SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Number: WIX 24088

Trade Name and Synonyms: Wix Coolant Filters / Conditioners

Chemical Name and Synonyms: Nitrite-nitrate-borate corrosion inhibitor. Chemical Family: Industrial water treatment Product Use: Vehicle coolant treatment Restrictions on use: Use only as directed SDS Date of Preparation: December 22, 2016

Manufacturer MANN+HUMMEL Filtration Technology US LLC 1 Wix Way Gastonia, NC 28054 **Telephone Numbers** Product Information: (704) 869-3869 Emergency Phone: (800) 424-9300 Chemtrec

SECTION 2. HAZARD(S) IDENTIFICATION

Classification:

This product is a manufactured article (vehicle coolant filter) containing solid pellets. The filter is sealed so no contact with the contents occurs during normal handling or use. Contact with the pellets from a broken filter may cause adverse effects and are classified as follows:

Physical	Health	Environmental
Not hazardous	Acute Toxicity Category 3 (Oral)	Harmful to the Environment Acute
	Carcinogen Category 1B	Toxicity Category 1
	Toxic to Reproduction Category 2	Harmful to the Environment Chronic
		Toxicity Category 1

Labeling:



Danger!

Hazard statement(s)

Toxic if swallowed. May cause an allergic skin reaction. May cause cancer. Suspected of damaging fertility. Very toxic to aquatic life with long lasting

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Precautionary statement(s)

Response IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. IF exposed or concerned: Get medical attention.

effects.

Collect spillage.

Prevention

<u>Storage & Disposal</u> Store locked up. Dispose of contents and container in accordance with local and national regulations.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Sodium Nitrite	7632-00-0	30-60%
Mercaptobenzothiazole	149-30-4	10-30%
Sodium Metasilicate	6834-92-0	10-30%
Sodium Nitrate	7631-99-4	5-10%
Disodium Tetraborate, anhydrous	1330-43-4	1-5%

The specific identity and/or exact concentration has been withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Eye: None expected under normal handling and use. If contact occurs with filter pellets, immediately flush eyes with large quantities of water. Get medical attention if irritation persists.

Skin contact: None expected with normal use. If contact with the filter pellets occurs, remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation or rash persists.

Inhalation: None expected with normal use. If dust from tablet is inhaled, remove to fresh air. If breathing is difficult or irritation develops, get medical attention.

Ingestion: None expected with normal use. If filter pellets, or dust is swallowed, do not induce vomiting. If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: None expected under normal conditions of use. The following applies to contact with the tablet if the coolant filer is broken and the tablet is exposed: May cause eye or skin irritation. Inhalation of dust may cause mucous membrane and respiratory tract irritation. Toxic if swallowed. Swallowing may cause intense cyanosis, nausea, vertigo, vomiting, collapse, spasms of abdominal pain, tachycardia, tachypnea, coma, convulsions and death. May cause cancer based on animal data. May cause reproductive effects based on animal data.

Indication of immediate medical attention and special treatment, if necessary: Get immediate medical attention if swallowed.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use media that is appropriate for the surrounding fire.

Specific hazards arising from the chemical: The tablet is not flammable or combustible. Combustion may produce oxides of carbon, nitrogen, boron sulfur and sodium.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers and structures with water. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Use appropriate protective clothing and equipment during clean-up.

Environmental hazards: Avoid release into the environment. Report spill as required by local and federal regulations.

Methods and materials for containment and cleaning up: If filter is not damaged, pick up and keep for use. If the filter is damaged and the tablet is released, collect in a manner that minimizes the generation of airborne dust. Place collected material into suitable containers for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Handle filters in a manner that minimizes the risk of damage and release of contents. In handling damaged filters, avoid generating and breathing dusts. Avoid contact with eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well-ventilated area away from combustible materials, acids and other incompatible materials.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Sodium Nitrite	None Established	
Mercaptobenzothiazole	5 mg/m3 TWA skin AIHA WEEL	
Sodium Metasilicate	None Established	
Sodium Nitrate	None Established	
Disodium Tetraborate, anhydrous (as borates)	2 mg/m3 TWA, 6 mg/m3 STEL ACGIH TLV	
	(inhalable)	

Appropriate engineering controls: No special engineering controls are required for handling undamaged filters.

Personal Protective Equipment

Respiratory protection: None required under normal conditions of use. For operations where exposures are excessive or irritation is experienced, a NIOSH approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134 and good Industrial Hygiene practice.

Skin protection: None required under normal conditions of use. Wear rubber or other impervious gloves when handling damaged filters or tablets.

Eye protection: None required under normal conditions of use. Safety goggles required for handling damaged filters or tablets.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

The following physical characteristics are for the pellets only.

Appearance (physical state, color, etc.): Yellow tablet inside a coolant filter Odor: No odor

Odor threshold: Not available	pH: 10.5 (1% solution)
Melting point/freezing point: Not available	Boiling point/Range: Not applicable
Flash point: >200°F (>93°C)	Evaporation rate: Not applicable
Flammability (solid, gas): Not flammable	
Flammable limits: LEL: Not applicable	UEL: Not applicable
Vapor pressure: <100 mmHg	Vapor density: Not applicable
Relative density: 0.881	Solubility(ies): Completely Soluble
Partition coefficient: n-ctanol/water: Not applicable	Auto-ignition temperature:
Decomposition temperature: Not available	Viscosity: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not expected to react.

Chemical stability: Stable.

Possibility of hazardous reactions: None expected under normal use conditions.

Conditions to avoid: Avoid extreme heat.

Incompatible materials: Incompatible with oxidizing materials, reducing agents, organic materials, acids and moisture.

Hazardous decomposition products: Thermal decomposition will generate carbon oxides, oxides of nitrogen, boron oxides, oxides of sulfur and sodium oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects: Handling undamaged filters will not result in adverse effects. The following information pertains to exposure to the coolant treatment tablets.

Eye: May cause irritation with redness and tearing.

Skin: May cause irritation. Sodium nitrite and borates may be harmful if absorbed through the skin. **Inhalation:** Dust may cause irritation of the mucous membranes and upper respiratory tract.

Ingestion: Toxic if swallowed. May cause intense cyanosis, nausea, vertigo, vomiting, collapse, spasms of abdominal pain, tachycardia, tachypnea, coma, convulsions and death.

Chronic effects: Prolonged or repeated exposure may cause nervous system effects, liver damage, kidney damage and effects on the blood.

Reproductive Toxicity: Borates have been shown to cause reproductive effects in laboratory animals. The relevance to humans is unknown.

Carcinogenicity: Mercaptobenzothiazole is classified by IARC as "Possibly Carcinogenic to Humans", Group 2A. None of the other components at 0.1% or greater are listed as a carcinogen by IARC, NTP or OSHA.

Acute Toxicity Values:

Acute Toxicity Estimate for the Product: Oral: 201.7 mg/kg, dermal >2000 mg/kg Sodium Nitrite: Oral rat LD50 85 mg/kg Mercaptobenzothiazole: Oral rat LD50 3800 mg/kg, Dermal rabbit LD50 >7940 mg/kg Sodium Metasilicate: Oral rat LD50 1890 mg/kg, Inhalation rat LC50 >2.06 mg/L/4 hr (no deaths occurred), Dermal rat LD50 >5000 mg/kg. Sodium Metaborate: Oral rat LD50 >2600 mg/kg, Inhalation rat LC50 >2.03 mg/L/4 hr (no deaths occurred), Dermal rat LD50 >2000 mg/kg. Sodium Nitrate: Oral rat LD50 3430 mg/kg, Dermal rat LD50 >5000 mg/kg Disodium Tetraborate: Oral rat LD50 3450 mg/kg, Inhalation rat LC50 >2.03 mg/L/4 hr (no deaths occurred), Dermal rat LD50 >2000 mg/kg.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Sodium Nitrite: 96 hr LD50 Oncorhynchus mykiss 0.54 mg/L, 48 hr EC50 daphnia magna 15.4 mg/L, 72 hr EC50 Desmodesmus subspicatus >100 mg/L

Mercaptobenzothiazole: 96 hr LC50 Oncorhynchus mykiss 0.73 mg/L, 48 hr EC50 daphnia magna 0.741 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata 0.5 mg/L

Sodium Metasilicate: 96 hr LC50 Gambusia affinis 2350 mg/kg, 48 hr EC50 daphnia magna 1700 mg/L, 72 hr EC50 Desmodesmus subspicatus 207 mg/L

Sodium Metaborate: 96 hr LC50 Limanda limanda74 mg/L, 48 hr EC50 daphnia magna 133 mg/L

Sodium Nitrate: 96 hr LC50 Lepomis macrochirus 12,000 mg/kg, 24 he EC50 daphnia magna 8609 mg/kg, Disodium Tetraborate: 96 hr LC50 Limanda limanda74 mg/L

Persistence and degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT (In containers <240 lbs)	UN3288	Toxic solid, inorganic, n.o.s. (Sodium Nitrite)	6.1	PGIII	
DOT (In containers >240 lbs)	UN3288	Toxic solid, inorganic, n.o.s. (Sodium Nitrite), RQ	6.1	PGIII	RQ 240 lbs
TDG	UN3288	Toxic solid, inorganic, n.o.s. (Sodium Nitrite)	6.1	PGIII	Marine Pollutant
IMDG	UN3288	Toxic solid, inorganic, n.o.s. (Sodium Nitrite)	6.1	PGIII	Marine Pollutant

This product or a similar product has been tested and found it does not meet the criteria for an oxidizing solid under DOT, TDG and IMDG.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

SECTION 15. REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA 103 Reportable Quantity: The tablets have a reportable quantity of 240 lbs based on 60% sodium nitrite with an RQ of 100 lbs. Many states have more stringent reporting requirements. Report releases as required by all federal, state and local authorities.

SARA TITLE III:

Hazard Category for Section 311/312: Acute health, chronic health

SARA 313: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

Sodium nitrite	7632-0-0	30-60%
Mercaptobenzothiazole	149-30-4	5-15%
Sodium nitrate	7631-99-4	5-10%
(nitrate compound)		

Section 302 Extremely Hazardous Substances (TPQ): None

California Proposition 65: This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity.

Ethylene Oxide	75-21-8	Cancer, developmental, female reproductive toxicity,
		male reproductive toxicity
Formaldehyde	50-00-0	Cancer

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

Canadian CEPA: All the components of this product are listed on the Canadian DSL.

SECTION 16. OTHER INFORMATION

NFPA Rating: Health = 3	Flammability = 0	Instability = 0
HMIS Rating: Health = 3	Flammability = 0	Physical Hazard =0

SDS Revision History: Section 2 Classification, Labeling, Hazard Statements, Precautionary Statements; Section 4 Skin contact, Most important symptoms/effects, acute and delayed, Most important symptoms/effects, acute and delayed; Section 9 Solubilities; Section 11 Skin, Carcinogenicity, Section 14 Transportation DOT, TDG, IMDG

Date of preparation: December 22, 2016 **Date of last revision:** August 16, 2016

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Revision History

Product	ict Type Chemical Name			
W1003	Coolant Filter	Nitrite-nitrate-borate corrosion inhibitor		
Revision	Description	Effective Date	Signed	
А	Revised phone number.	2/3/14	Carmen Reich	
В	Converted to GHS Format – All Sections revised	4/30/15	Angela Rath	
С	Section 2 Classification, Labeling, Hazard Statements, Precautionary Phrases, Section 3 Composition, Section 4 Eye, Skin, Inhalation, Most important symptoms, Section 7 Precautions for safe handling, Section 8 Exposure Limits, Section 9 Odor, Flashpoint, Vapor Pressure, Relative Density, Solubility, Section 11 Eye, Skin, Inhalation, Ingestion, Acute Toxicity Values, Section 15 California Proposition 65, Canadian DSL	1/11/16	Angela Rath	
D	Changed manufacturer name from "Wix Filtration Products Division, Affinia Group" to "MANN+HUMMEL Filtration Technology US LLC". Changed address from PO Box 1967 Gastonia, NC 28053 to 1 Wix Way Gastonia, NC 28054	8/16/16	Ethan Voss	
E	Supplier changed their classification and transport based on questions asked for Wercs submission. Section 2 Classification, Labeling, Hazard Statements, Precautionary Statements; Section 4 Skin contact, Most important symptoms/effects, acute and delayed, Most important symptoms/effects, acute and delayed; Section 9 Solubilities; Section 11 Skin, Carcinogenicity, Section 14 Transportation DOT, TDG, IMDG	12/22/16	Angela Rath	