81160-S Syrup

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 05/12/2015 Revision date: 08/20/2020 Supersedes: 05/12/2015 Version: 2.0

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@dober.com - www.dober.com
Contact:Regulatory Affairs

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. 1B	H314
Skin Sens. 1	H317
Carc. 1B	H350
Repr. 1B	H360
Aquatic Acute 2	H401
Aquatic Chronic 3	H412

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

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
H317 - May cause an allergic skin reaction
H350 - May cause cancer
H360 - May damage fertility or the unborn child
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

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 mist, spray.
P261 - Avoid breathing mist.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P301+P312 - If swallowed: Call a POISON CENTER if you feel unwell.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.

P302+P352 - If on skin: Wash with plenty of soap and water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - 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.
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
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)

32.05% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
20.81% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

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	10 – 30	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Eye Irrit. 2A, H319 Aquatic Acute 1, H400
Disodium Tetraborate, Anhydrous	(CAS-No.) 1330-43-4	5 – 10	Eye Irrit. 2A, H319 Repr. 1B, H360
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	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 STOT SE 3, H335
Sodium Mercaptobenzothiazole	(CAS-No.) 2492-26-4	< 1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
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 : Call a physician immediately. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately. Wash with plenty of soap and water. If skin irritation or rash occurs: Get immediate medical advice/attention. Wash contaminated clothing before reuse. Immediately call a poison center or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a poison center or doctor/physician.

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

Symptoms/effects	:	May cause cancer. May damage fertility or the unborn child. Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	:	May cause an allergic skin reaction.
Symptoms/effects after skin contact	:	Burns.
Symptoms/effects after eye contact	:	Serious damage to eyes.
Symptoms/effects after ingestion	:	Burns. 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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Reactivity	:	Thermal decomposition generates : Corrosive vapors.

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 attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	:	Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe mist, spray, vapors. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. Do not breathe mist, spray, vapors. 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 vapor. Avoid breathing mist, spray, vapors.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool. 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 : 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	

Sodium Nitrite (7632-00-0)		
ACGIH	Not applicable	
OSHA	Not applicable	

Disodium Tetraborate, Anhydrous (1330-43-4)		
ACGIH	ACGIH TWA (mg/m³)	2 mg/m³ (inhalable particulate matter (Borate compounds, inorganic)
ACGIH	ACGIH STEL (mg/m³)	6 mg/m³ (inhalable particulate matter (Borate compounds, inorganic)
OSHA	Not applicable	

Sodium Nitrate (7631-99-4)		
ACGIH	Not applicable	
OSHA	Not applicable	

Disodium Trioxosilicate (6834-92-0)		
ACGIH	Not applicable	
OSHA	Not applicable	

Sodium Mercaptobenzothiazole (2492-26-4)		
ACGIH	Not applicable	
OSHA	Not applicable	

Phenolphthalein (77-09-8)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear Protective gloves.

Eye protection : Chemical goggles or face shield.

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.

Environmental exposure controls : Avoid release to the environment.

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
	:	No data available
	:	No data available
Odor threshold	:	No data available
pH	:	12.1 – 12.45
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	Not applicable
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
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Specific gravity / density	:	1.388 – 1.42 g/ml
Solubility	:	Water: 100 %
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosion limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal use.

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

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

81160-S Syrup	
ATE US (oral)	415.617 mg/kg body weight

Sodium Nitrite (7632-00-0)	
LD50 oral rat	85 mg/kg

Sodium Nitrite (7632-00-0)	
LC50 inhalation rat (mg/l)	5.5 mg/l/4h
ATE US (oral)	85 mg/kg body weight
ATE US (vapors)	5.5 mg/l/4h
ATE US (dust, mist)	5.5 mg/l/4h

Disodium Tetraborate, Anhydrous (1330-43-4)	
LD50 oral rat	2660 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 2 mg/m³ (Exposure time: 4 h)
ATE US (oral)	2660 mg/kg body weight

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

Disodium Trioxosilicate (6834-92-0)	
LD50 oral rat	1153 mg/kg
ATE US (oral)	1153 mg/kg body weight

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 (Exposure time: 6 h)
ATE US (oral)	1476 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns.
pH: 12.1 – 12.45

Serious eye damage/irritation : Assumed to cause serious eye damage
pH: 12.1 – 12.45

Respiratory or skin sensitization : May cause an allergic skin reaction.

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.

STOT-single exposure : Not classified

STOT-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/effects after inhalation : May cause an allergic skin reaction.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

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

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Ecology - water : Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

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])

Disodium Tetraborate, Anhydrous (1330-43-4)	
LC50 fish 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)

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])

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 Mercaptobenzothiazole (2492-26-4)	
LC50 fish 1	0.3 – 1.1 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	1.9 – 5.1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	3.8 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

12.2. Persistence and degradability

81160-S Syrup	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

81160-S Syrup	
Bioaccumulative potential	Not established.

Sodium Nitrite (7632-00-0)	
Partition coefficient n-octanol/water (Log Pow)	-3.7 (at 25 °C)

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

Sodium Nitrate (7631-99-4)	
Partition coefficient n-octanol/water (Log Pow)	-3.8 (at 25 °C)

Sodium Mercaptobenzothiazole (2492-26-4)	
Partition coefficient n-octanol/water (Log Pow)	-0.46

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : 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

UN-No. (IMDG) : 1719

UN-No. (IATA) : 1719

14.2. UN proper shipping name

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

(Sodium Nitrite, 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)

Class (DOT)	:	8 - Corrosive
Hazard labels (DOT)	:	8
	:	
Transport hazard class(es) (IMDG)	:	8
Hazard 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

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.

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

Sodium Nitrite (7632-00-0)	
Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	S - S - indicates a substance that is identified in a final Significant New Use Rule.
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1 %

Sodium Polyacrylate (9003-04-7)	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Sodium Tolyltriazole (64665-57-2)	
EPA TSCA Regulatory Flag	TP - TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule.

Phenolphthalein (77-09-8)	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	0.1 %

Sodium Hydroxide (1310-73-2)	
CERCLA RQ	1000 lb

15.2. International regulations

CANADA

Sodium Nitrite (7632-00-0)	
Listed on the Canadian DSL (Domestic Substances List)	

Disodium tetraborate, anhydrous (1330-43-4)	
Listed on the Canadian DSL (Domestic Substances List)	

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 Trioxosilicate (6834-92-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class E - Corrosive Material

Sodium Mercaptobenzothiazole (2492-26-4)	
Listed on the Canadian DSL (Domestic Substances List)	

Phenolphthalein (77-09-8)	
Listed on the Canadian DSL (Domestic Substances List)	

15.3. US State regulations

This product can expose you to Phenolphthalein, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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 significant risk level (NSRL)
Yes	No	No	No	

SECTION 16: Other information

Indication of changes	:	Modified. Hazards identification. Regulatory information.
Revision date	:	08/20/2020
Abbreviations and acronyms	:	Acute Toxicity Estimate. Bioconcentration factor. Median effective concentration. International Air Transport Association. International Maritime Dangerous Goods. Median lethal concentration. Median lethal dose.
Other information	:	None.

Full text of H-phrases:

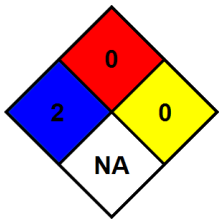
H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H341	Suspected of causing 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
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

NFPA specific hazard : NA - Not Applicable



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Personal protection : B

Dober SDS US

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.