

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : SI-1011

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Smart Chemical Solutions, LLC  
3505 Olsen Blvd  
Suite 201  
Amarillo, TX 79109  
T (806) 367-8031

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Serious eye damage/eye irritation Category 2 H319 Causes serious eye irritation  
Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning  
Hazard statements (GHS US) : H319 - Causes serious eye irritation  
Precautionary statements (GHS US) : P264 - Wash hands, forearms and face thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

9.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)  
9.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)  
9.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

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### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%
Diethylenetriamine penta(methylene phosphonic) acid, partial ammonium salt	CAS-No.: 70714-66-8	0.48 – 7.8
Caustic Soda 50%	CAS-No.: 1310-73-2	1 – 5

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

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
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 : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact : Eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 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.

### 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.

##### 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.  
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.

## 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. Wear personal protective equipment.  
Hygiene measures : 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 in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Color	: Yellow
Odor	: odorless
Odor threshold	: No data available
pH	: 4.6 – 5.6
Melting point	: Not applicable
Freezing point	: 31 °F
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 8.528 – 8.828
Solubility	: No data available
Partition coefficient n-octanol/water (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
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 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

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Unknown acute toxicity (GHS US)	9.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 9.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 9.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
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#### Diethylenetriamine penta(methylene phosphonic) acid, partial ammonium salt (70714-66-8)

LD50 oral rat	> 10 ml/kg Source: ECHA
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LC50 Inhalation - Rat	> 4602 mg/kg
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Skin corrosion/irritation : Not classified  
pH: 4.6 – 5.6

#### Caustic Soda 50% (1310-73-2)

pH	> 14 (20 °C)
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Serious eye damage/irritation : Causes serious eye irritation.  
pH: 4.6 – 5.6

#### Caustic Soda 50% (1310-73-2)

pH	> 14 (20 °C)
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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  
Viscosity, kinematic : No data available

#### Caustic Soda 50% (1310-73-2)

Viscosity, kinematic	51.803 mm <sup>2</sup> /s
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Symptoms/effects after eye contact : Eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

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### Diethylenetriamine penta(methylene phosphonic) acid, partial ammonium salt (70714-66-8)

LC50 - Fish [1]	216 mg/l Source: ECHA
EC50 - Crustacea [1]	66 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	9910 mg/l Test organisms (species): other:
LC50 - Fish [2]	6435 mg/l Test organisms (species): Cyprinodon variegatus
EC50 - Other aquatic organisms [2]	> 250 mg/l Test organisms (species): other:
NOEC (chronic)	67 mg/l Test organisms (species): other aquatic mollusc: Duration: '96 h'
NOEC chronic fish	25.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '60 d'

### 12.2. Persistence and degradability

#### Caustic Soda 50% (1310-73-2)

Persistence and degradability	Biodegradability: not applicable.
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### 12.3. Bioaccumulative potential

#### Diethylenetriamine penta(methylene phosphonic) acid, partial ammonium salt (70714-66-8)

Partition coefficient n-octanol/water (Log Pow)	-3.4 Source: ECHA
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#### Caustic Soda 50% (1310-73-2)

Bioaccumulative potential	Does not contain bioaccumulative component(s).
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### 12.4. Mobility in soil

#### Caustic Soda 50% (1310-73-2)

Ecology - soil	No (test)data on mobility of the component(s) available.
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### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

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

## SECTION 14: Transport information

DOT	IMDG	IATA
<b>14.1. UN number</b>		
Not regulated	Not applicable	Not applicable
<b>14.2. Proper Shipping Name</b>		
Not regulated	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>		
Not regulated	Not applicable	Not applicable

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DOT	IMDG	IATA
<b>14.4. Packing group</b>		
Not regulated	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>		
Not regulated	Not applicable	Not applicable
No supplementary information available		

### 14.6. Special precautions for user

**DOT**

Not regulated

**IMDG**

Not applicable

**IATA**

Not applicable

### 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. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Diethylenetriamine penta(methylene phosphonic) acid, partial ammonium salt	CAS-No. 70714-66-8	0.48 – 7.8%
Caustic Soda 50%	CAS-No. 1310-73-2	1 – 5%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

**CANADA**

No additional information available

**EU-Regulations**

No additional information available

**National regulations**

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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### SECTION 16: Other information

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

#### Full text of H-phrases

H319	Causes serious eye irritation
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