SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Number: WS10058

Trade Name and Synonyms: Wix Coolant Filters / Conditioners

Chemical Name and Synonyms: Pyrophosphate-nitrite-nitrate corrosion inhibitor

Chemical Family: Industrial water treatment

Product Use: Vehicle coolant treatment **Restrictions on use:** Use only as directed

SDS Date of Preparation: June 15, 2016

Details of the supplier of the safety data sheet: Telephone Numbers

MANN+HUMMEL Filtration Technology US LLC Product Information: (704) 869-3869

1 Wix Way

Gastonia, NC 28054

SECTION 2. HAZARD(S) IDENTIFICATION

Classification:

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

Physical	Health	Environmental
Not Hazardous	Acute Toxicity Category 4 (Oral)	Harmful to the Environment Acute
	Skin Corrosion Category 1B	Toxicity Category 2
	Eye Damage Category 1	
	Respiratory Sensitization Category 1	
	Skin Sensitization Category 1	

Labeling:







Danger!

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Hazard statement(s)

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Page 1 of 8

Precautionary statement(s)

Prevention

Do not breathe dusts.

Wash thoroughly after handling.

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Emergency Phone: (800) 424-9300 Chemtrec

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves, protective clothing, and eye protection and face protection.

In case of inadequate ventilation wear respiratory protection.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water.

Wash contaminated clothing before reuse.

Immediately call a POISON CENTER or doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER or doctor.

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

Immediately call a POISON CENTER or doctor.

Storage & Disposal

Store locked up.

Dispose of contents and container in accordance with local and national regulations.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Tetrapotassium Pyrophosphate Anhydrous	7320-34-5	10-30%
Sodium Nitrite	7632-00-0	10-30%
Sodium Nitrate	7631-99-4	10-30%
Sodium Metasilicate	6834-92-0	5-10%
Benzotriazole	95-14-7	5-10%
Maleic Anhydride	108-31-6	<1%

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 for at least 20 minutes, holding the eyelids apart. Get immediate medical attention.

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 develops.

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

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Most important symptoms/effects, acute and delayed: None expected under normal conditions of use. The following applies to contact with the table if the coolant filer is broken and the tablet is exposed: Eye and skin contact may cause severe irritation or burns. Permanent eye damage may occur. May cause allergic skin reaction. Inhalation of dust may cause mucous membrane and respiratory tract irritation. May cause respiratory sensitization with asthma like symptoms. Harmful if swallowed. Swallowing may cause burns to the digestive tract, central nervous system effects, cyanosis, convulsions and collapse.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is required is respiratory sensitization occurs.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use water spray, foam, dry chemical or carbon dioxide to extinguish. Do not use a heavy water stream.

Specific hazards arising from the chemical: The tablet is not flammable or combustible. The tablet contains sodium nitrite and sodium nitrate which are oxidizers and can enhance the burning of other materials. Combustion may produce corrosive vapors and carbon, nitrogen and metal oxides.

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. Prevent 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:

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Tetrapotassium Pyrophosphate Anhydrous	None Established
Sodium Nitrite	None Established
Sodium Nitrate	None Established
Sodium Metasilicate	None Established
Benzotriazole	None Established
Maleic Anhydride	0.25 ppm TWA OSHA PEL
	0.0025 ppm TWA ACGIH TLV (inhalable fraction
	and vapor)

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.): White briquette inside a coolant filter **Odor:** Not available.

Odor threshold: Not available	pH: 10-11 @ 5% dilution		
Melting point/freezing point: Not available	Boiling point/Range: Not applicable		
Flash point: Not applicable	Evaporation rate: Not applicable		
Flammability (solid, gas): Not flammable			
Flammable limits: LEL: Not applicable	UEL: Not applicable		
Vapor pressure: Not applicable	Vapor density: Not applicable		
Relative density: Not available	Solubility(ies): Completely soluble in water		
Partition coefficient: n-ctanol/water: Not applicable	Auto-ignition temperature:		
Decomposition temperature: Not available	Viscosity: Not applicable		

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Pellets may ignite in contact with organic materials.

Chemical stability: Stable under normal storage and handling conditions.

Possibility of hazardous reactions: None expected under normal use conditions. **Conditions to avoid:** Avoid extreme heat. Avoid contact with combustible materials.

Incompatible materials: Incompatible with acids and bases.

Hazardous decomposition products: Thermal decomposition will generate oxides of carbon and corrosive vapors.

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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 contact: May cause severe irritation or burns with redness, tearing and pain. Permanent damage can occur. **Skin contact:** May cause severe irritation or burns. Sodium nitrite may be harmful if absorbed through the skin. Maleic anhydride has been shown to cause skin sensitization.

Inhalation: Dust may cause irritation of the mucous membranes and upper respiratory tract. Absorption may cause effects similar to those described under ingestion. Maleic anhydride has been shown to cause to cause respiratory sensitizations in humans.

Ingestion: Harmful if swallowed. May cause burns to the mouth and throat, dizziness, nausea, vomiting, low blood pressure, cyanosis, rapid heartbeat, convulsions and collapse.

Chronic effects: Prolonged over exposure may cause nervous system effects, chronic diarrhea, liver damage, kidney damage and effects on the blood.

Reproductive Toxicity: In a two-generation reproductive toxicity study, rats were dosed via gavage to 0, 20, 55 and 150 mg/kg/day maleic anhydride. The NOAEL for reproductive effects is 55 mg/kg/day. No developmental toxicity was observed when pregnant rats were dosed with maleic anhydride via gavage to 0, 30, 90 and 140 mg/kg/day. As a result, the NOAEL (maternal) was determined to be 140 mg/kg/day.

Germ Cell Mutagenicity: None of the components have been shown to cause mutagenic activity.

Carcinogenicity: None of the components are listed as carcinogens by IARC, NTP or OSHA.

Acute Toxicity Values:

Acute Toxicity Estimate for the Product: Oral: 539.9 mg/kg

Tetrapotassium Pyrophosphate Anhydrous: Dermal rabbit LD50 > 2000 mg/kg, Inhalation rat LC50 > 1.1 mg/L/4 hr

Sodium Nitrite: Oral rat LD50 85 mg/kg

Sodium Nitrate: Oral rat LD50 3430 mg/kg, Dermal rat LD50 >5000 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.

Benzotriazole: Oral rat LD50 500 mg/kg, Dermal rabbit LD50 >2000 mg/kg

Maleic Anhydride: Oral rat LD50 235 mg/kg, Inhalation rat LC50 4.35 mg/L/1 hr (no mortality), Dermal rabbit

LD50 2620 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Tetrapotassium Pyrophosphate Anhydrous: 96 hr LC50 Oncorhynchus mykiss >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50 Desmodesmus subspicatus >100 mg/L

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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

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

Benzotriazole: 96 hr LC50 Danio rerio 180 mg/L, 48 hr EC50 Daphnia galeata 15.8 mg/L, 72 hr EC50

Selenastrum capricornutum 75 mg/L

Maleic Anhydride: 96 hr LC50 Oncorhynchus mykiss 75 mg/L, 48 hr EC50 daphnia magna 42.8 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata 74.35 mg/L

Persistence and degradability: Biodegradation is not applicable to inorganic substances. Maleic anhydride is readily biodegradable.

Bioaccumulative potential: No data available.

Mobility in soil: No data available. **Other adverse effects:** None known.

SECTION 13. DISPOSAL CONSIDERATIONS

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

SECTION 14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard	Packing	Environmental
			Class	Group	Hazard
DOT		Not Regulated			
(containers					
<800 lbs)					
DOT	UN3077	Environmentally Hazardous	9	PGIII	RQ 500 lbs.
(containing		Substance, solid, n.o.s.			
>500 lbs)		(Sodium Nitrite), RQ			

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.

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CERCLA 103 Reportable Quantity: The tablets have a reportable quantity of 500 lbs 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	10-30%
Sodium Nitrate	7631-99-4	5-10%
(nitrate compound)		

Maleic Anhydride 108-31-6 <1%

Section 302 Extremely Hazardous Substances (TPQ): None

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

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

1,2 dichlorethane	107-06-2 t	race	Cancer
T1 1 0 11	== 01 0		~ 1 1

Ethylene Oxide 75-21-8 trace Cancer, developmental, male reproductive

toxicity, female reproductive toxicity

SECTION 16. OTHER INFORMATION

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

SDS Revision History: 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

Date of preparation: June 15, 2016 **Date of last revision:** January 11, 2016

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Revision History

Product	Туре	Chemical Name	
W1026	SCA + Coolant Filter	Pyrophosphate-nitrite-nitrate	
		corrosion in	hibitor
Revision	Description	Effective Date	Signed
A	Revised phone number.	2/3/14	Carmen Reich
В	Converted to GHS Format	4/30/15	Angela Rath
С	Based on new SDS from Supplier	1/11/16	Angela
	Section 2 Classification, Labeling Section 3		
	Composition, Section 4 Most important		
	symptoms/effects, acute and delayed, Section 8		
	Exposure Limits, Section 9 pH, Section 11 Acute		
	Toxicity, Section 12 Ecotoxicity		
D	Changed manufacturer name from "Wix Filtration	6/15/2016	Ethan Voss
	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		

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