

## SAFETY DATA SHEET



CHEM INTERNATIONAL

**Tallow Amine, distilled**

Revision: 1.00

Issuing date: 05/15/2015

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : TALLOW AMINE, DISTILLED

Product Use Description : Surfactant

Company : Chem International  
6099 Ponders Court  
Greenville, SC 29615

Telephone : (864) 458-7868  
Fax : (864) 458-7783

Emergency telephone : CHEMTREC: 800-424-9300 (within U.S. and Canada) or  
703-527-3887 (for international collect calls)

**2. HAZARDS IDENTIFICATION****Emergency Overview**

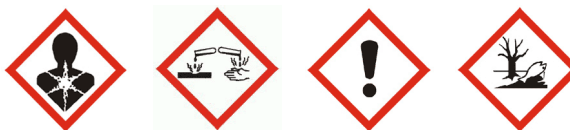
Appearance	solid
Color	light yellow
Odor	ammoniacal
Hazard Summary	No further data available.

**GHS Classification**

Acute toxicity (Oral) : Category 4  
 Skin corrosion : Category 1B  
 Serious eye damage : Category 1  
 Specific target organ systemic toxicity - single exposure : Category 3 (Respiratory system)  
 Specific target organ systemic toxicity - repeated exposure (Oral) : Category 2  
 Aspiration hazard : Category 1  
 Acute aquatic toxicity : Category 1  
 Chronic aquatic toxicity : Category 1

**GHS Label element**

Hazard pictograms :



Signal Word : Danger

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- Hazard Statements** : H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.  
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.
- Precautionary Statements** : **Prevention:**  
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
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.  
P310 Immediately call a POISON CENTER or doctor/ physician.  
P363 Wash contaminated clothing before reuse.  
P391 Collect spillage.  
**Storage:**  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

## Potential Health Effects

- Inhalation** : Inhalation of aerosols may cause irritation to mucous membranes.  
Thermal decomposition can lead to release of irritating gases and vapors.  
May cause respiratory irritation.  
May be fatal if swallowed and enters airways. Inhalation may cause central nervous system effects.
- Skin** : Burns may occur several hours after the removal of the product.  
Symptoms may be delayed.  
Causes severe skin burns.  
The product may be absorbed through the skin.
- Eyes** : Vapor in the eyes may cause irritation and pain.  
Causes severe eye burns.

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Ingestion : Harmful if swallowed.  
May cause irritation of the mucous membranes.  
Causes burns.  
May be fatal if swallowed and enters airways.

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No information available.

## **Carcinogenicity:**

**IARC** : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**ACGIH** : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### Hazardous ingredients

Chemical Name	CAS-No.	Classification	Concentration [%]
Tallow amine	61790-33-8	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute): 10	90 - 100

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

- General advice : Immediate medical attention is required.  
Move out of dangerous area.  
Show this material safety data sheet to the doctor in attendance.  
Burns may occur several hours after the removal of the product.
- Inhalation : Obtain medical attention immediately.
- Skin contact : Take off contaminated clothing and shoes immediately.  
Carefully remove paste or solidified product.  
Wash skin immediately with 0,5 % acetic acid in water, and then with soap and water.  
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.  
Skin irritation, if untreated, may be prolonged and serious (e.g., necrosis). This may be prevented by early treatment with medium strength corticosteroids.
- Eye contact : In case of contact with eyes, rinse immediately with 0.5% acetic acid in water for a few minutes, followed by rinsing with plenty of water.  
Get medical attention immediately. Continue to rinse during transport of patient. Remove contact lenses. Protect unharmed eye.  
Keep eye wide open while rinsing.  
Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
- Ingestion : Clean mouth with water and drink afterwards plenty of water.  
Never give anything by mouth to an unconscious person. Take victim immediately to hospital.  
Do not induce vomiting! May cause chemical burns in mouth and throat.

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## Notes to physician

Symptoms	: No information available.
Risks	: No information available.
Treatment	: No information available.

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## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting / Specific hazards arising from the chemical	: Treat as oil fire. Do not use a solid water stream as it may scatter and spread fire. Water spray may be ineffective unless used by experienced firefighters. Do not allow run-off from firefighting to enter drains or water courses.
Combustion products	: Carbon oxides Nitrogen oxides (NOx)
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus and protective suit.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

See also Section 9. Physical and chemical properties: Safety data

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## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Use personal protective equipment. Wear respiratory protection. Ensure adequate ventilation.
Environmental precautions	: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up / Methods for containment	: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.
Additional advice	: For personal protection see section 8.

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## 7. HANDLING AND STORAGE

### Handling

Advice on safe handling	: For personal protection see section 8.
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Avoid formation of respirable particles.  
Do not breathe vapors/dust.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.

## Storage

Requirements for storage areas and containers : Prevent unauthorized access.  
Avoid elevated temperatures.  
Keep in a well-ventilated place.  
Reacts with copper, aluminum, zinc and their alloys

Other data : No decomposition if stored and applied as directed.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

Contains no substances with occupational exposure limit values.

### Engineering measures

Provide eyewash station and safety shower. Keep solutions of 0.5% acetic acid in water close at hand.

### Personal protective equipment

Eye/face protection : Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Hand protection : Glove material: Nitrile rubber  
: Glove material: butyl-rubber

Skin and body protection : Protective suit

Respiratory protection : Keep respiratory equipment available. If use conditions can generate aerosol or mist, wear suitable respiratory equipment.  
Wear full face mask supplied with:  
Combination filter: ABEKP.

Hygiene measures : Avoid contact with skin, eyes and clothing.  
When using do not eat or drink.  
When using do not smoke.  
Dry-clean contaminated clothing before reuse.

### Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	: solid
Color	: light yellow
Odor	: ammoniacal
Odor Threshold	: No data available

### Safety data

pH	: not applicable
Melting point/range	: 40 °C
Boiling point/boiling range	: 290 - 350 °C
Flash point	: > 150 °C Method: Pensky-Martens closed cup
Ignition temperature	: > 150 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable.
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapor pressure	: < 1 hPa at 20 °C
Relative vapor density	: No data available
Density	: 813 kg/m <sup>3</sup> at 38 °C
Relative density	: No data available
Water solubility	: dispersible/insoluble
Solubility in other solvents	: Soluble in alcohols.
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, dynamic	: at 20 °C Not applicable
Viscosity, kinematic	: at 20 °C Not applicable
Explosive properties	: Not explosive

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Oxidizing properties : The substance or mixture is not classified as oxidizing.

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

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## 10. STABILITY AND REACTIVITY

Conditions to avoid : Extremes of temperature and direct sunlight.

Materials to avoid : Reacts with copper, aluminum, zinc and their alloys  
Oxidizing agents  
Acids

Hazardous decomposition products : No hazardous decomposition products are known.

Thermal decomposition : No data available

Reactivity : Stable under normal conditions.

Chemical stability : Stable under recommended storage conditions.

Hazardous reactions : No dangerous reaction known under conditions of normal use.

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## 11. TOXICOLOGICAL INFORMATION

### PRODUCT INFORMATION:

#### Toxicology Assessment

Further information : May cause damage to organs through prolonged or repeated exposure.

#### Carcinogenicity:

**IARC** : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**ACGIH** : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

### TOXICOLOGY DATA FOR THE INGREDIENTS:

#### Test result

#### Component: Tallow amine

Acute oral toxicity : LD50: > 300 - 2,000 mg/kg  
Species: rat  
Method: OECD Test Guideline 401



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Skin irritation	: Species: rabbit Result: Causes burns. Method: OECD Test Guideline 404
Target Organ Systemic Toxicant - Single exposure	: Routes of exposure: Inhalation May cause respiratory irritation.
Target Organ Systemic Toxicant - Repeated exposure	: Routes of exposure: Oral May cause damage to organs through prolonged or repeated exposure.
Aspiration toxicity	: May be fatal if swallowed and enters airways.

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## 12. ECOLOGICAL INFORMATION

### PRODUCT INFORMATION:

#### Ecotoxicology Assessment

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.

#### Further information on ecology

#### Hazardous to the ozone layer

Regulation : 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

### INGREDIENTS:

#### Test result

#### Component: Tallow amine

#### Ecotoxicity effects

Toxicity to fish : LC50: > 0.01 - 0.1 mg/l  
Exposure time: 96 h  
Species: Pimephales promelas (fathead minnow)  
Method: OECD Test Guideline 203  
Read-across (Analogy)

Toxicity to daphnia and other aquatic invertebrates : EC50: > 0.01 - 0.1 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 202  
Read-across (Analogy)

Toxicity to algae : EC50: > 0.01 - 0.1 mg/l

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Exposure time: 72 h  
Species: *Scenedesmus subspicatus* (algae)  
Method: OECD Test Guideline 201  
Read-across (Analogy)

M-Factor : 10

## Elimination information (persistence and degradability)

Bioaccumulation : Bioconcentration factor (BCF): > 500

Mobility : Can be leached out from soil.

Biodegradability : Result: Readily biodegradable.  
Method: OECD Test Guideline 301D

## Further information on ecology

Biochemical Oxygen Demand (BOD) : No data available

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## 13. DISPOSAL CONSIDERATIONS

Product : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Hazardous waste

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### International regulation

#### IATA-DGR

UN/ID No. : UN 3259  
Proper shipping name : Amines, solid, corrosive, n.o.s., (primary fatty amine)

Class : 8  
Packing group : II  
Labels : 8  
Packing instruction (cargo aircraft) : 863  
Packing instruction (passenger aircraft) : 859  
Packing instruction (LQ) : Y844  
Environmentally hazardous : yes

#### IMDG-Code

UN number : UN 3259  
Proper shipping name : AMINES, SOLID, CORROSIVE, N.O.S., (primary fatty amine)  
Class : 8  
Packing group : II

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Labels : 8  
EmS Code : F-A, S-B  
Marine pollutant : yes  
(primary fatty amine)

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

Not applicable for product as supplied.

## Domestic regulation

### 49 CFR

UN/ID/NA number : UN 3259  
Proper shipping name : Amines, solid, corrosive, n.o.s., (primary fatty amine)  
Class : 8  
Packing group : II  
Labels : 8  
ERG Code : 154  
Marine pollutant : yes  
(primary fatty amine)  
Reportable Quantity : This product does not contain an environmentally hazardous substance per 49 CFR 172.101, Appendix A.

## 15. REGULATORY INFORMATION

### Notification status

CH INV : YES. On the inventory, or in compliance with the inventory  
TSCA : YES. All chemical substances in this product are either listed on the TSCA Inventory or in compliance with a TSCA Inventory exemption.  
DSL : YES. All components of this product are on the Canadian DSL.  
AICS : YES. On the inventory, or in compliance with the inventory  
NZIoC : YES. On the inventory, or in compliance with the inventory  
ENCS : YES. On the inventory, or in compliance with the inventory  
ISHL : YES. On the inventory, or in compliance with the inventory  
KECI : YES. On the inventory, or in compliance with the inventory  
PICCS : YES. On the inventory, or in compliance with the inventory  
IECSC : YES. On the inventory, or in compliance with the inventory

For explanation of abbreviations, see section 16.

**OSHA Hazards** : Toxic by ingestion, Corrosive to skin, Moderate respiratory irritant

### EPCRA - Emergency Planning and Community Right-to-Know

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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## Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM/ Intermediate or Final VOC's (40 CFR 60.489).

## Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, and Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

## California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

## 16. OTHER INFORMATION

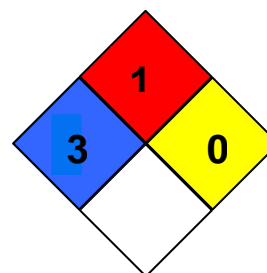
### Full text of H-Statements

H302	: Harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.
H335	: May cause respiratory irritation.
H373	: May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.

### Further information

**HMIS Classification** : Health Hazard: 3  
Flammability: 1  
Reactivity: 0

**NFPA Classification** : Health Hazard: 3  
Fire Hazard: 1  
Reactivity Hazard: 0



**Date Prepared:** 05/15/2015  
**Further Information:** Product classified under the US GHS format.

### Notification status explanation

REACH 1907/2006 (EU)  
CH INV Switzerland. New notified substances and declared preparations

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TSCA	United States TSCA Inventory
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
NZIoC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances (METI)
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)

The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the context of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.