

## Safety Data Sheet

SDS ID: Stock Code TC

Revision date: August 21, 2024

### Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** "SWITCH" Transition Green Medium Bodied Low VOC Cement

**Synonyms:** None

**Chemical family:** Hydrocarbon Mixture

**Producer:** J.C. Whitlam Manufacturing Company

200 West Walnut Street

P.O. Box 380

Wadsworth, Ohio 44282-0380

[www.jcwhitlam.com](http://www.jcwhitlam.com)

**Telephone:** 330-334-2524 Available during normal business hours

**Emergency:** CHEMTEL 800-255-3924 Available 24 hours

### Section 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Flammable liquid and vapor – vapor may cause a flash fire. This product can be easily ignited by heat, spark, or flames. Causes eye irritation. Harmful if swallowed. Prolonged or repeated skin contact may cause drying, cracking, or irritation. High vapor concentrations may cause drowsiness and irritation of the eyes, skin, and respiratory tract.

#### GHS Label elements, including precautionary statements

**DANGER** — Highly Flammable Liquid and Vapor (*category 2*)

**WARNING** — Causes Serious Eye Irritation (*category 2A*)

May cause drowsiness or dizziness



DANGER HARMFUL WARNING

#### Precautionary Statements

Keep away from heat/sparks/open flames/hot surfaces – No smoking. Keep container tightly closed. Wear protective gloves and safety glasses. Ground/bond container and receiving equipment.

Avoid breathing vapors. Wash skin thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN, immediately remove all contaminated clothing. Rinse skin with water/shower. IF IN EYES, Remove contact lenses if present and easy to do so, rinse with water for several minutes. If eye or skin irritation persists – get medical advice/attention. Store in a well-ventilated place. Follow hazardous (ignitable) waste regulations for disposal of unused product, see SDS.

**Inhalation:** May cause irritation to mucous membranes and upper respiratory tract. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, central nervous system depression, fatigue, dizziness, and nausea.

**Chronic:** Repeated or prolonged exposure may result in liver damage or may cause dermatitis by defatting the skin. See Section 11 (Toxicological Information) for additional information.

- Ingestion:** May cause irritation of the digestive tract, stomach pain, nausea, and vomiting.
- Skin contact:** Prolonged or repeated contact with skin may cause redness, irritation, swelling, and dermatitis.
- Eye contact:** Exposure to vapors or liquid may cause eye irritation.
- Carcinogenic evaluation:** No component of this product present at levels greater than 0.1 % is identified as a known, suspected or potential carcinogen by the NTP, the IARC or OSHA. The ACGIH designates Tetrahydrofuran as category A3 – confirmed animal carcinogen with unknown relevance to humans.

### Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Material information:

| Name                 | CAS No.  | Weight % |
|----------------------|----------|----------|
| Tetrahydrofuran*     | 109-99-9 | 48-53    |
| Acetone*             | 67-64-1  | 10-15    |
| Methyl ethyl ketone* | 78-93-3  | 2-7      |
| Cyclohexanone*       | 108-94-1 | 8-13     |

*\*Note: The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.*

### Section 4. FIRST AID MEASURES

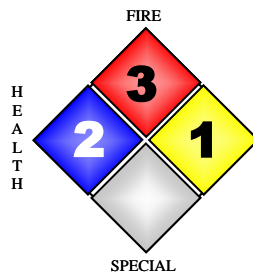
- Inhalation:** Move exposed persons to fresh air. If the person is not breathing or breathing is irregular, provide artificial respiration or oxygen by trained personnel. Seek medical attention.
- Skin contact:** Quickly remove contaminated clothing and shoes. Wash affected skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.
- Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If conscious and alert, rinse the mouth with water. Call a physician or poison control center immediately.
- Eye contact:** Check for and remove any contact lenses. Immediately consult physician after flushing eyes with tepid water for 15 minutes.

### Section 5. FIREFIGHTING MEASURES

- Suitable extinguishing media:** Small fires — Class B fire-extinguishing media including water spray, foam, CO<sub>2</sub> or dry powder. Do not use a water stream, as this will spread the fire.
- Specific hazards:** Fire or intense heat may cause violent rupture of product containers. Vapors may form explosive mixtures with air. Application of extinguishing media to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products including carbon oxides may cause a health hazard. Symptoms may not be immediately apparent.

**Special protective equipment for firefighters:** Full protective equipment including self-contained breathing apparatus should be used. Explosive in the presence of oxidizers or nitric acid. Do not allow run-off from fire-fighting to enter drains or water courses.

|                         | NFPA rating: | HMIS rating: |
|-------------------------|--------------|--------------|
| Health:                 | 2            | 2            |
| Flammability:           | 3            | 3            |
| Instability/reactivity: | 1            | 0            |
| Other:                  | N/A          | H (PPE)      |



|                        |
|------------------------|
| <b>Hazardous</b>       |
| <b>FP - Below 73 F</b> |
| <b>Stable</b>          |
| <b>N/A</b>             |

## Section 6. ACCIDENTAL RELEASE MEASURES

|   |  |
|---|--|
| <b>Personal Precautions:</b>                | Immediately contact emergency personnel. Evacuate any potentially affected area and isolate personnel from entry. Ventilate closed spaces before entering them. Vapor can collect in lower areas.  |
| <b>Large Spill:</b>                         | Personnel must have appropriate training, per OSHA 29 CFR 1910.120. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8).   |
| <b>Methods for Containment and Clean up</b> | Shut off source if possible and if safe. Eliminate all ignition sources. Use non-sparking tools during all cleanup procedures. Prevent entry into waterways, sewers, basements or confined areas. Advise applicable authorities if material has entered sewers or water courses. |

## Section 7. HANDLING AND STORAGE

|                  |  |
|------------------|--|
| <b>Handling:</b> | Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Ground/bond the container and receiving equipment and take precautionary measures against static discharge. Avoid breathing vapors. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Launder soiled clothing thoroughly before re-use. |
| <b>Storage:</b>  | Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor. Do not store with incompatible materials. See Section 10, Stability and Reactivity.  |

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits:

| Name                       | CAS No.  | ACGIH® TLV® Exposure Limits:                 | Federal OSHA PELs     | OSHA PELs 1989 <sup>c</sup>                   |
|----------------------------|----------|--|-----------------------|---|
| <b>Acetone</b>             | 67-64-1  | 500 ppm <sup>A</sup><br>750 ppm <sup>B</sup> | 1000 ppm <sup>A</sup> | 750 ppm <sup>A</sup><br>1000 ppm <sup>B</sup> |
| <b>Methyl-ethyl ketone</b> | 78-93-3  | 200 ppm <sup>A</sup><br>300 ppm <sup>B</sup> | 200 ppm <sup>A</sup>  | None  |
| <b>Cyclohexanone</b>       | 108-94-1 | 20 ppm <sup>A</sup>                          | 50 ppm <sup>A</sup>   | 25 ppm <sup>A</sup>                           |
| <b>Tetrahydrofuran</b>     | 109-99-9 | 50 ppm <sup>A</sup><br>100 ppm <sup>B</sup>  | 200 ppm <sup>A</sup>  | 200 ppm <sup>A</sup><br>250 ppm <sup>B</sup>  |

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

<sup>A</sup> Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

<sup>B</sup> A Short Term Exposure Limit TWA over the course of 15 minutes.

PEL — Permissible Exposure Limit is the maximum 8-hour TWA concentration of a chemical that a worker may be exposed to under Occupational Safety and Health Administration (OSHA) regulations.

<sup>C</sup> Federal OSHA 1989 PELs were vacated but are in use and enforced by many state OSHA plans.

**Engineering measures:** Local exhaust ventilation is preferable. Mechanical ventilation must be explosion proof. General ventilation is acceptable if exposure to materials in this section is maintained below applicable exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

|                                  |  |
|----------------------------------|--|
| <b>Respiratory protection:</b>   | When engineering controls are not sufficient to reduce exposure to levels below applicable exposure limits, seek professional advice prior to respirator selection and use. For concentrations less than 10 times the exposure limits, wear a properly fitted NIOSH/ MSHA-approved respirator with organic vapor cartridges. |
| <b>Skin and body protection:</b> | Wear impervious clothing and gloves to prevent contact. Butyl-rubber is recommended for full contact or splash contact. Other protective material may be used, depending on the situation, if adequate degradation and permeation data is available.   |
| <b>Eye protection:</b>           | Wear safety spectacles with unperforated sideshields, or goggles.  |
| <b>Hygiene measures:</b>         | Avoid repeated or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and launder before reuse.  |
| <b>Other precautions:</b>        | Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.  |

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                                 |
|---|---------------------------------|
| <b>Appearance:</b>  | Green viscous liquid            |
| <b>Physical state (solid/liquid/gas):</b>                   | Liquid                          |
| <b>Substance type (pure/mixture):</b>                       | Mixture                         |
| <b>Color:</b>   | Green                           |
| <b>Odor:</b>  | Ether-, and acetone-like odor   |
| <b>Molecular weight:</b>                                    | 63.6 grams/ mol.                |
| <b>pH:</b>  | N/A                             |
| <b>Boiling point/range (5-95%):</b>                         | 147°F; 64°C                     |
| <b>Melting point/range:</b>                                 | N/A                             |
| <b>Decomposition temperature:</b>                           | Not Available                   |
| <b>Specific gravity:</b>                                    | 0.87                            |
| <b>Vapor density:</b>                                       | (AIR = 1) 3.5                   |
| <b>Vapor pressure:</b>                                      | 20 mm Hg at 68°F                |
| <b>Evaporation rate (Butyl acetate= 1):</b>                 | 5.6                             |
| <b>Flash point, method used:</b>                            | 1°F; -17.2°C, TTC               |
| <b>Water solubility:</b>                                    | Not available                   |
| <b>VOC Content (SCAQMD Rule 1168<br/>Test Method 316A):</b> | <510 grams/liter                |
| <b>Auto-ignition temperature:</b>                           | 610°F; 321°C (lowest component) |
| <b>Flammable limits in air — lower (%):</b>                 | 1.1                             |
| <b>Flammable limits in air — upper (%):</b>                 | 11.5                            |

## Section 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>Reactivity:</b>                       | No data available   |
| <b>Stability:</b>                        | Stable under recommended storage conditions                     |
| <b>Possibly hazardous reactions:</b>     | Vapors may form an explosive mixture with air                   |
| <b>Conditions to avoid:</b>              | Heat, flames, sparks, temperature extremes, and direct sunlight |
| <b>Incompatible Materials:</b>           | Strong oxidizing agents, Acids, Alkalies, Peroxides.            |
| <b>Hazardous decomposition products:</b> | By fire, Carbon dioxide, Carbon monoxide                        |
| <b>Polymerization:</b>                   | Will not occur.   |

## Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Excessive exposure leads to depression of the central nervous system. Causes eye irritation, moderate skin irritation.

### Product information:

| Name                | CAS No.  | Inhalation:                                 | Dermal:                                      | Oral:                                       |
|---------------------|----------|---|--|---|
| Acetone             | 67-64-1  | LC <sub>50</sub> (Rat): 76 mg/l, 4 hours    | LD <sub>50</sub> (Rabbit) 20,000 mg/kg       | Acute LD <sub>50</sub> (Rat): 5,800 mg/kg   |
| Methyl-ethyl ketone | 78-93-3  | LC <sub>50</sub> (Rat): >5,000 ppm, 6 hours | LD <sub>50</sub> (Rabbit) 5 to 13 g/kg       | LD <sub>50</sub> (Rat) 2,700 to 5,600 mg/kg |
| Cyclohexanone       | 108-94-1 | LC <sub>50</sub> (Rat): 8,000 ppm, 4 hours  | LD <sub>50</sub> (Rabbit) 794 to 3,160 mg/kg | LD <sub>50</sub> (Rat) 1,534 mg/kg          |
| Tetrahydrofuran     | 109-99-9 | LC <sub>50</sub> (Rat): 18,000 ppm, 4 hours | Not available                                | LD <sub>50</sub> (Rat) 3,240 mg/kg          |

LC<sub>50</sub> — The concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours)

**Chronic toxicity:** Ingredients are not listed by the IARC, NTP, OSHA, or EPA as carcinogenic. Repeated or prolonged exposure may cause skin dryness or cracking. Repeated or prolonged exposure in excess of exposure limits in Section 8 may cause damage to the respiratory tract, lungs, liver, and kidney.

**Sensitization:** Not known to cause sensitization in humans.

## Section 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** EC<sub>50</sub> Fathead minnow 96-hour 527 to 8,890 mg/l (TLm — Median Threshold Limit). The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful effect on the environment.

**Persistence and Degradability:** Expected to be readily biodegradable.  
Products of degradation: carbon oxides (CO, CO<sub>2</sub> and water)

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** Waste from this product may be hazardous as defined under RCRA 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Incinerate in an approved facility. Do not incinerate a closed container. Disposal of this material must be done in accordance with federal, state and/or local regulations. The material destined for disposal must be characterized properly and may differ from the product described in this SDS if mixed with other wastes.

## Section 14. TRANSPORT INFORMATION

Please refer to DOT regulation 49 CFR 172.101:

**Transport information:** This material is regulated under DOT when transported via U.S. commerce routes: and IATA, and IMO via international routes

**Hazardous Materials Description:** (DOT and IATA): UN1133, Adhesives, 3, II  
(IMO): UN1133, Adhesives, 3, II, -017 C

**UN/identification no.:** UN1133

**Proper shipping name:** Adhesives, containing flammable liquid

**Hazard class:** 3

**Packing group:** II

**DOT reportable quantity (lbs.):** 1,000 (Tetrahydrofuran)

## Section 15. REGULATORY INFORMATION

### U.S. federal regulatory information:

#### State and community right-to-know regulations:

*The following component(s) of this material are identified on the regulatory lists below:*

#### U.S. TSCA Chemical inventory Section 8(b)

**OSHA** — This product is determined to be hazardous as defined in the OSHA Hazard Communications Standard.

**CERCLA** Sections 102a/103 (40 FR 302.4):

Acetone, methyl-ethyl ketone, and cyclohexanone: Reportable Quantity (RQ): 5,000 pounds

Tetrahydrofuran: Reportable Quantity (RQ): 1,000 pounds

Some Components of this product are listed in the following sections of **SARA**:

SARA Title III Section 302 — N/A

SARA Title III Section 304 — N/A

SARA Title III Section 313 — Methyl ethyl ketone

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21)

Acute health hazard: Yes

Chronic health hazard: Yes

Fire hazard: Yes

Reactive Hazard: No

Pressure Hazard: No

#### California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

#### WHMIS (Canada)

Class B-2: Flammable liquid with a flash point lower than 100°F (37.8°C)

Class D-2A: Material causing other toxic effects

**NOTE:** User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.

## Section 16. OTHER INFORMATION

### Standards and Certification Listings:

This product meets the performance requirements of ASTM D2564. It also meets SCAQMD Rule 1168/316A. It is compliant with LEED® (Leadership in Energy and Environmental Design). When using this product, credit can be claimed for LEED® Green Building Rating System – Indoor Environmental Quality.

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