AntCant™

SAFETY DATA SHEET

revision date: September 15, 2018

Section 1 - Identification

MSDS Name: AntCant Catalog Numbers: N/A Synonyms: RepelANT

Company Identification:

Critter Technology 7919 Silverton, Suite 422 San Diego, CA 92126

For information in North America call: 858-993-4755 For emergencies in the US: 800-424-9300 (ChemTrec)

RECOMMENDED USE: AntCant is used as a non-toxic coating that prevents ants and other climbing insects from traversing a treated inclined surface.

Section 2 - Hazard Identification

Flammable Liquid, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Specific Target Organ Toxicity (single exposure), Category 3

Symbols:





GHS Signal Word: Danger

GHS Hazard Phrases:

H225: Highly flammable liquid and vapor.

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H335: May cause respiratory irritation. H336: May cause drowsiness or dizziness.

GHS Precautionary Phrases:

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233: Keep container tightly closed

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparking, non-conductive tools

P243: Take precautionary measures against static discharge.

P261: Avoid breathing gas/mist/vapors/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this material.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:

P370+378: In case of fire, use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide to extinguish.

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for several minutes.

P337+313: If eye irritation persists, get medical advice/attention.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER/doctor if you feel unwell.

GHS Storage and Disposal:

P403+233: Store container tightly closed in well-ventilated place.

P501: Dispose of contents/container according to local, state and federal regulations.

NFPA: Health 1 Flammability 3 Reactivity 0

Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Chemical Name	Percent	EINECS/ELINCS
N/A	TergoSol™ Solvent	>90	
Trade secret	Proprietary ingredient (1)	Trade secret	

Composition comments US GHS: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of section 1910.1200.

Appearance: Slight white liquid; Combustible liquid

Signal word: Danger

Hazard statements: highly flammable, contents may catch fire, container may explode if heated, harmful if swallowed or inhaled, irritant

Section 4 - First Aid Measures

4.1 Description of first aid measures

Eyes: If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin: First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Ingestion: Rinse mouth. Do NOT induce vomiting. If individual is drowsy or unconscious, do not give anything by mouth. Contact a physician, medical facility, or poison control center for advice. If possible, do not leave individual unattended.

Inhalation: If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Indication of immediate medical attention and special treatment needed: Treat patient symptomatically.

4.2 Most important symptoms and effects both acute and delayed

Potential health symptoms and effects

Eyes: Redness. Mild irritation. Itching and/or tearing may indicate more severe eye exposures.

Skin: May cause mild irritation or dermatitis. Should not cause allergic skin reaction. A single, prolonged exposure is not likely to result in material being absorbed in harmful amounts.

Inhalation: May cause repiratory irritation, nausea, drowsiness, inebriation, unconsciousness, and central nervous system depression. Vapors may cause dizziness or respiratory distress.

Deliberate inhalation of vapors may cause serious illness

Section 5 - Fire Fighting Measures

5.1 Extinguishable media

Suitable extinguishing media: For small fires, use media such as "alcohol foam", dry chemical, carbon dioxide. For large fires, apply water from as far away as possible. Use very large volumes (flood) of water. Water mist or spray, streams, or jets may be ineffective. Adapt fire-extinguishing measures to surroundings.

5.2 Special hazards arising from the substance or mixture

Unsuitable extinguishing media: No limitation of extinguishing agents is provided for the material. Combustible material. Vapors are heavier than air and may spread along floors. May form explosive mixtures with air at ambient temperatures. Pay attention to flashback. Development of hazardous combustion gases or vapors is possible in the event of a fire. Symptoms of overexposure to these gases may not be apparent. Seek medical advice.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat. If possible, firefighters should control run-off water to prevent environmental contamination.

5.4 Further information

Precautions for fire-fighting: Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes. Use standard firefighting procedures and consider the hazards of other materials.

Section 6 - Accidental Release Measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.
- **6.2 Environmental precautions:** Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.
- **6.3 Methods and materials for containment and cleaning up:** Cover drains. Collect, contain, and pump off spills. Cover with a large quantity of inert absorbent (e.g. sand, earth, diatomaceous earth, vermiculite). Collect product using non-sparking/non-conductive tools and place in container for disposal according to local / national regulations (see section 13). Observe possible material restrictions (sections 7.2 and 10.5). Clean contaminated area with soap and water
- **6.4 Reference to other sections:** For indication about waste treatment, see section 13.

Other information: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapors/mists with a water spray jet. Do not discharge into lakes, streams, ponds or public waters.

Section 7 - Handling and Storage

- **7.1 Precautions for safe handling:** Wear all appropriate protective equipment specified in Section 8. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition. No smoking. Take measures to prevent the buildup of electrostatic charge. Keep containers tightly closed when not in use. For precautions, see section 2.
- **7.2 Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a cool, dry, ventilated area, away from incompatible substances. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Incompatible materials: acids, bases. Storage temperature: >10°C

7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

Section 8 - Exposure Controls, Personal Protection

8.1 Control parameters

TergoSol- PEL 620 mg/m3, 200 ppm US OSHA; STEL 250 ppm, TWA 200 ppm US ACGIH; STEL 760 mb/m3, 200 ppm, TWA 610 mg/m3, 200 ppm US NIOSH

8.2 Exposure controls:

General advice: These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Engineering measures: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Hand protection: Wear gloves recommended by glove supplier for protection against materials in section 3. Gloves should be impermeable to chemicals and oil and be chemically resistant. Breakthrough time of selected gloves must be greater than the intended use period. Neoprene, nitrile rubber or butyl rubber gloves with cuffs are recommended.

Body protection: Wear flame retardant, antistatic protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentration and quantities of hazardous substances handled.

Respiratory protection: None required with normal use. Always us an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate, use a NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, or using the lavatory.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance:

b) Odour

c) Odour Threshold
d) pH

e) Melting point/freezing point
f) Initial boiling point and
boiling range

Form: Liquid
Color: Cloudy white
mild fruity, acid
no data available
not established
-73.1 °C (-99.6 °F)
65.1 °C (149.2 °F)

g) Flash point 4.5 °C (40.1 °F)

h) Evaporation rate (BuAc = 1) 5.35

i) Flammability (solid, gas) no data available

j) Upper/lower flammability Upper explosion limit: 13.65 %(V) or explosive limits Lower explosion limit: 3.38 %(V)

k) Vapor pressure at 20 °C 131.25 mmHg

I) Vapor density (Air = 1) 2.73

m) Relative density 0.97 g/ml (9.72 lb/gal)

n) Water solubility 23.22%

o) Partition coefficient: noctanol/water no data available
 p) Auto-ignition temperature 492.75 °C (919 °F)
 q) Decomposition temperature no data available

r) Viscosity 0.89cP

s) Explosive properties no data availablet) Oxidizing properties no data available

VOC 2.82 g/L

Measurement of Incremental

Reactivity (MIR)

0.065 g ozone / g or organics

9.2 Other data No data available

Section 10 - Stability and Reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Reacts violently with oxidants and potassium tert-butoxide and may cause a fire hazard.

Air contact may form hazardous compounds

The substance decomposes on burning producing irritating fumes.

10.4 Conditions to avoid

Air, heat, flames and sparks.

10.5 Incompatible materials

Oxidizing agents, acids, bases.

10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon, hydrocarbons, fumes, and smoke. On contact with air, Benzaldehyde may be produced.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Proprietary Ingredient:

Acute oral toxicity LD50 Rat: > 5000 mg/kg

Method: OECD Test Guideline 401 comparable product

LD0 Rat: 1000 mg/kg

Method: OECD Test Guideline 401 No deaths occurred. comparable product

Based on available data, the classification criteria are not met.

Acute inhalation toxicity LCO Rat: 0.139 mg/l / 4 h

Method: analogous OECD method (maximum concentration attainable in experiments)

No deaths occurred, comparable product

Based on available data, the classification criteria are not met.

Acute dermal toxicity LD50 Rat: > 2000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal toxicity comparable product

Based on available data, the classification criteria are not met.

Skin irritation Rabbit Not irritating.

Method: OECD Test Guideline 404 comparable product

Eye irritation Rabbit Not irritating.

Method: OECD Test Guideline 404 comparable product

Assessment of STOT single exposure

No evidence for hazardous properties

Assessment of STOT repeat exposure

No evidence for hazardous properties

Risk of aspiration

toxicity

No aspiration toxicity classification

Gentoxicity in vitro Ames test S. typhimurium / E. coli Negative

Method: OECD TG 471 comparable product

Mutagenicity assessment No evidence of mutagenic effects

Carcinogenicity No evidence that cancer may be caused.

Carcinogenicity

assessment

Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.

Toxicity to reproduction No evidence of reproduction toxic properties

TergoSol (toxicity data not available for TergoSol. Data listed below is for Methyl acetate, the majority component in TergoSol.)

Acute Oral Toxicity: LD50: >6,000 mg/kg Species: rat (highest dose tested)

Acute Inhalation Toxicity: LC50: >50mg/L; 4 hr Species: rat (highest dose tested)

Acute Dermal Toxicity: LD50: >2,000 mg/L Species: rabbit (highest dose tested)

Skin irritation Not irritating Species: rabbit

Eye irritation Moderate irritation Species: rabbit

11.2 Further information

Absorption of large quantities may cause nausea, inebriation, unconsciousness, and respiratory arrest. Further data: Handle in accordance with good industrial hygiene and safety practice. No component of this product is present at levels greater than or equal to 0.1 % is identified as a probable, possible, potential or confirmed carcinogen by ACGIH, IARC, NTP or OSHA. RTECS: FG0450000.

Section 12 - Ecological Information

Proprietary ingredient

12.1 Toxicity

Toxicity to fish LC50 (Brachydanio rerio): > 10000 mg/l / 96 h Method: OECD 203

The reported toxic effects relate to the nominal concentration.

Toxicity in aquatic EC50 Daphnia magna: > 1000 mg/l / 24 h Method: OECD 202 invertebrates The reported toxic effects relate to the nominal concentration.

12.2 Persistence and degradability

Biodegradability: The methods designed to assess persistence and biodegradability are not applicable to this

product, in analogy to inorganic substances.

12.3 Bioaccumulative potential

Bioaccumulation Not to be expected.

12.4 Mobility in soil Mobility

Mobility No remarkable mobility in soil is to be expected.

<u>TergoSol</u> (toxicity data not available for TergoSol. Data listed below is for Methyl acetate, the majority component in TergoSol.)

12.1 Toxicity

Toxicity to Fish LC50 (Fathead minnow): 295-348 mg/l / 96 h

Toxicity in aquatic

Invertebrates

EC50 Daphnia magna: 1027 mg/l / 48 h

12.2 Persistence and degradability

Biodegradability: 70% (28d)

12.3 Bioaccumulative potential

Bioaccumulation No Data Available

12.4 Mobility in soil Mobility

Mobility No Data Available

Section 13 - Disposal Considerations

13.1 Waste Disposal:

Dispose of waste and residues in accordance with local/provincial/state/federal authorities. The generation of waste should be avoided or minimized whenever possible. Although this product is classified as non-hazardous under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261 this material and its container should be disposed of in the safest manner. Empty containers may contain product residue.

Leave chemicals in original containers. Avoid mixing with other waste. Handle unclean containers in a manner similar to handling the product itself. Incinerate in an approved facility. Do not incinerate closed container.

Section 14 - Transport Information

1 Pint (500 ml) Containers or Smaller						
	DOT	IATA	IMDG			
Shipping Name:	n/a	Consumer Commodity	n/a			
Hazard Class:	Limited Quantity	9	Limited Quantity			
UN Number:	n/a	ID8000	n/a			
Packing Group:	n/a	n/a	n/a			

Bulk Containers					
	DOT	IATA	IMDG		
Shipping Name:	Paint	Paint	Paint		
Hazard Class:	3	3	3		
UN Number:	1263	1263	1263		
Packing Group:	II	II	II		

Section 15 - Regulatory Information

Proprietary Ingredient

US Federal Regulations:

OSHA

If listed below, chemical specific standards apply to the product or components:

None listed

Clean Air Act Section (112) If listed below, components present at or above the de minimus level are

hazardous air pollutants:

• None listed

CERCLA Reportable Quantities If listed below, a r

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

None listed

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

• Fire Hazard

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

• None listed

Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

None listed

State Regulations

The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in section 2 and 15 of this SDS.

California Proposition 65 A warning under the California Drinking Water Act is required only if listed below:

None listed

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

NFPA Ratings Health: 1 Flammability: 1 Reactivity: 0

TergoSol

U.S Federal Regulations

OSHA Hazard communication standard:

This material contains hazardous chemicals as defined by the OSHA Hazard Communication Standard (28 CFR 1910.1200).

TSCA (US Toxic Substances Control Act):

All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Superfund Amendments and Reauthorization Act (SARA)

SARA 311-312 Hazard Classification(s):

Immediate (acute) health hazard.

Fire hazard.

SARA 313 Information:

None of the chemicals in this product are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304/311/312 Extremely Hazardous Substance:

No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification:

No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA)

No components of this product are listed as hazardous substances.

Clean Air Act (CAA)

This product does not contain any chemicals that are listed as Hazardous Air

Pollutants (HAPs) designated in CAA Section 112 (b). This product does not contain any Class 1 Ozone depleters.

This product does not contain any Class 2 Ozone depleters.

Clean Water Act (CWA)

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

HMIS (U.S.A.): Health Hazard: 1, Fire Hazard: 3, Physical Hazard: 0

NFPA (U.S.A.): Health: 1, Flammability: 3, Reactivity: 0

Section 16 - Additional Information

SDS Creation Date: 12/5/2016 Revision Date: 09/15/2018

The information above is believed to be accurate and represents the best information currently available to us and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. This document is offered solely as a guide for the customer's consideration. investigation and verification and is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. These suggestions do not replace state, municipal and/or insurance requirements. Any use of this information must be determined by the user to be in accordance with applicable Federal, state and local regulations. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular application. In no event shall Critter Technology be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Critter Technology has been advised of the possibility of such damages. See reverse side of invoice or packing slip for additional terms and conditions of sale.