 / 0917.5845509

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

*This material is regulated as a complex substance.*

#### **Hazardous substance(s) or complex substance(s)**

Chemical Entity	CAS No.	Proportions (%)
Naphtha (Petroleum), Hydrotreated Light	64742-49-0	100

#### **Hazardous constituents contained in complex substances**

Chemical Entity	CAS No.	Proportions (%)
Heptane and isomers	Isomer mixtures	35-55
Cyclohexane	110-82-7	25-35
n-Hexane	110-54-3	<5
Methylcyclohexane	108-87-2	3-13

Remarks: All concentrations or proportions are percent by weight unless ingredient is a gas. Gas concentrations are in % by volume.

### 3. HAZARDS IDENTIFICATION

*Emergency overview:* Flammable liquid and vapor! Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited. Material can accumulate static charges which may cause an incendiary electrical discharge. May be irritating to the eyes, nose, throat, and lungs.

*Human Health Hazards:*

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<i>Ingestion:</i>	Low order of toxicity. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema.
<i>Inhalation:</i>	High vapor/aerosol concentrations are irritating to the respiratory tract causing headaches, dizziness, could be anesthetic and may have other central nervous system effects.
<i>Skin Contact:</i>	Prolonged or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.
<i>Eye Contact:</i>	This product is irritating to eyes, but will not permanently damage the eye tissue.
<i>Aggravation of Pre-existing Conditions:</i>	Pre-existing medical conditions of the following organ[s] or organ system[s] may be aggravated by exposure to this material: Skin, Eyes or CNS.

#### 4. FIRST AID MEASURES

<i>Inhalation:</i>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention immediately.
<i>Ingestion:</i>	Obtain medical attention immediately. Do not induce vomiting unless directed to do so by a medical personnel. Never give anything by mouth to an unconscious person.
<i>Skin Contact:</i>	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If persistent irritation occurs, obtain medical attention. Wash clothing before reuse.
<i>Eye Contact:</i>	Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. If persistent irritation occurs, obtain medical attention.

#### 5. Fire Fighting Measure

<i>Fire:</i>	Flammable liquid and vapor! Flash point: -15 °C (5 °F) Auto ignition temperature: 200 °C (392 °F) Flammable limits in air based on pure S-1425 % by volume: Lower Flammable Limit: 1.0; Upper Flammable Limit: 7.0
<i>Explosion:</i>	Vapor-air mixtures are explosive within flammable limits at normal temperatures. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sensitive to static discharge.
<i>Extinguishing media:</i>	Dry chemical, alcohol-resistant foam or carbon dioxide. Water spray may only be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.



- Unsuitable extinguishing media:* Do not use a solid stream or jet of water, since the stream will scatter and spread the fire.
- Special Information:* All storage areas should be provided with adequate firefighting facilities and equipment. The liquid produces a vapor that forms explosive mixtures with air especially in conditions at above flash point temperatures. In the event of a fire, contact the nearest fire station. For the company's own firefighters, they should wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.
- Special Firefighting Procedure:* Stay upwind. Use self-contained breathing apparatus and protective clothing. Vapor may explode if ignited in an enclosed area. Cool exposed containers with water.

## **6. ACCIDENTAL CONTROL MEASURES**

- Personal precautions:* Avoid contact with skin and eyes. Ventilate area of leak or spill thoroughly. Do not breathe vapor. Remove all heat or ignition sources. Evacuate the area of all non-essential personnel. Shut off leaks, if possible without personal risk.
- Personal protection:* Wear appropriate personal protective equipment (PPE) as specified in Section 8.
- Environmental precautions:* Contain and recover liquid when possible with an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand or earth) and place in a chemical waste container. Do not use combustible materials such as saw dust. Use non-sparking tools and equipment. Prevent from spreading or entering into drains, ditches, rivers and other waterways by using sand, earth or other appropriate barriers.
- Clean-up methods - small spillage:* Remove all ignition sources and ventilate area. Evacuate all non-essential personnel. Stop leak if without risk. Dilute with water and mop up or absorb with an inert dry material and place in a sealable container. Label and seal waste containers for product recovery or appropriate disposal (see Section 13).
- Clean-up methods – large spillage:* For large liquid spills (say more than a drum), remove all ignition sources. Evacuate all non-essential personnel. Stop leak if possible and without risk. Do not flush away residues with water. Blanket spill with alcohol resistant foam to limit evaporation or dike area to contain spill and absorb with earth, sand or other non-combustible material. Transfer to a labeled, sealable container for product recovery or proper disposal. Wear appropriate protective clothing to minimize contact with skin. Allow residues to evaporate or soak up with a suitable absorbent material and dispose safely and appropriately (see Section 13).



**7. HANDLING AND STORAGE**

<i>Handling:</i>	Protect self against physical damage. Avoid contact with skin, eyes and clothing. Do not breathe vapor. Use only in well ventilated areas.
<i>Handling temperature:</i>	Ambient.
<i>Storage:</i>	Keep container tightly closed in a cool, dry and well-ventilated place. Outside or detached storage is preferred. Separate from oxidizing materials. Storage and use areas should be No Smoking areas. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.
<i>Storage temperature:</i>	Ambient.
<i>Product transfer:</i>	Metal containers should be bonded and grounded for transfers to avoid static sparks.
<i>Recommended materials:</i>	For containers or container linings, use mild steel, carbon steel or stainless steel. Refer to appropriate sources or compatibility charts if using internal coating materials.
<i>Unsuitable materials:</i>	Oxidizing agents, mineral acids, halogenated organic compounds and molten sulfur. Combination with MEK will result in potentiated (greatly increased ) health effects similar to those in ingestion and inhalation
<i>Other Information:</i>	SBP-1425 is available from PPCI in bulk and in drums. Details are available upon request.

**8. EXPOSURE CONTROL / PERSONAL PROTECTION**

<i>Engineering Control Measure / Ventilation System:</i>	A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
<i>Occupational Exposure Standards:</i>	No value assigned for this specific material by American Conference of Governmental Industrial Hygienist (ACGIH). However, Exxon Mobil which is the supplier has below recommendations.
<i>Limit type:</i>	Time Weighted Average (TWA) – exposure limit over an eight-hour working day, for a five-day working week over an entire working life.
<i>Unit:</i>	Parts per million (ppm)
<i>Value:</i>	159
<i>Respiratory protection:</i>	Where local exhaust ventilation is not practicable, wear a full face-piece or a double cartridge respirator with organic vapor canister NPF 400. It may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier,



<i>Respiratory protection:</i>	and whichever is the lowest. For emergencies or instances where the exposure levels are not known, use a full-face-piece positive-pressure, air-supplied respirator. <b>WARNING:</b> Air purifying respirators do not protect workers in oxygen-deficient atmospheres.
<i>Hand protection:</i>	PVC gloves, chemical resistant gloves, nitrile gloves.
<i>Eye protection:</i>	Use chemical safety goggles with side shields or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.
<i>Body Protection:</i>	Wear impervious protective clothing such as one-piece overall, including safety shoes or boots, gloves, laboratory coat, apron or any appropriate cotton-made clothing to prevent skin contact.
<i>Specific Hygiene Measures:</i>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Always maintain and practice good housekeeping.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Appearance:</i>	Clear, colorless liquid
<i>Odor:</i>	Mild petroleum solvent
<i>Initial boiling point:</i>	78 °C
<i>Freezing point:</i>	-75°C (-103 °F)
<i>Vapor Pressure:</i>	8.65 kPa @ 20°C
<i>Specific Gravity:</i>	0.725 @ 15 °C
<i>Solubility:</i>	Immiscible in water
<i>Dynamic viscosity:</i>	0.432 centipoise (cP) @ 25 °C
<i>Vapor density (air=1):</i>	4.90
<i>Flash point:</i>	-15 °C
<i>Auto-ignition temperature:</i>	200 °C
<i>Upper flammable limit in air:</i>	1.0 % (v/v)
<i>Lower flammable limit in air:</i>	7.0 % (v/v)
<i>Evaporation rate, (NBAC = 1):</i>	6.0

## 10. STABILITY AND REACTIVITY

<i>Stability:</i>	Stable under normal temperature and pressure for use and storage.
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<i>Conditions to avoid:</i>	Heat, flames, ignition sources and incompatibles.
<i>Materials to avoid:</i>	Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc., as this presents a serious explosion hazard.
<i>Hazardous decomposition products:</i>	Thermal decomposition is highly dependent on conditions. A complex mixture of solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal and oxidative degradation.

## 11. TOXICOLOGICAL INFORMATIONS

<i>Basis for assessment:</i>	Information given by Exxon Mobil, who is the supplier for this product.
<i>Inhalation</i>	Minimally toxic through inhalation and negligible hazard at ambient/normal handling temperatures.
<i>Ingestion</i>	Toxicity: LD <sub>50</sub> >15,000 mg/kg
<i>Skin</i>	Toxicity: LD <sub>50</sub> >2,000 mg/kg
<i>Eye irritation:</i>	May cause mild, short-lasting discomfort to eyes.
<i>Skin irritation:</i>	Moderately irritating to skin with prolonged exposure.
<i>Respiratory toxicity:</i>	Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
<i>Human effects:</i>	Product has a low order of acute oral and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

## 12. ECOLOGICAL INFORMATION

<i>Basis for assessment:</i>	Information given is based on product data.
<i>Environmental Fate:</i>	
<i>Air</i>	Material is highly volatile and will partition rapidly to air.
<i>Soil:</i>	Adsorbs to soil and has low mobility
<i>Water:</i>	Not expected to partition to sediments and wastewater solids.
<i>Bioaccumulation:</i>	This material has an estimated bioconcentration factor (BCF) of SBP-1425 is less than 100. This material is not expected to significantly bioaccumulate.
<i>Environmental Toxicity:</i>	Expected to be toxic to aquatic organism. May cause long term adverse effects in the aquatic environment.



**13. Disposal Considerations**

<i>Precautions:</i>	Refer to Sections 7 before handling the product or containers.
<i>Waste disposal:</i>	Whatever SBP-1425 cannot be saved for recovery or treating, it should be managed in an appropriate and approved waste disposal facility. Care should in any case be taken to ensure disposal is compliant with statutory or regulatory requirements and local environmental laws.
<i>Product disposal:</i>	This product is not suitable for disposal by either landfill or via local sewers, drains, natural streams or rivers. The following advice only applies to the product as supplied. Processing, use or contamination of this product may change the waste management options.
<i>Container disposal:</i>	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not pressure cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Send to drum handlers that clean, recondition or metal reclaimer. Disposal of container and unused contents must be in accordance to local regulatory requirements and environmental laws.

**14. TRANSPORT INFORMATION**

<i>UN Number:</i>	3295
<i>Hazard Class</i>	3 (Flammable Liquid)
<i>Proper shipping name:</i>	Hydrocarbons Liquid
<i>Packing Group</i>	II (Flash Point = -15 °C)

**15. OTHER INFORMATION**

Philippine Prosperity Chemicals, Inc. provides the information contained herein in good faith and was obtained from sources which we believe are reliable. However, the information is provided without any warranty. The condition or methods of handling storage, use and disposal are beyond our control and may be beyond our knowledge. For this and any other reasons, we don't assume responsibility and disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use and disposal of the product. This document is intended only as a guideline to the appropriate precautionary handling of the material by properly trained personnel using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.