

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures
 Type of product : Scale and Corrosion Inhibitor
 Product code : T80001

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Industrial Applications

1.4. Supplier's details

Manufacturer

Dober Chemical Corp
 543 Forest Road
 18202 Hazle Township, PA - US
 T 630-410-7300 - F 630-410-7444
regulatory@dober.com - www.dober.com

1.5. Emergency telephone number

Emergency number : 1-800-255-3924 / 1-813-248-0585
 ChemTel

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Physical hazards :
 Health hazards : Acute toxicity (oral), Category 4
 : Skin corrosion/irritation, Category 2
 : Serious eye damage/eye irritation, Category 2
 : Reproductive toxicity, Category 1B
 Environmental hazards : Hazardous to the aquatic environment — Chronic Hazard, Category 3

2.2. Label elements

Hazard pictograms (GHS-ID) :



Signal word (GHS-ID) :

Danger

Hazard statements (GHS-ID) :

Harmful if swallowed (H302)
 Causes skin irritation (H315)
 Causes serious eye irritation (H319)
 May damage fertility. May damage the unborn child (H360Fd)
 Harmful to aquatic life with long lasting effects (H412)
 P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P264 - Wash hands, forearms and face thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER
 P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell
 P302+P352 - IF ON SKIN: Wash with plenty of soap and 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
 P321 - Specific treatment (see First aid measures on this label)
 P330 - Rinse mouth
 P332+P313 - If skin irritation occurs: Get medical advice/attention

Precautionary statements (GHS-ID)

Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose in a safe manner in accordance with local/national regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Sodium Nitrite	(CAS No) 7632-00-0	1 - 5
Disodium Tetraborate, Anhydrous	(CAS No) 1330-43-4	1 - 5
Disodium Trioxosilicate	(CAS No) 6834-92-0	1 - 5
Sodium Nitrate	(CAS No) 7631-99-4	1 - 5
Sodium Mercaptobenzothiazole	(CAS No) 2492-26-4	< 1
Sodium Hydroxide	(CAS No) 1310-73-2	< 1

SECTION 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.
Inhalation : Assure fresh air breathing. Allow the victim to rest.
Skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see First aid measures on this label).
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.
Ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May damage fertility or the unborn child.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting 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.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

See Heading 8. Exposure controls and personal protection.

SECTION 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. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. No smoking.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well-ventilated place. Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium Hydroxide (1310-73-2)		
Indonesia	OEL Ceilings (mg/m ³)	2 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³
USA - ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
Singapore	OEL STEL (mg/m ³)	2 mg/m ³
Malaysia	OEL - Ceilings (mg/m ³)	2 mg/m ³
China	OEL MAC (mg/m ³)	2 mg/m ³
China	Catalogue of Occupational Hazard Factors	Category 3 - Chemicals
Japan	Exposure limits (JSOH)	【Ceiling】 2mg/m ³
Japan	Exposure limits (ACGIH)	TWA -,STEL C 2 mg/m ³
Korea	ISHA	Hazardous Substances Subject to Control - Acids and Alkalis
Korea	ISHA Ceiling (mg/m ³)	2 mg/m ³
Disodium Tetraborate, Anhydrous (1330-43-4)		
Indonesia	OEL TWA (mg/m ³)	1 mg/m ³

Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

Exposure limit values for the other components

Sodium Hydroxide (1310-73-2)			
Indonesia	OEL Ceilings (mg/m ³)	2 mg/m ³	
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³	
USA - ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³	
Singapore	OEL STEL (mg/m ³)	2 mg/m ³	
Malaysia	OEL - Ceilings (mg/m ³)	2 mg/m ³	
China	OEL MAC (mg/m ³)	2 mg/m ³	
China	Catalogue of Occupational Hazard Factors	Category 3 - Chemicals	
Japan	Exposure limits (JSOH)	【Ceiling】 2mg/m ³	
Japan	Exposure limits (ACGIH)	TWA -,STEL C 2 mg/m ³	
Korea	ISHA	Hazardous Substances Subject to Control - Acids and Alkalis	
Korea	ISHA Ceiling (mg/m ³)	2 mg/m ³	
Disodium Tetraborate, Anhydrous (1330-43-4)			
Indonesia	OEL TWA (mg/m ³)	1 mg/m ³	
United Kingdom	WEL TWA (mg/m ³)	1 mg/m ³	
United Kingdom	WEL STEL (mg/m ³)	3 mg/m ³ (calculated)	
USA - ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (inhalable particulate matter)	
USA - ACGIH	ACGIH STEL (mg/m ³)	6 mg/m ³ (inhalable particulate matter)	
Singapore	OEL PEL (mg/m ³)	1 mg/m ³	
Malaysia	PEL TWA (mg/m ³)	1 mg/m ³	
New Zealand	TWA (mg/m ³)	1 mg/m ³	
Japan	Exposure limits (ACGIH)	TWA 2 mg/m ³ (l),STEL 6 mg/m ³ (l)	
Korea	ISHA TWA (mg/m ³)	1 mg/m ³ (anhydrous)	

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

No additional information available

8.4. Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection	: Wear protective gloves/protective clothing/eye protection/face protection protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Red to Purple
Odour	: odourless
Odour threshold	: No additional information available
pH	: 12
Relative evaporation rate (butylacetate=1)	: No additional information available
Melting point	: No additional information available
Freezing point	: -8 °C
Boiling point	: No additional information available
Flash point	: Not Applicable.
Auto-ignition temperature	: No additional information available
Decomposition temperature	: No additional information available
Flammability (solid, gas)	: Non flammable

Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

Vapour pressure	: 2.4 kPa
Relative vapour density at 20 °C	: ≤ 1
Relative density	: 1.12
Density	: 1.12 g/ml
Solubility	: Water: 100 %
Log Pow	: No additional information available
Viscosity (obsolete)	: No additional information available
Viscosity, kinematic	: No additional information available
Viscosity, dynamic	: 8 cP
Explosive properties	: No additional information available
Oxidising properties	: No additional information available
Percent Solids	: No additional information available
Evaporation rate	: No additional information available
Explosive limits	: No additional information available

SECTION 10: Stability and reactivity

Chemical stability	: Stable under normal conditions.
Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
Hazardous decomposition products	: Fume. Carbon monoxide. Carbon dioxide.
Incompatible materials	: Strong acids. Strong bases.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Oral: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

ATE ID (oral)	1959.817 mg/kg bodyweight
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Sodium Hydroxide (1310-73-2)

LD50 dermal rabbit	1350 mg/kg
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Sodium Mercaptobenzothiazole (2492-26-4)

LD50 oral rat	1476 mg/kg
LD50 dermal rabbit	> 1250 mg/kg
LC50 inhalation rat (mg/l)	1.3 mg/l (Exposure time: 6 h)

Sodium Nitrate (7631-99-4)

LD50 oral rat	1267 mg/kg
LD50 oral	3700 mg/kg

Disodium Trioxosilicate (6834-92-0)

LD50 oral rat	1153 mg/kg
LD50 oral	600 mg/kg

Disodium Tetraborate, Anhydrous (1330-43-4)

LD50 oral rat	2660 mg/kg
LD50 oral	1200 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Sodium Nitrite (7632-00-0)

LD50 oral rat	85 mg/kg
LD50 oral	77 mg/kg
LC50 inhalation rat (mg/l)	5.5 mg/l/4h

Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

Skin corrosion/irritation	: Causes skin irritation. pH: 12
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility. Suspected of damaging the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

Supplemental Coolant Additive

Viscosity, kinematic (calculated value) (40 °C)	7.14285714 mm ² /s
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Density	1.12 g/ml
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Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	: Toxic to aquatic life.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.
Other information	: Avoid release to the environment.

Sodium Hydroxide (1310-73-2)

EC50 Daphnia 1	40 mg/l
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Sodium Mercaptobenzothiazole (2492-26-4)

LC50 fish 1	0.3 - 1.1 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
LC50 fish 2	3.8 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	1.9 - 5.1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Log Pow	-0.46

Sodium Nitrate (7631-99-4)

LC50 fish 1	2000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 fish 2	994.4 - 1107 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
Log Pow	-3.8 (at 25 °C)

Disodium Trioxosilicate (6834-92-0)

LC50 fish 1	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
LC50 fish 2	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)

Sodium Nitrite (7632-00-0)

LC50 fish 1	0.19 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
LC50 fish 2	0.092 - 0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Log Pow	-3.7 (at 25 °C)

12.2. Persistence and degradability

Supplemental Coolant Additive

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

Supplemental Coolant Additive

Bioaccumulative potential	Not established.
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Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

Sodium Mercaptobenzothiazole (2492-26-4)

Log Pow	See section 12.1 on ecotoxicology.
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Sodium Nitrate (7631-99-4)

Log Pow	See section 12.1 on ecotoxicology...
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Disodium Tetraborate, Anhydrous (1330-43-4)

BCF fish 1	See section 12.1 on ecotoxicology.....
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Sodium Nitrite (7632-00-0)

Log Pow	See section 12.1 on ecotoxicology...
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12.4. Mobility in soil

Supplemental Coolant Additive

Mobility in soil	No additional information available
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Sodium Mercaptobenzothiazole (2492-26-4)

Log Pow	See section 12.1 on ecotoxicology.
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Sodium Nitrate (7631-99-4)

Log Pow	See section 12.1 on ecotoxicology...
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Sodium Nitrite (7632-00-0)

Log Pow	See section 12.1 on ecotoxicology...
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12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

SECTION 13: Disposal considerations

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment

Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

SECTION 14: Transport information

14.1. UN number

Not regulated for transport

14.2. Proper Shipping Name

Proper Shipping Name (UN RTDG) : Non Regulated
Proper Shipping Name (IMDG) : Non Regulated
Proper Shipping Name (IATA) : Non Regulated

14.3. Transport hazard class(es)

UN RTDG
Transport hazard class(es) (UN RTDG) : Not applicable
IMDG
Transport hazard class(es) (IMDG) : Not applicable
IATA
Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (UN RTDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- **UN RTDG**
No data available
- **IMDG**
No data available
- **IATA**
No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

15.2. International Regulations

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R-phrases:

S-phrases:

15.3. Chemical inventory status

Australia AICS	Not determined
Canada DSL	Not determined
Canada NDSL	Not determined
China IECSC	Not determined
EU EINECS	Not determined
EU ELINCS	Not determined
EU NLP	Not determined
Korea ECL	Not determined
US TSCA	All components are listed or exempted.

SECTION 16: Other information

Other information : None.

Supplemental Coolant Additive

Safety Data Sheet

According to the Ministry of Industry No.23/M-IND/PER/4/2013

SDS Indonesia

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