Section 1 PRODUCT AND COMPANY IDENTIFICATION

Product Number: WIX 24071, 24072, 24073, 24074, 24428, 24429, 24008

Trade Name and Synonyms: Wix Spin-on Coolant Filters / Conditioners

Chemical Name and Synonyms: Nitrite-borate corrosion inhibitor

Chemical Family: Industrial water treatment Product Use: Vehicle coolant treatment Restrictions on use: Use only as directed MSDS Date of Preparation: June 15, 2016

Details of the supplier of the safety data sheet:

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

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)	Hazardous to the Aquatic Environment
	Skin Corrosion Category 1B	Acute Hazard Category 1
	Eye Damage Category 1	
	Specific Target Organ Toxicity	
	Category 3 (Respiratory Irritation)	
	Toxic to Reproduction Category 1B	
	Carcinogen Category 1B	

Labeling:











Danger! Hazard statement(s)

Toxic if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation.

May cause cancer.

Page 1 of 8 Revision E

Precautionary statement(s)

Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

P/N: 24071, 24072, 24073, 24074, 24428, 24429, 24008

Safety Data Sheet W1010W

Spin-on Coolant Filters / Conditioners

May damage fertility or the unborn child. Very toxic to aquatic life.

Do not breathe dust.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves, protective clothing, eye protection

and face 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. IF exposed or concerned: Get medical attention.

Collect spillage.

Storage & Disposal

Store locked up.

Dispose of contents and container in accordance with local

and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Sodium Nitrite	7632-00-0	30-60%
Sodium Metasilicate	6834-92-0	10-30%
Benzotraizole	95-14-7	5-10%
Disodium Tetraborate, anhydrous	1330-43-4	1-5%
Phenolphthalein	77-09-8	<1%

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

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 immediate medical attention.

Inhalation: None expected with normal use. If dust from tablet is inhaled, remove to fresh air. Get immediate medical attention.

Page 2 of 8 Revision E P/N: 24071, 24072, 24073, 24074, 24428, 24429, 24008

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 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. Inhalation of dust may cause mucous membrane and respiratory tract irritation. Toxic if swallowed. Swallowing may cause burns to the digestive tract, central nervous system effects, cyanosis, convulsions and collapse. May cause cancer. May cause reproductive or developmental effects based on animal data.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is required for routes of exposure.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide to extinguish.

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

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.

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. Avoid contact with 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Page 3 of 8 P/N: 24071, 24072, 24073, 24074, 24428, 24429, 24008 Revision E

Sodium Nitrite	None Established
Sodium Metasilicate	None Established
Benzotraizole	None Established
Disodium Tetraborate, anhydrous	2 mg/m3 TWA, 6 mg/m3 STEL ACGIH TLV
	(inhalable)
Octadecanoic Acid, Magnesium Salt	None Established
Sodium Nitrate	None Established
Phenolphthalein	None Established

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

The following physical characteristics are for the pellets only.

Appearance (physical state, color, etc.): White to yellowish briquette 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: Not applicable	Evaporation rate: Not applicable
Flammability (solid, gas): Not flammable	
Flammable limits: LEL: Not applicable	UEL: Not applicable
Vapor pressure: ≤ 0.013 kPa	Vapor density: Not applicable
Relative density: 0.88 g/ml	Solubility(ies): Partially soluble in water
Partition coefficient: n-ctanol/water: Not applicable	Auto-ignition temperature:
Decomposition temperature: Not available	Viscosity: Not applicable

10. STABILITY AND REACTIVITY

Reactivity: This product is stable

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.

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

moisture

Page 4 of 8 P/N: 24071, 24072, 24073, 24074, 24428, 24429, 24008

Revision E

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

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. Phenolphthalein has been shown to cause sensitization in humans.

Inhalation: Dust may cause irritation of the mucous membranes and upper respiratory tract. Absorption may cause effects similar to those described under ingestion.

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

Reproductive Toxicity: In a five generation reproduction toxicity study, phenolphthalein was administered to mice orally. Examination of offspring showed a reduction in testis weight and sperm count, and decreased number of births due to decreased pregnancy rate, and decrease in body weight of progeny. Borate compounds cause adverse reproductive effects in laboratory animals.

Germ Cell Mutagenicity: Phenolphthalein was negative in the AMES test but showed positive results in a chromosome aberration assay in human embryo cells. Similar tests in Chinese hamster ovary cells were not positive. It is suggested that phenolphthalein acts as a promutagen and must be metabolically activated to exert its clastogenic effect.

Carcinogenicity: Phenolphthalein is listed by IATA as "Possibly Carcinogenic to Humans, Group 2B and by NTP as "Reasonably Anticipated to be a Human Carcinogen". None of the other components of this product present at 0.1% or greater are listed as carcinogens by IARC, NTP or OSHA

Acute Toxicity Values:

Acute Toxicity Estimate for the Product: Oral: 142.8 mg/kg, Dermal >2000 mg/kg

Sodium Nitrite: Oral rat LD50 85 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

Disodium Tetraborate: Oral rat LD50 3450 mg/kg, Inhalation rat LC50 >2.03 mg/L/4 hr (no deaths occurred),

Octadecanoic acid, magnesium salt (2:1):

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

Phenolphthalein: No toxicity data available

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

Page 5 of 8 P/N: 24071, 24072, 24073, 24074, 24428, 24429, 24008

Revision E

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

Disodium Tetraborate: 96 hr LC50 Limanda74 mg/L

Octadecanoic acid, magnesium salt (2:1)

Sodium Nitrate: 96 hr LC50 Lepomis macrochirus 12,000 mg/kg, 24 he EC50 daphnia magna 8609 mg/kg, Phenolphthalein: 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50 Desmodesmus subspicatus 8.9 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:** None known.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard	Packing	Environmental
			Class	Group	Hazard
DOT	UN2923	Corrosive solids, toxic, n.o.s.	8 (6.1)	PGIII	RQ 180
		(contains disodium			
		trioxosilicate, sodium nitrite)			
TDG	UN2923	Corrosive solids, toxic, n.o.s.	8 (6.1)	PGIII	Marine Pollutant
		(contains disodium			
		trioxosilicate, sodium nitrite)			
IMDG	UN2923	Corrosive solids, toxic, n.o.s.	8 (6.1)	PGIII	Marine Pollutant
		(contains disodium			
		trioxosilicate, sodium nitrite)			

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

15. REGULATORY INFORMATION

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

Page 6 of 8 Revision E

Spin-on Coolant Filters / Conditioners

CERCLA 103 Reportable Quantity: The tablets have a reportable quantity of 180 lbs based on 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%

 Phenolphthalein:
 77-09-8
 <1%</td>

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:

Phenolphthalein 77-09-8 <1% Cancer

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

toxicity, female reproductive toxicity

16. OTHER INFORMATION

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

*Chronic Health Hazard

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:** October 1, 2015

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Page 7 of 8 Revision E P/N: 24071, 24072, 24073, 24074, 24428, 24429, 24008

Revision History

Product	Туре	Chemical Name		
W1010	Coolant Filter	Nitrite-borate corrosion inhibitor		
Revision	Description	Effective	Signed	
	_	Date		
A	Changed chemical composition	12/26/12	C. Reich	
В	Revised phone number	2/3/14	Carmen Reich	
С	Converted to GHS	4/30/15	Angela Rath	
D	Based on Vendor SDS - Section 2 Classification,	10/1/15	Angela Rath	
	Pictogram, hazard Statements, Precautionary			
	Statements, Section 4 All Section, Section 5			
	Specific Hazard Arising from the Chemical, Section			
	9 Relative Density, Section 11 Acute Toxicity			
	Estimate, Section 14 RQ, Section 15 CERCLA 103			
	Reportable Quantity, Section 16 HMIS & NFPA			
	Ratings			
Е	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			