



# Drydene Thermodynall AI-3 Booster

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

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## SECTION 1: Identification

### 1.1. Identification

Product form : Mixtures  
Product name : Drydene Thermodynall AI-3 Booster

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

Use of the substance/mixture : Inhibitor.  
Restrictions on use : No additional information available

### 1.3. Details of the supplier of the safety data sheet

DRYEDENE PERFORMANCE PRODUCTS  
305 Micro Drive  
Jonestown, PA 17038  
1-877-DRYDENE  
sds@drydenelubricants.com

### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300  
CHEMTREC (24 HOURS)

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Skin corrosion/irritation, Category 1B H314  
Full text of H statements : see section 16

### 2.2. Label elements

#### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger  
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage  
Precautionary statements (GHS-US) : P260 - Do not breathe mist, vapours  
P264 - Wash hands thoroughly after handling  
P280 - Wear eye protection, face protection, protective clothing, protective gloves  
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: 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  
P310 - Immediately call a doctor  
P321 - Specific treatment (see First aid measures on this label)  
P363 - Wash contaminated clothing before reuse  
P405 - Store locked up  
P501 - Dispose of contents/container to Collection point

### 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. Substances

Not applicable

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### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
2-aminoethanol	(CAS-No.) 141-43-5	10 - < 20	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 STOT SE 3, H335

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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 general : Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.
- First-aid measures after inhalation : 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 : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : Causes severe skin burns and eye damage.
- Symptoms/effects after eye contact : Causes serious eye damage.

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

Treat symptomatically and supportively.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Burning produces irritating, toxic and noxious fumes.
- Explosion hazard : Product is not explosive.
- Reactivity : Thermal decomposition generates : Corrosive vapours.

### 5.3. Advice for firefighters

- Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Chemical goggles or safety glasses. Face shield. Wear suitable protective clothing and gloves.
- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Chemical goggles or safety glasses. Face shield. Wear suitable protective clothing and gloves.
- Emergency procedures : Ventilate area. Stop leak if safe to do so.

### 6.2. Environmental precautions

Do not discharge into drains or the environment.

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

- For containment : Do not allow minor leaks or spills to accumulate on walking surfaces.  
Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

### 6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not breathe mist, spray, vapours. Avoid contact with skin, eyes and clothing.  
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

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

- Technical measures : Comply with applicable regulations.  
Storage conditions : Do not store near food, foodstuffs, drugs, or potable water supplies. Keep container closed when not in use.  
Incompatible products : Strong oxidizers. Strong acids. metals.  
Heat and ignition sources : Keep away from heat, sparks and flame.  
Prohibitions on mixed storage : Incompatible materials.  
Storage area : Store in dry, cool, well-ventilated area.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

2-aminoethanol (141-43-5)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	7.5 mg/m <sup>3</sup>
ACGIH	ACGIH TWA (ppm)	3 ppm
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (ppm)	6 ppm
ACGIH	Remark (ACGIH)	Eye & skin irr
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	3 ppm
IDLH	US IDLH (ppm)	30 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	8 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	3 ppm
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
NIOSH	NIOSH REL (STEL) (ppm)	6 ppm

### 8.2. Exposure controls

- Appropriate engineering controls : Avoid splashing. Ensure good ventilation of the work station. Emergency safety showers should be available in the immediate vicinity of any potential exposure. Eyewash stations.  
Hand protection : Wear suitable gloves resistant to chemical penetration.  
Eye protection : Chemical goggles or safety glasses. Face shield.  
Skin and body protection : Wear suitable protective clothing. Impervious clothing.  
Respiratory protection : In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges.

## SECTION 9: Physical and chemical properties

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

- Physical state : Liquid  
Color : light yellow  
Odor : mild  
Odor threshold : No data available

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pH	: 9.6 (1% in water)
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C PMCC
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: 1.12 @ 25 °C
Relative vapour density at 20 °C	: No data available
Solubility	: Soluble in water. Water: 100 %
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: 670 cSt @ 40 °C
Viscosity, dynamic	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat.

### 10.5. Incompatible materials

Strong acids. Strong oxidizers. metals.

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours. Carbon dioxide. Carbon monoxide. Nitrogen oxides. ammonia. Isocyanates.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Not classified

2-aminoethanol (141-43-5)	
LD50 oral rat	1515 mg/kg
LD50 dermal rabbit	1822 (1822 - 3451) mg/kg
LC50 inhalation rat (mg/l)	> 1.3 mg/l
ATE US (oral)	1515.000 mg/kg bodyweight
ATE US (dermal)	1822.000 mg/kg bodyweight
ATE US (dust,mist)	1.500 mg/l/4h

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

Serious eye damage/irritation : Not classified  
(Serious eye damage, category 1, implicit)

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Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes severe skin burns and eye damage.
Symptoms/effects after eye contact	: Causes serious eye damage.

### SECTION 12: Ecological information

#### 12.1. Toxicity

2-aminoethanol (141-43-5)	
LC50 fish 1	165 mg/l 48 h
EC50 Daphnia 1	65 mg/l 48 h

#### 12.2. Persistence and degradability

Drydene Thermodynall AI-3 Booster	
Persistence and degradability	Not established.

2-aminoethanol (141-43-5)	
Persistence and degradability	Readily biodegradable.

#### 12.3. Bioaccumulative potential

Drydene Thermodynall AI-3 Booster	
Bioaccumulative potential	Not established.

2-aminoethanol (141-43-5)	
Log Pow	-1.31

#### 12.4. Mobility in soil

Drydene Thermodynall AI-3 Booster	
Ecology - soil	Not established.

#### 12.5. Other adverse effects

Effect on the global warming	: No known effects from this product.
Other information	: No additional information available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Sewage disposal recommendations	: Do not dispose of waste into sewer.
Waste 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

#### Department of Transportation (DOT)

In accordance with DOT	
Transport document description	: UN2491 Ethanolamine solutions, 8, III
UN-No.(DOT)	: UN2491
Proper Shipping Name (DOT)	: Ethanolamine solutions
Transport hazard class(es) (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT)	: III - Minor Danger





