



MATERIAL SAFETY DATA SHEET

MSDS: CHAMPION® MSDS 1600 SERIES SOLVENT PRODUCTS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHAMPION® MSDS 1600 SERIES SOLVENT PRODUCTS

Synonyms:

4117 CHAMPION® 105 FLASH SOLVENT (MINERAL SPIRITS) 4244 CHAMPION® SG PENETRATING OIL
 4122 CHAMPION® 5 MINUTE MOTOR FLUSH 4306 CHAMPION® SUPER VALVE SHIELD

Company Identification

Champion Brands, L.L.C., 1001 Golden Drive, Clinton, MO 64735
 PHONE: 800-821-5693 WEBSITE: www.championbrands.com

CAS Registry Number Not Applicable
Synonyms None
Generic/Chemical Name Mixture
Product Type Petroleum Based Color Dye
Preparation Date February 22, 2008

Transportation Emergency Response

CHEMTREC: (800) 424-9300

Product Information

Product Information and MSDS Requests: (800) 821-5693 and www.championbrands.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Aliphatic Hydrocarbons (Stoddard Type)	8052413	< 15.0% weight
1,3,5-Trimethylbenzene	108678	< 1.0% weight
1,2,4-Trimethylbenzene	95636	< 1.0% weight
Xylene	1330207	> 3.0% weight
Ethylbenzene	100414	4.3 – 10.2% weight
Dipropylene glycol monomethyl ether	34590948	0.0 – 4.3% weight
Base Oil, Distillates, Hydrotreated, Petroleum Hydrocarbon	Mixture	> 3.0% weight

The BASE OIL may be a mixture of any of the following: CAS 64741884, CAS 64741895, CAS 64741964, CAS 64741975, CAS 64742014, CAS 64742525, CAS 64742536, CAS 64742547, CAS 64742558, CAS 64742570, CAS 64742627
 The COLORANT ADDITIVES are a mixture of any of the following: CAS 74499368, CAS 2475447, CAS 29887089, CAS 75476947, CAS 91696263, CAS 91696321, CAS 91696309

3. HAZARD IDENTIFICATION

PRIMARY ROUTES OF EXPOSURE

- INHALATION
- EYE CONTACT
- SKIN CONTACT
- DERMAL ABSORPTION

IMMEDIATE EFFECTS

Eye Contact: Contact with the eyes causes severe irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision.

Skin Contact: Contact with the skin causes irritation. Skin contact may cause drying or defatting of the skin. Symptoms may include pain, itching, discoloration, swelling, and blistering.

Ingestion: May be harmful if swallowed. Symptoms may include pain, nausea, vomiting, and diarrhea.

Inhalation: The vapor or fumes from this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Central nervous system effects may include headache, dizziness, nausea,

vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

DELAYED OR OTHER HEALTH EFFECTS:

Prolonged or repeated overexposure to xylene can cause the following: reversible liver and kidney impairment.

Prolonged or repeated overexposure to ethylbenzene can cause the following: kidney, liver, lung, pituitary, thyroid and testicular effects. Ethylbenzene has been listed by the International Agency for Research on Cancer (IARC).

Prolonged or repeated overexposure to dipropylene glycol monomethyl ether can cause the following: kidney and liver effects.

4. FIRST AID MEASURES

Eye: Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical attention.

Skin: Wash skin with water immediately and remove contaminated clothing and shoes. Get immediate medical attention. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: If swallowed, give 2 glasses of water to drink, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Inhalation: Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Note to Physicians: Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Flammable Liquid Class 1B

NFPA RATINGS: Health: 2 Flammability: 2 Reactivity: 0

FLAMMABLE PROPERTIES:

Flashpoint: > 38 °C (>100 °F) Pinsky-Martens Closed Cup

Autoignition: Xylene 466 - 530 °C (874 - 986 °F)

Flammability (Explosive) Limits (% by volume in air): LEL = 1.0% UEL = 14% DPGME

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Nitrogen.

6. ACCIDENTAL RELEASE INFORMATION

Protective Measures: Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

7. HANDLING AND STORAGE

Precautionary Measures: Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85F. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling. Do not breathe vapor or fumes. Keep out of the reach of children.

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

General Storage Information: DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces . USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

8. EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

Skin Protection: Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: Silver Shield, Viton.

Respiratory Protection: Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as: Air-Purifying Respirator for Organic Vapors.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Ethylbenzene	ACGIH	100 mg/m ³	545 mg/m ³	--	A3
Ethylbenzene	OSHA PEL/VPEL	100 mg/m ³	435 mg/m ³	--	--
Aliphatic Hydrocarbons (Stoddard Tyupe)	ACGIH	100 mg/m ³	--	--	--
Aliphatic Hydrocarbons (Stoddard Tyupe)	OSHA PEL/VPEL	500/100 mg/m ³	--	--	Skin
Xylene	ACGIH TLV	100 mg/m ³	655 mg/m ³	--	Skin A3
Xylene	OSHA PEL/VPEL	100 mg/m ³	655 mg/m ³	--	--
Xylene	NIOSH REL		435 mg/m ³	868 mg/m ³	--
Dipropylene glycol monomethyl ether	ACGIH TLV	100 mg/m ³	150 mg/m ³	--	--
Dipropylene glycol monomethyl ether	OSHA PEL/VPEL	100 mg/m ³	150 mg/m ³	--	--

9. PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Dark Blue, Red, or Green

Physical State: Liquid

Odor: Hydrocarbon odor

pH: Not Applicable

Vapor Pressure: 5 to 6.6 mm Hg @ 20 °C Xylene

Vapor Density (Air = 1): 3.6 Xylene

%Volatility: <56% approx.

Boiling Point: 137 to 144 °C

Solubility: Insoluble

Freezing Point: No Data Available

Specific Gravity: 0.96 @ 15.6°C (60°F)

Viscosity: >3.8 cSt @ 20°C (68°F)

10. STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: May react with strong acids, strong alkalis and strong oxidizing agents.

Hazardous Decomposition Products: None known.

Hazardous Polymerization: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.

Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.

Skin Sensitization:

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

ADDITIONAL TOXICOLOGY INFORMATION:

Component	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
Ethylbenzene	NO DATA AVAILABLE	NO DATA AVAILABLE	17,360 MG/M ³ (RAT)(4H)

Xylene	4.3 G/KG (RAT)	>3.95 ML/KG (RABBIT)	6,700 PPM (RAT)(4H)
1,3,5-Trimethylbenzene	NO DATA AVAILABLE	NO DATA AVAILABLE	24 MG/M3 (RAT)(4H)
1,2,4-Trimethylbenzene	6.0 G/KG (RAT)	NO DATA AVAILABLE	24 MG/M3 (RAT)(4H)

Cancer: Ethylbenzene has indicated that lifetime inhalation exposure of rats and mice resulted in increases in certain types of cancer at 750 ppm, including kidney tumors in rats and lung cancer tumors in mice. Incidences of testicular adenoma were increased along with increased incidences of thyroid effects in rats at 750 ppm; pituitary effects were observed in female mice at 250 ppm. These effects were not observed in animals exposed to ethylbenzene at 75 ppm.

Mutagen: No Data

12. ECOLOGICAL INFORMATION

ECOTOXICITY

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE

This material is not expected to be readily biodegradable.

13. DISPOSAL INFORMATION

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

14. TRANSPORTATION INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DEPARTMENT OF TRANSPORTATION

PACKAGED CLASSIFICATION: ORM-D
DOT Shipping Name: CONSUMER COMMODITY

BULK CLASSIFICATION:

IMDG: UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III
 IATA_P: UN1268, Petroleum distillates, n.o.s. 3, III
 IATA_C: UN1268, Petroleum distillates, n.o.s. 3, III
 CFR_ROAD: UN1268, Petroleum distillates, n.o.s. (Aliphatic Petroleum Distillates,) 3, III
 CFR_RAIL: UN1268, Petroleum distillates, n.o.s. (Aliphatic Petroleum Distillates,) 3, III
 CFRJNWTR: UN1268, Petroleum distillates, n.o.s. (Aliphatic Petroleum Distillates,) 3, III
 IMDGJNWTR: UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III
 IMDG_ROAD: UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III
 IMDG_RAIL: UN1268, PETROLEUM DISTILLATES, N.O.S. 3, III

15. REGULATORY INFORMATION

SARA TITLE 3: Section 311/312 CATEGORIES:

- | | |
|---------------------------------------|-----|
| 1. Immediate (Acute) Health Effects: | YES |
| 2. Delayed (Chronic) Health Effects: | YES |
| 3. Fire Hazard: | YES |
| 4. Sudden Release of Pressure Hazard: | NO |
| 5. Reactivity Hazard: | NO |

SARA TITLE 3: Section 313 INFORMATION:

This product contains a chemical which is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present (Quantity present and CAS are found in section 2.)

Ethylbenzene
 Xylene

CERCLA INFORMATION:

This material is regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304. This material is, or

contains, chemicals listed in 40 CFR Table 302.4 or no designated RCRA ISC substances. The reportable Quantity(s) (RQ) are listed below. Releases in excess of its reportable quantity must be reported to the National Response Center (800 424-8802) and to the appropriate state and local emergency response organizations.

Ethylbenzene 1000 LBS

Xylene 100 LBS

RCRA WASTE DISPOSAL CLASS: D001, Ignitable

CHEMICAL INVENTORIES:

AUSTRALIA: All the components of this material are listed on the Australian Inventory of Chemical Substances (AICS).

CANADA: All the components of this material are on the Canadian Domestic Substances List (DSL).

EUROPEAN UNION: All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC.

JAPAN: All the components of this product are on the Existing & New Chemical Substances (ENCS) inventory in Japan, or have an exemption from listing.

KOREA: This material contains components that require notification before sale or importation into Korea.

PHILIPPINES: All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

STATE REGULATORY INFORMATION:

THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES; OTHER PRODUCT SPECIFIC HEALTH AND SAFETY DATA IN OTHER SECTIONS OF THE MSDS MAY ALSO BE APPLICABLE FOR STATE REQUIREMENTS. FOR DETAILS ON YOUR REGULATORY REQUIREMENTS YOU SHOULD CONTACT THE APPROPRIATE AGENCY IN YOUR STATE.

STATE LISTED COMPONENT	CAS NO	PERCENT	STATE CODE
1,2,4-TRIMETHYL BENZENE	95-63-6	<1	MA, NJ, PA, CA, MN
1,3,5-TRIMETHYL BENZENE	108-67-8	<1	MA, NJ
XYLENE	95-47-6	<3	CA, FL, MA, NJ, PA, RI, IL

CA = CALIFORNIA HAZ. SUBST. LIST

CA65C, CA65R, CA65C/R = CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT OF 1986 OR PROPOSITION 65 LIST

CT = CONNECTICUT TOXIC. SUBST. LIST

FL = FLORIDA SUBST. LIST

IL = ILLINOIS TOXIC SUBST. LIST

LA = LOUISIANA HAZ. SUBST. LIST

MA = MASSACHUSETTS SUBST. LIST

ME = MAINE HAZ. SUBST. LIST

MN = MINNESOTA HAZ. SUBST. LIST

NJ = NEW JERSEY HAZ. SUBST. LIST

PA = PENNSYLVANIA HAZ. SUBST. LIST

RI = RHODEISLAND HAZ. SUBST. LIST.

WHMIS CLASSIFICATION:

Class B, Division 3: Flammable Liquids

Class D, Division 1, Subdivision B: Toxic Material -Acute Lethality

Class D, Division 2, Subdivision A: Very Toxic Material -Carcinogenicity

Class D, Division 2, Subdivision B: Toxic Material -Chronic Toxic Effects Skin or Eye Irritation.

16. DISCLAIMER

NFPA RATINGS: Health: 1 Flammability: 2 Reactivity: 0

HMIS RATINGS: Health: 0 Flammability: 2 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *-Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: Revision updates many sections and the MSDS should be read in its entirety.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
OSHA - Occupational Safety and Health Administration	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
IARC - International Agency for Research on Cancer	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by Champion LLC, 1001 Golden Drive, Clinton, Missouri 64735.

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