SDS Number: 1031012550/50
Issue Date: 11/20/2017
Revised Date: 4/1/2019
Version No: 2

## 1. IDENTIFICATION

**Product Name:** TEC-KOOL Elite Yellow Premix Antifreeze
**Chemical Name/Synonyms:** TEC-KOOL Elite Yellow Nitrite-Free Heavy-Duty ELC Premix Antifreeze
**Company Name & Address:** Tec-Kool, 1320 1st Street, Rock Island, IL 61201
**For More Information Call:** (309) 788-5631 (Monday-Friday 8:00-4:30)
**In Case of Emergency Call:** (800) 424-9300 Chemtrec (24 Hours/7 Days)

## 2. HAZARD(S) IDENTIFICATION

**Hazard Classification:**

| **Hazard Class :** | **Category:** | **Hazard Statement:** |
|---|---|---|
| Harmful if swallowed | 4 | H302 |
| Causes eye irritation | 2B | H320 |
| May cause damage to organs through prolonged or repeated exposure | 2 | H373 |
| | | |

See section 16 for full list of H statements.

**Signal Word:** **Warning**

**Hazard Statement(s):**

H302 Harmful if swallowed.
H320 Causes eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure

**Pictogram(s):**

**Precautionary Statement(s):**

| | |
|---|---|
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink, or smoke when using this product. |
| P280 | Wear personal protective equipment as required |
| P301+P312 | IF SWALLOWED: Call poison center/doctor if you feel unwell. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. |
| P337+P313 | Rinse mouth. |
| P501 | If eye irritation persists: Get medical advice/attention. |

**Description of Other Hazards:**

N/A

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance:**

| Chemical Name | CAS# | % By Weight | GHS-US |
|---|---|---|---|
| N/A | | | |
| | | | |
| | | | |
| | | | |
| | | | |

The exact concentrations of ingredients are considered proprietary and are being withheld as a Trade Secret in accordance with paragraph (i) of §1910.1200. In addition, there is batch-to-batch variability in ingredient concentrations.

**Mixture:**

| Chemical Name | CAS# | % By Weight | GHS-US |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Ethylene Glycol | 107-21-1 | <=50 | H302 |
| Dye | N/A | <1 | N/A |
| Denatonium Benzoate | 3734-33-6 | <1 | H302,H315,H319,H335 |
| Methyl-oxirane | 9003-11-6 | <3 | N/A |
| Deionized Water | 7732-18-5 | Balance | Not Classified |

## 4. FIRST-AID MEASURES

**Description of First-Aid Measures:**

**First-Aid Measures General:**

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-Aid Measures after Inhalation:**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical advice. If not breathing, give artificial respiration.

**First-Aid Measures after Skin Contact:**

Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irratation occurs: Rinse immediately with plenty of water (for at least 15 minutes). Get medical advice/attention.

**First-Aid after Eye Contact:**

Rinse immediately with plenty of water for 15 minutes, lifting lower and upper lids. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/ attention.

**First-Aid after ingestion:**

Obtain emergency medical attention. Rinse mouth. DO NOT INDUCE VOMITING! If the person is fully conscience, make him/her drink two glasses of water. Never give an unconscience person anything to drink. Call a POISON CENTER or doctor if you feel unwell. If medical advice is delayed, and if the person has swallowed a moderate volumn of material, then give three to four ounces of hard liquor, such as whisky. For children, give proportionally less, according to weight.

**Most Important symptoms and effects, both acute and delayed:**

**Symptoms:** Causes damage to organs (kidneys).

**Symptoms after skin contact:** Causes skin irritation.

**Symptoms after eye contact:** Causes serious eye damage.

**Symptoms after ingestion:** Swallowing a small quantity of this material will result in serious health hazard.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Agents:** Water fog. Alcohol-resistant foam. Foam. Carbon dioxide. Dry chemical powder. Sand. Fine water spray.

**Unsuitable Extinguishing Agents:** Do not use a heavy water stream. May spread fire.

**Protective Equipment/Precautions**

| | |
|---|---|
| **for Firefighters:** | Do not release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode. Full protective equipment including self-contained breathing apparatus should be used during a fire. During emergency conditions, over-exposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Seek medical attention. |

## 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal Precautions, Protective Equipment:** | See section 8 for recommendations on the use of personal protective equipment. |
| **Measures for Environmental Protection:** | Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. |
| **Measures for Cleaning/Collecting:** | Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. |

## 7. HANDLING AND STORAGE

| | |
|---|---|
| **Precautions for Safe Handling:** | See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of |

aerosols.

**Conditions for Safe Storage, Including any Incompatibilities:** Keep only in the original container in a cool, well ventilated place away from: Heat sources. Keep container closed when not in use. Product may become solid at temperatures below -37 C. Keep away from strong acids, strong bases and oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:**

| Component | Exposure Limits | Basis | Entity |
|---|---|---|---|
| Ethylene Glycol | 10 mg/m³ | STEL | ACGIH |
| | N/A | STEL | OSHA |
| | | | |
| | | | |
| | | | |

TWA: Time weighted average over 8 hours of work.
TLV: Threshold limit value over 8 hours of work.
REL: Recommended exposure limit.
PEL: Permissible exposure limit.
STEL: Short term exposure limit during x minutes.
IDLH: Immediately dangerous to life or health.
WEEL: Workplace environmental exposure levels.
CEIL: Ceiling.

**Exposure Controls:**

**Personal Protective Equipment:** Avoid all unnecessary exposure. Gloves. Safety glasses.

**Breathing Equipment:** Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

**Protection of Hands:** Wear protective gloves.

**Eye Protection:** Wear chemical safety glasses or goggles, and face shield.

**Additional Recommendations:** N/A

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Basic Physical and Chemical Properties:**

| | |
|---|---|
| Physical State: | Liquid |
| Color: | Yellow |
| Odor: | Mild |
| Odor Threshold: | No Data Available |
| pH 50% Water Solution: | 8.0 - 9.5 |
| Freezing Point: | -36˚C (-34˚F) |
| Boiling Point: | 109˚C (229˚F) |
| Flash Point: | 116˚C (241˚F) |
| Evaporation Rate: | Nil |
| Flammability: | No Data Available |
| Auto-Ignition Temperature: | No Data Available |
| Decomposition Temperature: | No Data Available |
| Vapor Pressure: | <.1 mm Hg @ 20˚C |
| Vapor Density: | 2.1 (air=1) |
| Solubility: | Water: Complete |
| Specific Gravity: | 1.045 min. |
| Viscosity, Kinematic: | No Data Available |
| Viscosity, Dynamic: | No Data Available |

## 10. STABILITY AND REACTIVITY

**Reactivity:** No dangerous reactions known under normal conditions of use.

**Chemical Stability:** Stable

**Conditions to Avoid:** Extremely high or low temperatures.

**Incompatible Materials:** Keep away from strong acids, strong bases, and oxidizing agents.

**Hazardous Decomposition Products:** Carbon dioxide. Carbon monoxide. Fume. Ethers. Aldehydes. Alcohols.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:**

| | Ethylene Glycol (107-21-1) | Denatonium Benzoate (3734-33-6) | |
|---|---|---|---|
| Skin: | LD50 Dermal - rabbit - 10,626 mg/kg | Skin: | LD50 Dermal - rabbit - > 2000 mg/kg |
| Eyes: | Eyes - rabbit - Mild eye irritation - 24 h | Eyes: | Not Available |
| Inhalation: | Not Available | Inhalation: | Not Available |
| Ingestion: | LD50 Oral - rat - 4,700 mg/kg | Ingestion: | LD50 Oral - rat - 584 mg/kg |

**Potential Routes of Exposure/Potential Health Effects:**

| | | |
|---|---|---|
| Skin: | Causes skin irritation | Skin: |
| Eye: | Causes serious eye damage | Eye: |
| Inhalation: | Not Classified | Inhalation: |
| Ingestion: | Swallowing a small quanity can result in serious health hazard. The lethal dose in humans is estimated to be 100 ml (3 oz) | Ingestion: |
| Carcinogenic Effects: | | Carcinogenic Effects: |
| Mutagenic Effects: | | Mutagenic Effects: |
| Reproductive | | Reproductive |

| | |
|---|---|
| Toxicity: | Toxicity: |
| Sensitization: | Sensitization: |
| Target Organs: | Target Organs: |

## 12. ECOLOGICAL INFORMATION

| | | |
|---|---|---|
| **Ecotoxicity:** | Aquatic Vertebrate: | LC50 - Oncorhynchus mykiss (rainbow trout) - 18,500 mg/l - 96 h |
| | | LC50 - Leuciscus idus (Golden orfe) - > 10,000 mg/l - 48 h |
| | | NOEC - Pimephales promelas (fathead minnow) - 32,000 mg/l - 7 d |
| | | NOEC - Pimephales promelas (fathead minnow) - 39,140 mg/l - 96 h |
| | Aquatic Invertebrate: | EC50 - Daphnia magna (Water flea) - 74,000 mg/l - 24 h |
| | | NOEC - Daphnia - 24,000 mg/l - 48 h |
| | | LC50 - Daphnia magna (Water flea) - 41,000 mg/l - 48 h |
| | Terrestrial: | Not Available |
| | Mobility: | Not Available |
| | Biodegration: | Biodegradeable |
| | Bioaccumulation: | Not Available |

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods:**

| | |
|---|---|
| Waste: | Dispose of contents/container, in a safe mannor, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations. |

Ecology-waste materials: Avoid release to the environment

## 14. TRANSPORT INFORMATION

**Department of Transportation (DOT):**

| | |
|---|---|
| Transport Document Description: | UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III |
| UN-No.: | UN3082 |
| Proper Shipping Name: | Environmentally hazardous substances, liquid, n.o.s. |
| Hazard Class: | 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173. 140 |
| Hazard Labels: | 9 - Class 9 (Miscellaneous dangerous n |


| | |
|---|---|
| Packing Group: | III - Minor Danger |
| Packaging Non-bulk: | 203 |
| Packaging Bulk: | 241 |
| Symbols: | G - Identifies PSN requiring a technical name |
| Packaging Exceptions: | 155 |
| Quantity Limits: | No Limit |
| Vessel Stowage: | A - May be stowed "on deck" or "under deck" on a vessel |

**TDG:** Refer to current TDG Canada for further Canadian regulations

**Maritime Transport IMDG:** Not regulated by IMDG (in quantities under 5000 lbs in any one inner package)

**Air Transport ICAO-TI and IATA-DGR:** Not regulated by IATA (in quantities under 5000 lbs in any one inner package)

**Land Transport ADR/RID:** Non Bulk: not regulated by the U.S. DOT (in quantities under 5000 lbs in any one inner package)

## 15. REGULATORY INFORMATION

**U.S. Federal Regulations:**

| | |
|---|---|
| TSCA Inventory Status: | Ingredients listed on TSCA inventory |
| DSCL(EEC): | Ingredients listed on DSCL inventory |

| | |
|---|---|
| SARA 302: | Not listed |
| SARA 304: | Not listed |
| SARA 311: | Immediate (acute) health hazard |
| SARA 312: | Delayed (chronic) health hazard |
| SARA 313: | Ethylene glycol is subject to Form R reporting |

### International Regulations:

Canada WHMIS: Class D-2A: Poisonous and infectious material- Other effects- Very toxic

Class D-1B: Poisonous and infectious material- Immediate and serious effects- Toxic

EU: No Information available

### U.S. State Regulations:

California Prop 65: **WARNING:** This product contains, or may contain, substance(s) known to the State of California to cause cancer, developmental toxicity and/or reproductive toxicity:

| | | |
|---|---|---|
| | **Substance:** | Ethylene Glycol (107-21-1) |
| | Carcinogens List: | No |
| | Developmental Toxicity: | Yes |
| Male | Reproductive Toxicity: | No |
| Female | Reproductive Toxicity: | No |
| Non-Significant Risk Level (NSRL): | | N/A |

Please refer to Sections 2, 8, and 11 for health & exposure risks, for more information, see: www.P65Warnings.ca.gov

**Others:**

| | | |
|---|---|---|
| Massachusetts | Right to know list: | Listed |
| New Jersey | Right to know hazardous substance list: | Listed |
| Pennsylvania | Right to know list - environmental hazard list: | Listed |

## 16. OTHER INFORMATION

**NFPA**

**Health Hazard:** 1-Exposure could cause irritation but only minor residual injury even if no treatment given.

**Fire Hazard:** 1-Must be preheated before ignition can occur.

**Reactivity:** 0-Normally stable, even under fire exposure conditions, and are not reactive with water.

**NS Symbol:** N/A


Full text of H statements:

**Physical Hazards:**

| Code: | Phrase: |
|---|---|
| H200: | Unstable explosive |
| H201: | Explosive; mass explosion hazard |
| H202: | Explosive; severe projection hazard |
| H203: | Explosive; fire, blast or projection hazard |
| H204: | Fire or projection hazard |
| H205: | May mass explode in fire |
| H206: | Fire, blast or projection hazard: increased risk of explosion if desensitizing agent is reduced |
| H207: | Fire or projection hazard: increased risk of explosion if desensitizing agent is reduced |
| H208: | Fire hazard: increased risk of explosion if desensitizing agent is reduced |
| H220: | Extremely flammable gas |
| H221: | Flammable gas |
| H222: | Extremely flammable aerosol |
| H223: | Flammable aerosol |
| H224: | Extremely flammable liquid and vapour |
| H225: | Highly flammable liquid and vapour |
| H226: | Flammable liquid and vapour |
| H227: | Combustible liquid |
| H228: | Flammable solid |
| H229: | Pressurized container: may burst if heated |
| H230: | May react explosively even in the absence of air |
| H231: | May react explosively even in the absence of air at elevated pressure and/or temperature |
| H232: | May ignite spontaneously if exposed to air |
| H240: | Heating may cause an explosion |
| H241: | Heating may cause a fire or explosion |
| H242: | Heating may cause a fire |
| H250: | Catches fire spontaneously if exposed to air |
| H251: | Self-heating; may catch fire |
| H252: | Self-heating in large quantities; may catch fire |
| H260: | In contact with water releases flammable gases which may ignite spontaneously |
| H261: | In contact with water releases flammable gas |

**Health Hazards (Cont.):**

| Code: | Phrase: |
|---|---|
| H300: | Fatal if swallowed. |
| H301: | Toxic if swallowed |
| H302: | Harmful if swallowed |
| H303: | May be harmful if swallowed |
| H304: | May be fatal if swallowed and enters airways |
| H305: | May be harmful if swallowed and enters airways |
| H310: | Fatal in contact with skin |
| H311: | Toxic in contact with skin |
| H312: | Harmful in contact with skin |
| H313: | May be harmful in contact with skin |
| H314: | Causes severe skin burns and eye damage |
| H315: | Causes skin irritation |
| H316: | Causes mild skin irritation |
| H317: | May cause an allergic skin reaction |
| H318: | Causes serious eye damage |
| H319: | Causes serious eye irritation |
| H320: | Causes eye irritation |
| H330: | Fatal if inhaled |
| H331: | Toxic if inhaled |
| H332: | Harmful if inhaled |
| H333: | May be harmful if inhaled |
| H334: | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H335: | May cause respiratory irritation |
| H336: | May cause drowsiness or dizziness |
| H340: | May cause genetic defects |
| H341: | Suspected of causing genetic defects |
| H350: | May cause cancer |
| H351: | Suspected of causing cancer |
| H360: | May damage fertility or the unborn child |
| H361: | Suspected of damaging fertility or the unborn child |
| H361d: | Suspected of damaging the unborn child |
| H361e: | May damage the unborn child |
| H361f: | Suspected of damaging fertility |

H270: May cause or intensify fire; oxidizer

H271: May cause fire or explosion; strong oxidizer

H272: May intensify fire; oxidizer

H280: Contains gas under pressure; may explode if heated

H281: Contains refrigerated gas; may cause cryogenic burns or injury

H290: May be corrosive to metals

**Environmental Hazards:**

**Code:** **Phrase:**

H400: Very toxic to aquatic life

H401: Toxic to aquatic life

H402: Harmful to aquatic life

H410: Very toxic to aquatic life with long-lasting effects

H411: Toxic to aquatic life with long-lasting effects

H412: Harmful to aquatic life with long-lasting effects

H413: May cause long-lasting harmful effects to aquatic life

H420: Harms public health and the environment by destroying ozone in the upper atmosphere

H433: Harmful to terrestrial vertebrates

**Health Hazards:**

**Code:** **Phrase:**

H313+H333: May be harmful in contact with skin or if inhaled

H303+H313+H333: May be harmful if swallowed, in contact with skin or if inhaled

H315+H320: Causes skin and eye irritation

H361g: may damage fertility

H362: May cause harm to breast-fed children

H370: Causes damage to organs

H371: May cause damage to organs

H372: Causes damage to organs through prolonged or repeated exposure

H373: May cause damage to organs through prolonged or repeated exposure

H300+H310: Fatal if swallowed or in contact with skin

H300+H330: Fatal if swallowed or if inhaled

H310+H330: Fatal in contact with skin or if inhaled

H300+H310+H330: Fatal if swallowed, in contact with skin or if inhaled

H301+H311: Toxic if swallowed or in contact with skin

H301+H331: Toxic if swallowed or if inhaled

H311+H331: Toxic in contact with skin or if inhaled

H301+H311+H331: Toxic if swallowed, in contact with skin or if inhaled

H302+H312: Harmful if swallowed or in contact with skin

H302+H332: Harmful if swallowed or if inhaled

H312+H332: Harmful in contact with skin or if inhaled

H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled

H303+H313: May be harmful if swallowed or in contact with skin

H303+H333: May be harmful if swallowed or if inhaled

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