

MATERIAL SAFETY DATA SHEET
OSHA "Hazard Communication" (29 CFR 1910.1200)

Section I- Manufacturer and Product

Genisphere Inc.
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HMIS CODES

Health **2**
 Flammability **3**
 Reactivity **0**

TELEPHONE FOR INFORMATION: Toll free in USA call 1-877-888-3362
Local and International call 1-215-996-3000

Laboratory Reagents

Product Name: DyeSaver 2

Product No.: Q500500, Q500600

Section II- Composition / Information on Ingredients

<u>% by WT</u>	<u>CAS No.</u>	<u>Ingredient</u>	<u>Units</u>	<u>Vapor Pressure</u>
5.0	64742-89-8	Lt. Aliphatic Hydrocarbon Solvent	CGIH TLV 100 ppm OSHA PEL 100ppm	53mm
5.0	108-88-3	Toluene	ACGIH TLV 50ppm (skin) OSHA PEL 100 ppm (skin) OSHA PEL 150 ppm (skin) STEL	22mm
80.0	67-64-1	Acetone	ACGIH TLV 500 ppm ACGIH TLV 750 ppm STEL OSHA PEL 1000 ppm	180 mm

Section III- Hazards Identification

ROUTES OF EXPOSURE: Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

EFFECTS OF OVEREXPOSURE: Irritation of eyes, skin and upper respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Headache, dizziness, nausea and loss of coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None generally recognized.

CANCER INFORMATION: For complete discussion of toxicology data refer to Section 6

Section IV- First Aid Measures

- If **INHALED**: If affected, remove from exposure. Restore breathing. Keep warm & quiet
- If on **SKIN**: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
- If in **EYES**: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
- If **SWALLOWED**: Do NOT induce vomiting- Get medical attention immediately.

Section V- Fire Fighting Measures / Explosion Data

FLASH POINT: LEL 1.0 UEL 12.8 1 F PMCC

FLAMMABILITY CLASSIFICATION: RED LABEL – Extremely Flammable, Flash below 21F

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam

UNUSAL FIRE & EXPLOSION HAZARDS: Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

Section VI- Health Hazard Data / Toxicological Information

CHRONIC HEALTH HAZARDS: No ingredient in this product is an IARC, NTP, or OSHA listed carcinogen. Prolonged overexposure to solvent ingredients in Sec. 2 may cause adverse effects to the liver, urinary, cardiovascular, and reproductive systems. Reports have associated repeated and prolonged overexposure to solvent with permanent brain and nervous system damage.

Toxicology Data:

<u>CAS No.</u>	<u>Ingredient Name</u>				
64742-89-8	Lt. Aliphatic Hydrocarbon Solvent	LC50	RAT	4 HR	Not available
		LD50	RAT	-	Not available
108-88-3	Toluene	LC50	RAT	4 HR	4000 ppm
		LD50	RAT		5000 mg / kg
67-64-1	Acetone	LC50	RAT	4 HR	Not available
		LD50	RAT		5800 mg / kg

Section VII- Ecological Information

No data available

Section VIII- Reactivity Data

STABILITY: Stable

CONDITIONS TO AVOID: None known

INCOMPATIBILITY: None known

HAZARDOUS DECOMPOSITION PRODUCTS: By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION: Will not occur.

Section IX- Spill or Leak Procedures / Disposal Considerations

SPILL: Remove all sources of ignition. Ventilate the area. Remove with inert absorbent.

DISPOSAL: Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261: Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial and Local regulations regarding pollution.

Section X- Exposure Controls / Personal Protection Information

PRECAUTIONS TO BE TAKEN IN USE: Use only with adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapor and spray mist. Wash hands after using.

RESPIRATORY PROTECTION: If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSA for protection against materials in Sec.2

VENTILATION: Local exhaust preferable. General exhaust acceptable if the exposure to materials in Sec.2 in maintained below applicable exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108

PROTECTIVE GLOVES: Protective Gloves: Required. Wear gloves which are recommended by glove supplier for protection against materials in Sec.2

EYE PROTECTION: Wear safety spectacles with unperforated sideshields

OTHER PRECAUTIONS: Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

WORK PRACTICES: Good laboratory technique should be used when handling this product. Do not mouth pipette! Observe appropriate chemical hygiene and avoid contact with skin and eyes.

HYGIENIC PRACTICES: Do not eat, drink or smoke while working with reagents. Upon completion of work activities involving this product, wash any exposed body areas thoroughly with soap and water.

Section XI- Handling and Storage

STORAGE CATEGORY: DOL Storage Class IB

PRECAUTIONS: Contents are EXREMELY FLAMMABLE. Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively. During use and until all vapors are gone: Keep area ventilated- Do Not smoke- Extinguish all flames, pilot lights and heaters- Turn off stoves, electric tools and appliances and any other sources of ignition. Consult NFPA Code. Use approved Bonding and Grounding procedures. Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of reach of children.

Section XII- Physical and Chemical Properties

Product Weight: 6.87 lb /gal 823 g/l

Boiling Point: 132-238 F 55-114 C

Volatile Volume: 96%

Vapor Density: Heavier than Air

Volatile Organic Compounds (VOC Theoretical)

5.97 lb/gal 715 g/l Less Federally Exempt Solvents

3.03 lb/gal 363 g/l Emitted VOC

Specific Gravity: 0.83

Melting Point: Not Available

Evaporation Rate: Slower than Ether

Solubility in Water: N/A

Section XIII- Transport Information

No data available

Section XIV- Regulatory Information

SARA 313 (40 CFR 372.65C) Supplier Notification

<u>CAS No.</u>	<u>Chemical/Compound</u>	<u>%by WT</u>	<u>% Element</u>
108-88-3	Toluene	7.5	-----

CALIFORNIA PROPOSITION 65- WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION: All chemicals in this product are listed, or are exempt from listing on the TSCA Inventory.

Section XV- Other Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Disclaimer: The information, data, and recommendations contained herein are believed to be accurate. Genisphere, Inc., makes no warranty of any kind whatever with respect thereto and disclaims all liability from reliance thereon. We reserve the right to revise this MSDS periodically as new information becomes available.