

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

1.1. Product identifier

Product form : Mixture
 Product name : 81160-S Syrup
 Product code : 81160S

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Coolant Additive

1.3. Details of the supplier of the safety data sheet

Dober Chemical Corp
 11230 Katherine's Crossing
 Suite 100
 Woodridge, IL 60517 - US
 T 630-410-7300 - F 630-410-7444
regulatory@dobergroup.com - www.dobergroup.com

1.4. 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

GHS-US classification

Acute Tox. 4 (Oral) H302
 Skin Corr. 1A H314
 Carc. 1B H350
 Repr. 1B H360
 Aquatic Acute 2 H401

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

GHS07

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage
 H350 - May cause cancer
 H360 - May damage fertility or the unborn child
 H401 - Toxic to aquatic life

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P260 - Do not breathe dust/fume/gas/mist/vapours/spray
 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+P312 - If swallowed: Call a poison center/doctor if you feel unwell
 P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - If inhaled - If inhaled: Remove person to fresh air and keep comfortable for breathing
 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
 P310 - Immediately call a poison center/doctor

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P321 - Specific treatment (see First aid measures on this label)
P330 - Rinse mouth
P363 - Wash contaminated clothing 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

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Sodium Nitrite	(CAS No) 7632-00-0	10 - 30	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400
Disodium Tetraborate, Anhydrous	(CAS No) 1330-43-4	5 - 10	Repr. 1B, H360 Aquatic Acute 3, H402
Sodium Nitrate	(CAS No) 7631-99-4	5 - 10	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
Disodium Trioxosilicate	(CAS No) 6834-92-0	5 - 10	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 STOT SE 3, H335
Phenolphthalein	(CAS No) 77-09-8	< 1	Muta. 2, H341 Carc. 1B, H350

Full text of H-phrases: see section 16

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 you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor/physician if you feel unwell.

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

Symptoms/injuries : May cause cancer.

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: Firefighting 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

No additional information available

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 environment.

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

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

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

81160-S Syrup

ACGIH	Not applicable
OSHA	Not applicable

Phenolphthalein (77-09-8)

ACGIH	Not applicable
OSHA	Not applicable

Sodium Nitrite (7632-00-0)

ACGIH	Not applicable
OSHA	Not applicable

Disodium Trioxosilicate (6834-92-0)

ACGIH	Not applicable
OSHA	Not applicable

Sodium Nitrate (7631-99-4)

ACGIH	Not applicable
OSHA	Not applicable

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Disodium Tetraborate, Anhydrous (1330-43-4)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
ACGIH	ACGIH STEL (mg/m ³)	6 mg/m ³
OSHA	Not applicable	

8.2. Exposure controls

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.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Red / Purple
Odour	: odourless
Odour threshold	: No data available
pH	: 12.1 - 12.45
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.388 - 1.42 g/ml
Solubility	: Water: 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

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10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

81160-S Syrup	
ATE US (oral)	413.781 mg/kg bodyweight

Sodium Nitrite (7632-00-0)	
LD50 oral rat	85 mg/kg
LC50 inhalation rat (mg/l)	5.5 mg/l/4h
ATE US (oral)	85.000 mg/kg bodyweight
ATE US (vapours)	5.500 mg/l/4h
ATE US (dust,mist)	5.500 mg/l/4h

Disodium Trioxosilicate (6834-92-0)	
LD50 oral rat	600 mg/kg
ATE US (oral)	600.000 mg/kg bodyweight

Sodium Nitrate (7631-99-4)	
LD50 oral rat	1267 mg/kg
ATE US (oral)	1267.000 mg/kg bodyweight

Disodium Tetraborate, Anhydrous (1330-43-4)	
LD50 oral rat	2660 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	2660.000 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 12.1 - 12.45

Serious eye damage/irritation : Not classified

pH: 12.1 - 12.45

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

Phenolphthalein (77-09-8)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen

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

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

Sodium Nitrite (7632-00-0)	
LC50 fishes 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])

Disodium Trioxosilicate (6834-92-0)	
LC50 fishes 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 Nitrate (7631-99-4)	
LC50 fishes 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])

Disodium Tetraborate, Anhydrous (1330-43-4)	
LC50 fishes 1	340 mg/l (Exposure time: 96 h - Species: Limanda limanda)
EC50 Daphnia 1	1085 - 1402 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	158 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
EC50 other aquatic organisms 2	2.6 - 21.8 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])

12.2. Persistence and degradability

81160-S Syrup	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

81160-S Syrup	
Bioaccumulative potential	Not established.

Sodium Nitrite (7632-00-0)	
Log Pow	-3.7 (at 25 °C)

Sodium Nitrate (7631-99-4)	
Log Pow	-3.8 (at 25 °C)

Disodium Tetraborate, Anhydrous (1330-43-4)	
BCF fish 1	(no evidence of bioaccumulation)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

UN-No.(DOT) : UN1719

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UN-No. (IMDG) : 1719

UN-No.(IATA) : 1719

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Caustic alkali liquids, n.o.s.

(Disodium Trioxosilicate)

RQ of 500 lb

Proper Shipping Name (IMDG) : CAUSTIC ALKALI LIQUID, N.O.S.
(Disodium Trioxosilicate)

Proper Shipping Name (IATA) : CAUSTIC ALKALI LIQUID, N.O.S.
(Disodium Trioxosilicate)

14.3. Transport hazard class(es)

Department of Transportation (DOT) Hazard Classes : 8 - Corrosive

Hazard labels (DOT) : 8
:



Transport hazard class(es) (IMDG) : 8

Danger labels (IMDG) : 8
:



Transport hazard class(es) (IATA) : 8

Hazard labels (IATA) : 8
:



14.4. Packing group

Packing group (DOT) : II

Packing group (IMDG) : II

Packing group (IATA) : II

14.5. Environmental hazards

Marine pollutant(DOT) : No

Marine pollutant(IMDG) : No

Marine pollutant(IATA) : No

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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

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Phenolphthalein	CAS No 77-09-8	< 1
Sodium Nitrite	CAS No 7632-00-0	10 - 30

Phenolphthalein (77-09-8)

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting 0.1 %

Sodium Nitrite (7632-00-0)

Listed on United States SARA Section 313

EPA TSCA Regulatory Flag S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule.

SARA Section 313 - Emission Reporting 1.0 %

15.2. International regulations

CANADA

Phenolphthalein (77-09-8)

Listed on the Canadian DSL (Domestic Substances List)

Sodium Nitrite (7632-00-0)

Listed on the Canadian DSL (Domestic Substances List)

Disodium Trioxosilicate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class E - Corrosive Material

Sodium Nitrate (7631-99-4)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class C - Oxidizing Material
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Disodium tetraborate, anhydrous (1330-43-4)

Listed on the Canadian DSL (Domestic Substances List)

15.3. US State 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 and/or reproductive toxicity

Phenolphthalein (77-09-8)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

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SECTION 16: Other information

Other information : None.

Full text of H-phrases::

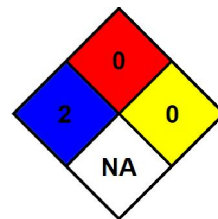
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Acute 2	Hazardous to the aquatic environment — Acute Hazard, Category 2
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Carc. 1B	Carcinogenicity, Category 1B
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Muta. 2	Germ cell mutagenicity, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H272	May intensify fire; oxidiser
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

NFPA specific hazard : NA - Not Applicable



HMIS III Rating

Health : 2 - Temporary or minor injury may occur

Flammability : 0

Physical : 0

Personal Protection : B

Dober SDS US

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