

### SECTION 1: Identification of the hazardous chemical and of the supplier

#### 1.1. Product identifier

Product form : Mixtures  
 Product name : A-400  
 Product code : 284103

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

Recommended use : Scale and Corrosion Inhibitor

#### 1.3. Supplier's details

Dober Chemical Corp  
 11230 Katherine's Crossing  
 60517 Woodridge, IL - US  
 T 630-410-7300 - F 630-410-7444  
[regulatory@dober.com](mailto:regulatory@dober.com) - [www.dober.com](http://www.dober.com)

### SECTION 2: Hazards identification

#### 2.1. Classification of the hazardous chemical

Classification according to Industry Code of Practice on chemicals classification and hazard communication (2014)

Skin Corr. 1B H314  
 Eye Dam. 1 H318

#### 2.2. Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2014)

Hazard pictograms (GHS-MY) :



GHS05

Signal word (GHS MY) : Danger  
 Contains : Sodium Tolyltriazole  
 Hazard statements (GHS MY) : H314 - Causes severe skin burns and eye damage  
 Precautionary statements (GHS MY) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P264 - Wash hands, forearms and face thoroughly after handling  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
 P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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

#### 2.3. Other hazards not contributing to the classification

No additional information available

### SECTION 3: Composition and information of the ingredients of the hazardous chemical

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS (Rev. 4, 2011)
Sodium Tolyltriazole	(CAS-No.) 64665-57-2	10 - 30	Acute Tox. 4 (Oral), H302 Acute Tox. Not classified (Dermal) Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT SE 3, H335
Sodium Nitrate	(CAS-No.) 7631-99-4	5 - 10	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Acute Not classified

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Name	Product identifier	%	Classification according to the United Nations GHS (Rev. 4, 2011)
Sodium Hydroxide	(CAS-No.) 1310-73-2	< 1	Flam. Sol. Not classified Ox. Sol. Not classified Met. Corr. 1, H290 Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute Not classified

Name	Product identifier	%
Sodium Tolytriazole	(CAS-No.) 64665-57-2	10 - 30
Sodium Nitrate	(CAS-No.) 7631-99-4	5 - 10
Sodium Hydroxide	(CAS-No.) 1310-73-2	< 1

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
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.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

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

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

Other medical advice or treatment	: Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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#### 5.2. Special hazards arising from the substance or mixture

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
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#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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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	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.
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##### 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".
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#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material.
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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

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

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Sodium Hydroxide (1310-73-2)		
Malaysia	OEL - Ceilings (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

#### Exposure limit values of other components

No additional information available

#### 8.2. Monitoring

No additional information available

#### 8.3. Appropriate engineering controls

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

#### 8.4. Personal protective equipment

##### Hand protection:

Wear protective gloves/protective clothing/eye protection/face protection

##### 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

- Environmental exposure controls : Avoid release to the environment.

### SECTION 9: Physical and chemical properties

- Physical state : Liquid
- Appearance : No data available
- Color : amber
- Odor : odorless
- Odor threshold : No data available
- pH : 12.6 - 13.6
- Melting point, Freezing point : Melting point: Not applicable
- Boiling point : No data available
- Flash point : No data available
- Auto-ignition temperature : No data available
- Flammability (solid, gas) : Not applicable
- Vapor pressure : No data available
- Evaporation rate : No data available
- Explosion limits : No data available
- Explosive properties : No data available
- Minimum ignition energy : No data available
- Solubility : Water: 100 %
- Specific gravity / density : Specific gravity / density: 1.245 - 1.275 g/cm<sup>3</sup>
- Relative density : No data available

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Viscosity : No data available

### SECTION 10: Stability and reactivity

Chemical stability : Stable under normal conditions  
Conditions to avoid : None under recommended storage and handling conditions (see section 7)  
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced  
Possibility of hazardous reactions : None under normal 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) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

Unknown acute toxicity (GHS MY)	17.07% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 27.04% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 42.21% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
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<b>Sodium Tolytriazole (64665-57-2)</b>	
LD50 oral rat	1980 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
<b>Sodium Nitrate (7631-99-4)</b>	
LD50 oral rat	1267 mg/kg
LD50 oral	3700 mg/kg
<b>Sodium Hydroxide (1310-73-2)</b>	
LD50 dermal rabbit	1350 mg/kg

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
pH: 12.6 - 13.6  
Serious eye damage/irritation : Causes serious eye damage.  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.  
Unknown hazards to the aquatic environment (GHS-MY) : Contains 34.42 % of components with unknown hazards to the aquatic environment  
Aquatic acute : Not classified  
Aquatic chronic : Not classified

<b>Sodium Nitrate (7631-99-4)</b>	
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)
<b>Sodium Hydroxide (1310-73-2)</b>	
EC50 Daphnia 1	40 mg/l

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### 12.2. Persistence and degradability

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Persistence and degradability	No additional information available

### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No additional information available
Sodium Nitrate (7631-99-4)	
Log Pow	See section 12.1 on ecotoxicology

### 12.4. Mobility in soil

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Mobility in soil	No additional information available
Sodium Nitrate (7631-99-4)	
Log Pow	See section 12.1 on ecotoxicology

### 12.5. Other adverse effects

Ozone	: Not classified
GWPmix comment	: No known effects from this product.
Other adverse effects	: No additional information available

## SECTION 13: Disposal information

### 13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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## SECTION 14: Transportation information

### 14.1. UN number

UN-No. (UN RTDG)	: 1719
UN-No. (IMDG)	: 1719
UN-No. (IATA)	: 1719

### 14.2. Proper Shipping Name

Proper Shipping Name (UN RTDG)	: CAUSTIC ALKALI LIQUID, N.O.S. (Sodium Tolytriazole, Sodium Hydroxide)
Proper Shipping Name (IMDG)	: CAUSTIC ALKALI LIQUID, N.O.S. (Sodium Tolytriazole, Sodium Hydroxide)
Proper Shipping Name (IATA)	: Caustic alkali liquid, n.o.s. (Sodium Tolytriazole, Sodium Hydroxide)

### 14.3. Transport hazard class(es)

#### UN RTDG

Transport hazard class(es) (UN RTDG)	: 8
Hazard labels (UN RTDG)	: 8



#### IMDG

Transport hazard class(es) (IMDG)	: 8
Hazard labels (IMDG)	: 8



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### IATA

Transport hazard class(es) (IATA) : 8  
Hazard labels (IATA) : 8



### 14.4. Packing group

Packing group (UN RTDG) : II  
Packing group (IMDG) : II  
Packing group (IATA) : II

### 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

Special provision (UN RTDG) : 274  
Limited quantities (UN RTDG) : 1L  
Excepted quantities (UN RTDG) : E2  
Packing instruction (UN RTDG) : P001, IBC02  
Portable tank and bulk container special instructions (UN RTDG) : T11  
Portable tank and bulk container special provisions (UN RTDG) : TP2, TP27

#### - IMDG

Special provision (IMDG) : 274  
Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T11  
Tank special provisions (IMDG) : TP2, TP27  
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE  
EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES  
Stowage category (IMDG) : A

#### - IATA

PCA Excepted quantities (IATA) : E2  
PCA Limited quantities (IATA) : Y840  
PCA limited quantity max net quantity (IATA) : 0.5L  
PCA packing instructions (IATA) : 851  
PCA max net quantity (IATA) : 1L  
CAO packing instructions (IATA) : 855  
CAO max net quantity (IATA) : 30L  
Special provision (IATA) : A3  
ERG code (IATA) : 8L

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

Not applicable

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### 14.8. 14.8. Hazchem or Emergency Action 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. 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Version : 1.0  
Date of issue : 8/26/2017  
Revision date : 26/08/2017

Abbreviations and acronyms : ATE - Acute Toxicity Estimate  
BCF - Bioconcentration factor  
EC50 - Median effective concentration  
IATA - International Air Transport Association  
IMDG - International Maritime Dangerous Goods  
LC50 - Median lethal concentration  
LD50 - Median lethal dose

Other information : None.

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Acute Tox. Not classified (Dermal)	Acute toxicity (dermal) Not classified
Aquatic Acute Not classified	Hazardous to the aquatic environment - Acute Hazard Not classified
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Ox. Sol. 3	Oxidizing solids Category 3
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation

SDS Malaysia - Dober

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