SDS Number: 0001
Issue Date: 10/10/2018
Revised Date: 4/1/2019
Version No: 2

1. IDENTIFICATION

Product Name: TEC-KOOL Max Red HD NOAT ELC Premix Antifreeze
Chemical Name/Synonyms: N/A
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
Reproductive Toxicity	2	H361
May cause damage to organs through prolonged or repeated exposure	2	H373
Causes eye irritation	2B	H320

See section 16 for full list of H statements.

Signal Word: **Warning**

Hazard Statement(s):

H302 Harmful if swallowed.
H361 Suspected of damaging fertility or unborn child
H373 May cause damage to organs through prolonged or repeated exposure
H320 Causes eye irritation

Pictogram(s):

Precautionary Statement(s):

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
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.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of all contents/containers in accordance with local regulations.

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	5	N/A
Deionized Water	7732-18-5	Balance	N/A

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:	Red
Odor:	Mild
Odor Threshold:	No Data Available
pH 50% Water Solution:	8.0 - 9
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		Mutagenic

Effects:	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

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

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
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
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
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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