Page 1 Date SDS Printed & Reviewed: 05/19/17 Last Formula Revision Date: 04/27/17 (APF)

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER:

GUARDX QO500 PREMIUM BLACK

OTHER MEANS OF IDENTIFICATION (FOR CHEMTREC): FORMULA # 19E083N12

RECOMMENDED USE OF THE CHEMICAL: AEROSOL SPRAY

SUPPLIER DETAILS: MANUFACTURED BY:

Custom-Pak Products Inc. N118 W18981 Bunsen Drive Germantown, WI 53022 (262) 251-6180

MANUFACTURED/PACKAGED FOR:

NANOMECH INC. 2447 TECHNOLOGY WAY SPRINGDALE, AR 72764 479-725-8003

EMERGENCY 24-HOUR TELEPHONE NUMBERS:

Call CHEMTREC: within USA dial 1-800-424-9300 or outside USA dial +1-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

HAZARD PICTOGRAMS:









GHS02 Flame, GHS04 Gas Cylinder, GHS07 Exclamation Mark, GHS08 Health Hazard

CLASSIFICATION OF THE SUBSTANCE OF MIXTURE:

Flammable Aerosols, Category 1 Gasses Under Pressure, Category Compressed Liquid Aspiration Hazard, Category 1
Acute Toxicity - Dermal, Category 4
Skin Corrosion/Irritation, Category 2 Sensitization - Skin, Category 1,1A,1B Serious Eye Damage/Eye Irritation, Category 2A Acute Toxicity - Inhalation, Category 4 Specific Target Organ Toxicity - Single Exposure, Category 3 Specific Target Organ Toxicity - Single Exposure, Category 3 Germ Cell Mutagenicity, Category 1A,1B Carcinogenicity, Category 1A,1B Specific Target Organ Toxicity - Repeated Exposure, Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 15.17%

SIGNAL WORD: DANGER

HAZARD STATEMENTS:

- H222 Extremely flammable aerosol.
- H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin. H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation. H332 Harmful if inhaled.
- н335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness. H340 May cause genetic defects.
- н350 May cause cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS:

GENERAL & PREVENTION:

- P102 Keep out of reach of children.
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
- Keep away from heat/sparks/open flames/other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. P210
- P211
- P251
- P261
- Avoid breathing vapor/spray.
 Wash hands thoroughly after handling. P264
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.

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Wear eye protection.

RESPONSE:

P301+P350 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P350 IF ON SKIN: Wash with plenty of soap and water.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do

P312 Call a POISON CENTER/doctor if you feel unwell. P331 Do NOT induce vomiting.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P363 Wash contaminated clothing before reuse.

STORAGE:

P403+P233 Store in a well-ventilated place. Keep container tightly closed when not in use.
P410+P403 Protect from sunlight. Store in a well-ventilated place.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 degrees C/122 degrees F.

DISPOSAL:

P501 Dispose of contents/container in accordance with local/regional/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#	COMPONENT	CAS#	% by WT.
1	ACETONE	67-64-1	40-51
2	PROPANE	74-98-6	10-16
3	VM&P NAPHTHA	64742-89-8	10-16
4	N-BUTANE	106-97-8	5-8
5	ZINC SULFATE	7779-90-0	3-5
6	*CARBON BLACK	1333-86-4	1-3
7	PM ACETATE	108-65-6	1-3
8	*TITANIUM DIOXIDE	13463-67-7	0.1-1
9	METHYL ETHYL KETOXIME	96-29-7	0.1-1

SECTION 4 - FIRST AID MEASURES

Inhalation: If inhaled: Move person to fresh air and keep in comfortable position for breathing.

If innated move person to iresh air and keep in comfortable position for breathing.

If breathing difficulty persists: Get medical advice/attention.

Skin Contact: If on skin: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. If skin irritation persists: Get medical advice/attention.

wtact: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Ingestion: If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting unless directed to

do so by medical personnel.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

See Section 11: Toxicological Information and effects.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT REQUIRED:

Treat symptomatically.

<u>SECTION 5 - FIRE-FIGHTING MEASURES</u>

Suitable Extinguishing Media: CO2 (Carbon Dioxide), dry chemical, or water fog.
Unsuitable Extinguishing Media: Water spray may be unsuitable. However if water is used fog nozzles are preferable.
Water may be used to cool closed containers to prevent pressure build-up and explosion when exposed to extreme heat.
Specific Hazards Arising From the Chemical: Closed containers exposed to heat from fire may build pressure and explode. Products of combustion may include but are not limited to: oxides of carbon.
Special Protective Equipment and Precautions for Fire-Fighters: Full protective equipment including

self-contained breathing apparatus should be used.

<u>SECTION 6 - ACCIDENTAL RELEASE MEASURES</u>

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Prevent contamination of soil/ground, waterways, drains, and sewers.

Methods of Containment: Absorb spilled liquid in suitable material.

Methods for Clean-Up: Use spark-proof tools to sweep or scrape up, containerize, and dispose of properly. Other Information: Ensure adequate ventilation.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling:

Vapors may ignite explosively. Prevent buildup of vapors. Keep from sparks, heat, flame or other heat sources.

Do not smoke. Turn off pilot lights, heaters, electric motors and other sources of ignition during use and

until all vapors are gone. Do not puncture or incinerate/burn container. Keep container tightly closed while not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in dry, well-ventilated area and in accordance with federal, state, and local regulations. Do not expose to heat or store at temperatures above 50 degrees C / 122 degrees F. If storing in cold temperatures, allow product to warm to room temperature before use. Keep container tightly closed and away from heat and sunlight when not in use.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

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CONTROL PARAMETERS

#	COMPONENT	ACGIH TLV-STEL	ACGIH TLV-TWA	OSHA PEL-TWA
1	ACETONE	750 ppm	500 ppm	1000 ppm
2	PROPANE	1800 ppm	2500 ppm	1000 ppm
3	VM&P NAPHTHA	N/E	300 ppm	300 ppm
4	N-BUTANE	N/E	800 ppm	800 ppm
5	ZINC SULFATE	N/E	10 mg/m3	N/E
6	*CARBON BLACK	N/E	3.5 mg/m ppm	3.5 mg/m ppm
7	PM ACETATE	N/E	N/E	N/E
8	*TITANIUM DIOXIDE	N/E	10 mg/m3 ppm	15 mg/m3 ppm
9	METHYL ETHYL KETOXIME	N/E	N/E	N/E
10	METHYL ALCOHOL	250 ppm	200 ppm	200 ppm

APPROPRIATE ENGINEERING CONTROLS: Provide adequate ventilation to keep air contamination below OSHA

permissible exposure limits and ACGIH TLV exposure levels.

EYE/FACE PROTECTION: Wear safety glasses with side shields. Have eye wash facilities immediately available.

SKIN PROTECTION: Wear chemical resistant gloves if contact is likely.

RESPIRATORY PROTECTION: Use NIOSH-approved air-purifying respirator with organic cartridge or canister if exposure cannot be controlled within applicable limits with ventilation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Aerosol - Pressurized Liquid COLOR: See product identification

ODOR: Solvent Odor ODOR THRESHOLD: No data available No data available :Hq

FREEZING POINT: Not Established (mixture)

BOILING POINT: Not Applicable (pressurized mixture)

FLASH POINT: less than -18 degrees C (less than -0.4 degrees F), c.c.

EVAPORATION RATE: Faster than ether

Not Established (mixture) UPPER FLAMMABILITY LIMIT: Not Established (mixture) LOWER FLAMMABILITY LIMIT:

VAPOR PRESSURE: Not Established (pressurized mixture)

SPECIFIC GRAVITY: 0.759 SOLUBILITY (WATER): Negligible VOC PERCENT BY WEIGHT: 37.5

HAPS PERCENT BY WEIGHT: Ω MIR EPA NUMBER: 0.599 MIR CA NUMBER: 0.547

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.

CONDITIONS TO AVOID: Keep away from heat, sparks, and flames.

INCOMPATIBLE MATERIALS: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: by fire - Carbon Dioxide and Carbon Monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF ENTRY: Skin contact, Inhalation, Eye contact, Ingestion SIGNS AND SYMPTOMS OF EXPOSURE:

Skin Contact: Signs/symptoms may include localized redness, itching, drying and cracking of skin.
Inhalation: Intentional concentration and inhalation may be harmful or fatal.

Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion: Signs/sympto

Central nervous system, kidneys, lungs, liver, eyes, skin, brain, respiratory tract, urinary tract, reproductive system, cardiovascular system

TOXICOLOGICAL DATA:

#	COMPONENT	LD50 ORAL	LD50 DERMAL	LC50 INHALATION
1.	ACETONE	5800 mg/kg (rat)	20000 mg/kg (rabbit)	76 mg/L (rat) 4 h
2.	PROPANE	N/E	N/E	658 mg/L (rat) 4 h
3.	VM&P NAPHTHA	>5000 mg/kg (rat)	>2000 mg/kg (rabbit)	>20 mg/L
4.	N-BUTANE	N/E	N/E	30957 mg/m3 (rat) 4h
5.	ZINC SULFATE	>5000 mg/kg (rat)	N/E	N/E
6.	*CARBON BLACK	8000	N/E	N/E
7.	PM ACETATE	>5000 mg/kg (rat)	>5000 mg/kg (rabbit)	>10.8 mg/l (rat) 6 h
8.	*TITANIUM DIOXIDE	N/E	N/E	N/E
9.	METHYL ETHYL KETOXIME	N/E	N/E	N/E
10.	METHYL ALCOHOL	5628 mg/kg (rat)	15800 mg/kg (rabbit)	64000 ppm (rat) 4 h

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SECTION 12: ECOLOGICAL INFORMATION

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of container and its contents in accordance with federal, state, and local regulations. Do not puncture, incinerate, or place container in trash compactor.

SECTION 14: TRANSPORTATION INFORMATION

GROUND (D.O.T./49 CFR):

UN1950 Transport Hazard Class: 2.1 UN I.D. Number: Packing Group: - (not applicable)

AEROSOLS (",FLAMMABLE" is optional to add after AEROSOLS) Limited Quantity (LTD QTY) label -- see 49 CFR 172.315 Proper Shipping Name: Hazard label:

(can add ",FLAMMABLE" after AEROSOLS) Shipping papers format: UN1950, AEROSOLS, 2.1, LTD QTY

AIR (IATA):

UN1950 Transport Hazard Class: 2.1 UN I.D. Number: Packing Group: - (not applicable)

Proper Shipping Name: AEROSOLS, FLAMMABLE Packing Instruction: Y203

LTD QTY label with "Y" in it, and Flammable Gas label Hazard labels:

UN1950, AEROSOLS, FLAMMABLE, 2.1 (Note LTD QTY not needed on papers) Shipping papers format:

WATER (IMDG):

UN I.D. Number: UN1950 Transport Hazard Class: 2.1 Packing Group: - (not applicable) Proper Shipping Name: AEROSOLS Hazard label: LTD QTY label (see IMDG 3.4.5.1)

Packing Instruction: P003,LP02 EmS: F-D,S-U Stowage and Segregation: Category A

UN1950, AEROSOLS, 2.1, (-18 C c.c.), LTD QTY Shipping papers format:

No component of this product is a listed Marine Pollutant (49 CFR 172,101,Appendix B).

SECTION 15: REGULATORY INFORMATION

International Chemical Inventory

All components of this product are listed on or exempt from the following inventories:

TSCA (United States), CEPA/DSL (Canada), AICS (Australia), IECSC (China) SARA Section 313 Toxic Chemicals:

ZINC SULFATE 7779-90-0, METHYL ALCOHOL 67-56-1

Chemicals listed above are subject to the SARA reporting requirements under 40 CFR 372.45(c)(5).

California Prop65 Chemicals:

*CARBON BLACK 1333-86-4, *TITANIUM DIOXIDE 13463-67-7, METHYL ALCOHOL 67-56-1

*California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This product contains chemicals known to the state of California to cause cancer and

birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

REVISION DATE: 04/27/17

HMIS & NFPA Hazard Scale:

0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe

HMIS(American Coatings Association's Hazardous Material Identification System): Health = 2 Flammability = 4 Physical Hazard = 1

NFPA 704(National Fire Protection Association's Hazard Identification Ratings System):

Instability = 1 Flammability = 4

This SDS is based on information believed to be reliable and accurate. Because of changing reporting requirements and other variables it is impossible to guarantee with complete accuracy all the information contained in this document. It is the responsibility of the user to determine proper personal protection based on actual condition of use and to comply with all federal, state, and local laws and regulations.