SAFETY DATA SHEET

Revision date 10-Apr-2018    Version 5    Supersedes Date: 02-Nov-2017

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Code  28089.01
Product Name  MEKP Liquid Hardener

Other means of identification
No information available

Recommended use of the chemical and restrictions on use
Industrial paint (Paint or Paint-Related)

Details of the supplier of the safety data sheet
See section 16 for more information

The Valspar Corporation
PO Box 1461
Minneapolis, MN  55440

E-mail address  msds@valspar.com

Emergency telephone number
United States of America  1-888-345-5732

Section 2: HAZARDS IDENTIFICATION

Classification
Acute toxicity - Oral Category 4
Skin corrosion/irritation Category 1 Sub-category A
Serious eye damage/eye irritation Category 1
Organic peroxides Type D

Label elements
HAZARD STATEMENTS
Heating may cause a fire
Harmful if swallowed
Causes severe skin burns and eye damage

PREVENTION
Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dusts or mists. Wear protective gloves/protective clothing/eye protection/face protection. P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep/Store away from clothing/ combustible materials. Keep only in original container.

RESPONSE
Get medical advice/attention if you feel unwell.

    Eyes
    IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

    Skin
    IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

    Inhalation
    IF INHALED: Remove person to fresh air and keep comfortable for breathing.

    Ingestion
    IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.

STORAGE
Store locked up. Store at temperatures not exceeding 38 °C/ 100 °F. Keep cool. Protect from sunlight. Store away from other materials.

DISPOSAL
Dispose of contents/containers in accordance with local regulations.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)
No information available.

OTHER HAZARDS
Not applicable.

UNKNOWN ACUTE TOXICITY
0% of the mixture consists of ingredient(s) of unknown toxicity.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone peroxide</td>
<td>1338-23-4</td>
<td>25 - 50</td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>78-93-3</td>
<td>3 - 5</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>3 - 5</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withhold as a trade secret.
Section 4: FIRST AID MEASURES

First Aid Measures

General advice
Get medical advice/attention if you feel unwell.

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed
Symptoms
No information available.

Indication of any immediate medical attention and special treatment needed
Note to physicians
Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media
Dry chemical, CO2, water spray or alcohol-resistant foam.

Not to be used for safety reasons: Strong water jet

Specific hazards arising from the chemical
Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Avoid breathing vapors or mists. Remove all sources of ignition. Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

For emergency responders
Use personal protection recommended in Section 8.

Environmental precautions
Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.
Methods for cleaning up
Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Do not breathe dust/fume/gas/mist/vapors/spray.

General Hygiene Considerations
Avoid contact with skin, eyes or clothing. When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Incompatible materials

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits
If $S^*$ appears in the OEL table, it indicates this chemical contains a skin notation.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone peroxide</td>
<td>Ceiling: 0.2 ppm</td>
<td></td>
<td>Ceiling: 0.2 ppm</td>
</tr>
<tr>
<td>1338-23-4</td>
<td></td>
<td>TWA: 200 ppm</td>
<td>Ceiling: 1.5 mg/m³</td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>STEL: 300 ppm</td>
<td>TWA: 590 mg/m³</td>
<td>IdLH: 3000 ppm</td>
</tr>
<tr>
<td>78-93-3</td>
<td>TWA: 200 ppm</td>
<td></td>
<td>TWA: 200 ppm</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>TWA: 1 ppm</td>
<td>TWA: 1 ppm</td>
<td>IdLH: 75 ppm</td>
</tr>
<tr>
<td>7722-84-1</td>
<td>TWA: 1.4 mg/m³</td>
<td></td>
<td>TWA: 1.4 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas. Provide local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection
Face protection shield. Tight sealing safety goggles.

Skin and body protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Hand Protection
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on
breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Respiratory protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
</tr>
<tr>
<td>Color</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH value</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available °C / °F</td>
</tr>
<tr>
<td>flash point</td>
<td>94 °C / 201 °F</td>
</tr>
<tr>
<td>evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Density (lbs per US gallon)</td>
<td>8.33</td>
</tr>
<tr>
<td>specific gravity</td>
<td>1</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>partially soluble</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Other information

Section 10: STABILITY AND REACTIVITY

Reactivity
No information available.

Chemical stability
Stable under normal conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization
None under normal processing.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials

Hazardous Decomposition Products
Carbon monoxide. Carbon dioxide (CO2).

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Causes serious eye damage

Skin Contact
Causes skin burns

Ingestion
Harmful if swallowed

Inhalation
Not applicable

### Numerical measures of toxicity - Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50 (Rat)</th>
<th>Dermal LD50</th>
<th>Inhalation LC50 (Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone peroxide</td>
<td>= 407 mg/kg</td>
<td>-</td>
<td>= 200 ppm (Rat) 4 h</td>
</tr>
<tr>
<td>1338-23-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>= 2483 mg/kg (Rat) = 2737 mg/kg (Rat)</td>
<td>= 5000 mg/kg (Rabbit) = 6480 mg/kg (Rabbit)</td>
<td>= 11700 ppm (Rat) 4 h</td>
</tr>
<tr>
<td>78-93-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>= 1518 mg/kg (Rat)</td>
<td>= 4060 mg/kg (Rat) = 2000 mg/kg (Rabbit)</td>
<td>= 2 g/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>7722-84-1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document.

- ATEmix (oral) 1429 Mg/kg
- ATEmix (inhalation-dust/mist) 30 mg/l
- ATEmix (inhalation-vapor) 220 mg/l

**UNKNOWN ACUTE TOXICITY**

0% of the mixture consists of ingredient(s) of unknown toxicity.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>A3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7722-84-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen.

Skin corrosion/irritation Causes skin burns
Serious eye damage/eye irritation Causes serious eye damage
Skin sensitization Not applicable
Respiratory sensitization Not applicable
Germ cell mutagenicity Not applicable
Carcinogenicity Not applicable
Reproductive Toxicity Not applicable
Specific target organ toxicity (single exposure) Not applicable
Specific target organ toxicity (repeated exposure) Not applicable
Aspiration hazard Not applicable

### Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

Environmental precautions Prevent product from entering drains.

**Persistence and degradability**

No information available

**Bioaccumulation**

No information available

**Mobility**

No information available

**Other adverse effects**

No information available

### Section 13: DISPOSAL CONSIDERATIONS
Waste treatment methods

Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.

Section 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>14.1 UN/ID no</th>
<th>DOT</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 Proper shipping name</td>
<td>Organic peroxide type D, liquid</td>
<td>Organic peroxide type D, liquid</td>
<td>Organic peroxide type D, liquid</td>
</tr>
<tr>
<td>Methyl ethyl ketone peroxide &lt; 45%</td>
<td>Methyl ethyl ketone peroxide &lt; 45%</td>
<td>Methyl ethyl ketone peroxide &lt; 45%</td>
<td></td>
</tr>
<tr>
<td>14.3 Hazard Class</td>
<td>5.2</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.5 Environmental hazard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.6 Special Provisions</td>
<td>Emergency Response Guide Number</td>
<td>122, 274</td>
<td>A20, A150, A802</td>
</tr>
<tr>
<td></td>
<td>EmS-No</td>
<td>F-J, S-R</td>
<td></td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The supplier may apply one of the following exceptions: Combustible Liquid (49 CFR 173.150(f)); Consumer Commodity (49 CFR 173.150(c), ICAO/IATA SP A112); Limited Quantity (49 CFR 173.150(b), ICAO Part 3 Chapter 4, IATA 2.7, IMDG Chapter 3.4); Viscous Liquid (49 CFR 173.121(b), IMDG 2.3.2.2, IATA 3.2.2.2, ADR 2.2.3.1.5); Does Not Sustain Combustion (49 CFR 173.120(a), IATA 3.3.1.3, ICAO 3.1.3, IMDG 2.3.1.3, ADR 2.2.3.1.1 Note 1); or others as allowed under hazardous materials/dangerous goods regulations.

Section 15: REGULATORY INFORMATION

International Inventories
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
All components are listed or exempt from listing.

DSL - Canadian Domestic Substances List
All components are listed or exempt from listing.

US Federal Regulations

SARA 311/312 Hazard Categories
- Acute health hazard: Yes
- Chronic Health Hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: Yes

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone peroxide</td>
<td>10 lb</td>
<td>RQ 10 lb final RQ</td>
<td>RQ 4.54 kg final RQ</td>
</tr>
<tr>
<td>1338-23-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>5000 lb</td>
<td>RQ 5000 lb final RQ</td>
<td>RQ 2270 kg final RQ</td>
</tr>
<tr>
<td>78-93-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>1000 lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7722-84-1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

US State Regulations

Rule 66 status of product
Not photochemically reactive.

U.S. EPA Label information
EPA Pesticide registration number
Not applicable

Product Code 28089.01
### U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Proprietary Non-Hazardous Ingredient - Proprietary CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone peroxide</td>
<td>1338-23-4</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>78-93-3</td>
</tr>
</tbody>
</table>

### Section 16: OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>X</td>
</tr>
</tbody>
</table>

**Supplier Address**

Valspar Coatings  
701 Shiloh Rd.  
Garland, TX 75042  
972-276-5181

**Prepared By**  
Product Stewardship

**Revision date**  
10-Apr-2018

**Revision Note**  
No information available

**Disclaimer**

The information on this Safety Data Sheet (SDS) is based on the present state of our knowledge, current national legislation and guidelines. As the specific conditions of use of the product are outside the supplier’s knowledge and control the user is responsible for ensuring that the requirements of relevant legislation are complied with. This SDS should not be construed as any guarantee of the technical performance or suitability for particular applications. UNLESS SUPPLIER AGREES OTHERWISE IN WRITING, SUPPLIER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. SUPPLIER WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

**End of Safety Data Sheet**