

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/07/2017 Version: 1.0

SECTI	ON 1: Identification	
1.1.	Identification	
Product	form	: Mixture
Product	name	: Coolant Additive
Product	code	: X006136, X006137, X006138, X007036, X007037, X007038
1.2.	Relevant identified uses of the subs	tance or mixture and uses advised against
Use of th	ne substance/mixture	: Corrosion inhibitors
Restricti	ons on use	: No additional information available
1.3.	Details of the supplier of the safety	data sheet
Donalds	on Company, Inc.	
1400 We	est 94th Street	
Bloomin	gton, MN 55431 - USA	
T 952-88	37-3131	
1.4.	Emergency telephone number	

Emergency number

2.1.

: CHEMTREC: 800-424-9300 (CHEMTREC Customer Number 6862)

GHS-US classification

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2A	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360

Classification of the substance or mixture

SECTION 2: Hazard(s) identification

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)

	GHS07 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	 H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H360 - May damage fertility or the unborn child
Precautionary statements (GHS-US)	 P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P261 - Avoid breathing spray, mist, vapours P264 - Wash hands thoroughly after handling P272 - Contaminated work clothing must not be allowed out of the workplace P280 - Wear eye protection, protective gloves P302+P352 - If on skin: Wash with plenty of soap, Water P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P308+P313 - If exposed or concerned: Get medical advice/attention P32+P313 - If skin irritation occurs: Get medical advice/attention 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 P405 - Store locked up P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
sodium nitrite	(CAS-No.) 7632-00-0	1 – 5	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400
Sodium mercaptobenzothiazole	(CAS-No.) 2492-26-4	1 - < 3	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
disodium tetraborate, anhydrous	(CAS-No.) 1330-43-4	< 1	Repr. 1B, H360 STOT RE 2, H373
disodium metasilicate	(CAS-No.) 6834-92-0	0.1 - 1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 STOT SE 3, H335
sodium nitrate	(CAS-No.) 7631-99-4	0.1 - 1	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECH	ON 4: First aid measures	
4.1.	Description of first aid measures	
First-aid	measures general :	Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid	measures after inhalation :	Remove person to fresh air and keep comfortable for breathing.
First-aid	measures after skin contact	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid	measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid	measures after ingestion :	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2.	Most important symptoms and effects	, both acute and delayed
Sympton	ns/effects	May damage fertility or the unborn child.
Sympton	ns/effects after skin contact	Causes skin irritation. May cause an allergic skin reaction.
Sympton	ns/effects after eye contact :	Causes serious eye irritation.
Sympton	ns/effects after ingestion :	May be harmful if swallowed.
4.3.	Indication of any immediate medical a	ttention and special treatment needed

Treat symptomatically.

SECTION	ON 5: Firefighting measures	
5.1.	Extinguishing media	
Suitable e	extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitabl	e extinguishing media	: Do not use a heavy water stream.
5.2.	Special hazards arising from the su	bstance or mixture
Fire haza	rd	: No particular fire or explosion hazard.
Reactivity	/	: No dangerous reactions known.
5.3.	Advice for firefighters	
Firefightir	ng instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus. **SECTION 6: Accidental release measures** 6.1. Personal precautions, protective equipment and emergency procedures General measures : Avoid all eye and skin contact and do not breathe vapour and mist. Stop leak if safe to do so. Use personal protective equipment as required. 6.1.1. For non-emergency personnel Protective equipment : Refer to section 8.2. Emergency procedures : Evacuate unnecessary personnel. 6.1.2. For emergency responders : Refer to section 8.2. Protective equipment : Ventilate area. Emergency procedures 6.2. **Environmental precautions** Prevent entry to sewers and public waters. Methods and material for containment and cleaning up 6.3. For containment Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Methods for cleaning up Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTI	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Precautions for safe handling :		: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid all eye and skin contact and do not breathe vapour and mist. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area.
Hygiene	measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2.	Conditions for safe storage, including	g any incompatibilities
Storage	conditions	: Keep container tightly closed.
Incompa	tible products	: Strong bases. Strong acids.
Incompatible materials		: Sources of ignition. Direct sunlight.
Storage area :		: Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium mercaptobenzothiazole (2492-26-4)		
Not applicable		
disodium metasilicate (6834-92-0)		
Not applicable		
sodium nitrate (7631-99-4)		
Not applicable		

8.2. Exposure controls

Appropriate engineering controls

: Avoid splashing. Avoid creating mist or spray. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation.

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Personal protective equipment	:	Avoid all unnecessary exposure.
Hand protection	:	Wear water impervious gloves.
Eye protection	:	Chemical goggles or safety glasses.
Skin and body protection	:	Wear suitable protective clothing.
Respiratory protection	:	In case of inadequate ventilation wear respiratory protection. Approved respirator.
Environmental exposure controls	:	Prevent leakage or spillage.
Other information	:	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	d chemical properties
Physical state	: Liquid
Colour	: red
Odour	: mild
Odour threshold	: No data available
рН	: 10.8 - 11.8
Melting point	: No data available
Freezing point	: -3 °C
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: 2.4 kPa
Relative vapour density at 20 °C	: <= 1
Relative density	: No data available
Density	: 1.042 - 1.064 g/ml
Solubility	: Water: 100 %
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
9.2. Other information	

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

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SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Likely routes of exposure	: Inhalation; Skin and eye contact	
Acute toxicity	: Not classified	
sodium nitrite (7632-00-0)		
LD50 oral rat	180 mg/kg	
ATE US (oral)	180 mg/kg bodyweight	
disodium tetraborate, anhydrous (1330-43-4)		
LD50 oral rat	3450 mg/kg male	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat (mg/l)	> 2.03 mg/l 5h	
ATE US (oral)	3450 mg/kg bodyweight	
Sodium mercaptobenzothiazole (2492-26-4)		
LD50 oral rat	1476 mg/kg	
LD50 dermal rabbit	> 7940 mg/kg	
LC50 inhalation rat (mg/l)	> 8.2 mg/l 6 h	
ATE US (oral)	1476 mg/kg bodyweight	
disodium metasilicate (6834-92-0)		
LD50 oral rat	1250 mg/kg	
LD50 dermal rat	> 5000 mg/kg	
ATE US (oral)	1250 mg/kg bodyweight	
sodium nitrate (7631-99-4)		
LD50 oral rat	1267 mg/kg	
LD50 dermal rat	> 5000 mg/kg	
ATE US (oral)	1267 mg/kg bodyweight	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: May cause an allergic skin reaction.	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: May damage fertility or the unborn child.	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated exposure)	: Not classified	

disodium tetraborate, anhydrous (1330-43-4)			
LOAEL (oral, rat, 90 days)	58.5 mg/kg bodyweight/day		
NOAEL (oral, rat, 90 days)	17.5 mg/kg bodyweight/day		
Aspiration hazard : Symptoms/effects after skin contact : Symptoms/effects after eye contact :	Not classified Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.		
Symptoms/effects after ingestion	May be harmful if swallowed.		

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - water :	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.	
sodium nitrite (7632-00-0)		
LC50 fish 1	0.11 mg/l	
disodium tetraborate, anhydrous (1330-43-4)		
LC50 fish 1	74 mg/l 96h Limanda limanda	
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Sodium mercaptobenzothiazole (2492-26-4)		
LC50 fish 1	3.8 mg/l 96 h	
EC50 Daphnia 1	1.9 - 5.1 mg/l 48 h	
LC50 fish 2	3 - 1.1 mg/l 96 h	
disodium metasilicate (6834-92-0)		
LC50 fish 1	2320 mg/l Gambusia affinis	
EC50 Daphnia 1	1700 mg/l	
LC50 fish 2	210 mg/l Brachydanio rerio	
sodium nitrate (7631-99-4)		
LC50 fish 1	12150 mg/l 96h	
EC50 Daphnia 1	665 mg/l 96h	
12.2. Persistence and degradability		

Cool	ant Ado	ditive
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 Persistence and degradability
 May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Coolant Additive		
Bioaccumulative potential	Not established.	
Sodium mercaptobenzothiazole (2492-26-4)		
Log Pow	2.42	
disodium metasilicate (6834-92-0)		
Bioaccumulative potential	Not expected to bioaccumulate.	
sodium nitrate (7631-99-4)		
Log Pow	-3.8 at 25C	
12.4. Mobility in soil		
Coolant Additive		
Ecology - soil	Not established.	

12.5. Other adverse effects

Other information

: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste disposal recommendations Ecology - waste materials
- Dispose in a safe manner in accordance with local/national regulations.Avoid release to the environment.
- **SECTION 14: Transport information**

Department of Transportation (DOT)

In accordance with DOT Not regulated.

Transport by sea

Not regulated.

Air transport

Not regulated.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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3 3 9		
disodium metasilicate (6834-92-0)		
SARA Section 311/312 Hazard Classes	Not subject to reporing requirements of the United States SARA Section 313	
15.2. International regulations		
CANADA		
sodium nitrite (7632-00-0)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
disodium tetraborate, anhydrous (1330-43-4)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
Sodium mercaptobenzothiazole (2492-26-4)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
disodium metasilicate (6834-92-0)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
sodium nitrate (7631-99-4)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
FU-Regulations		
sodium nitrite (7632-00-0)		
Listed on the EEC inventory EINECS (European	nventory of Existing Commercial Chemical Substances)	
disodium tetraborate, anhydrous (1330-43-4)		
Listed on the EEC inventory EINECS (European	nventory of Existing Commercial Chemical Substances)	
Sodium mercaptobenzothiazole (2492-26-4)		
Listed on the EEC inventory EINECS (European	nventory of Existing Commercial Chemical Substances)	
disodium metasilicate (6834-92-0)		
Listed on the EEC inventory EINECS (European	nventory of Existing Commercial Chemical Substances)	
sodium nitrate (7631-99-4)		
Listed on the EEC inventory EINECS (European	nventory of Existing Commercial Chemical Substances)	
National regulations		
sodium nitrite (7632-00-0)		
Listed on IECSC (Inventory of Existing Chemical	Substances Produced or Imported in China)	
Listed on Taiwan National Chemical Inventory	(fon ()	
Listed on the Japanese ENCS (Existing & New C	hemical Substances) inventory	
Listed on PICCS (Philippines Inventory of Chemic	als and Chemical Substances)	
Listed on NZIOC (New Zealand Inventory of Chem Listed on the AICS (Australian Inventory of Chem	icals) ical Substances)	
Listed on the Chinese Catalog of Hazardous Che	micals.	
disodium tetraborate, anhydrous (1330-43-4)		
Listed on IECSC (Inventory of Existing Chemical	Substances Produced or Imported in China)	
Listed on Taiwan National Chemical Inventory	itory)	
Listed on the Japanese ENCS (Existing & New C	hemical Substances) inventory	
Listed on PICCS (Philippines Inventory of Chemic	als and Chemical Substances)	
Listed on the AICS (Australian Inventory of Chem	ical Substances)	
Sodium mercaptobenzothiazole (2492-26-4)		
Listed on Taiwan National Chemical Inventory		
Listed on IECSC (Inventory of Existing Chemical	Substances Produced or Imported in China)	

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on KECI (Korean Existing Chemicals Inventory) Listed on NZIOC (New Zealand Inventory of Chemicals) Listed on the AICS (Australian Inventory of Chemical Substances)

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disodium metasilicate (6834-92-0)

Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Chinese Catalog of Hazardous Chemicals.

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

sodium nitrate (7631-99-4)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on Taiwan National Chemical Inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Chinese Catalog of Hazardous Chemicals.

15.3. US State regulations

Coolant Additive

State or local regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

sodium nitrite (7632-00-0)

U.S. - Pennsylvania - List of Hazardous Substances

- U.S. New York Right to Know List of Hazardous Chemicals
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Massachusetts Right To Know List

disodium metasilicate (6834-92-0)

Not included in State Right-to-Know Hazardous Chemicals Lists

sodium nitrate (7631-99-4)

U.S. - New York - Right to Know List of Hazardous Substances

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SECTION 16: Other information	
Data sources	: ACGIH (American Conference of Government Industrial Hygienists). Australia Worksafe "Preparation of Safety Data Sheets for Hazardous Chemicals".
	http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html.
	China GB T 16483:2008.
	China GB/T 17519-2013.
	China GBZ 2.1-2007 Occupational exposure limits for hazardous agents in the workplace: Chemical hazardous agents.
	European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database .
	European Standards: Personal Protective Equipment; accessed at: http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/personal- protective.egu/pment/index_en_htm
	Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
	Korean "Standard for Classification Labeling of Chemical Substance and Material Safety Data Sheet" Public Notice No. 2012-14.
	Manufacturer Information.
	National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.
	OSHA 29CFR 1910.1200 Hazard Communication Standard. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
	United Nations Economic Commission for Europe: About the GHS. Accessed at http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html.
	TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.
	WHMIS: The Workplace Hazardous Materials Information System: Canada's national hazard communication standard.
Other information	: None.
Full text of H-statements:	
H272	May intensify fire; oxidiser
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

Abbreviations and acronyms:

H400

H410

ATE: Acute Toxicity Estimate	
CAS (Chemical Abstracts Service) number	
EC50: Environmental Concentration associated with a response by 50% of the test population.	
GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).	
LD50: Lethal Dose for 50% of the test population	
OSHA: Occupational Safety & Health Administration	
PBT: Persistent, Bioaccumulative, Toxic	
STEL: Short Term Exposure Limits	
TSCA: Toxic Substances Control Act	
TWA: Time Weighted Average	
European List of Waste (LoW) code	

Very toxic to aquatic life with long lasting effects

Very toxic to aquatic life

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NFPA health hazar	d	:	2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard		:	1 - Materials that must be preheated before ignition can occur.
NFPA reactivity		:	0 - Normally stable, even under fire exposure conditions, and not reactive with water.
Hazard Rating			
Health		:	2 Moderate Hazard - Temporary or minor injury may occur
			* - Chronic (long-term) health effects may result from repeated overexposure
Flammability		:	1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical		:	0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	1	:	В
			B - Safety glasses, Gloves
SDS Prepared by:	The Redstone Group, LLC. 6077 Frantz Rd Suite 206 Dublin, Ohio USA 43016 614.923.7472		

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product