

SAFETY DATA SHEET

according to the Globally Harmonized System and US regulation

ARMOSTAT 300-XE50

Version 2 Revision Date 06/18/2020 Print Date 11/13/2020 US / Z8

1. IDENTIFICATION

Product name : ARMOSTAT 300-XE50

Product Use Description : Specific use(s): Antistatic additive

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化学事故应急咨询电话: +86 532 8388 9090

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Dustless granules
Color	white
Odor	amine-like

GHS Classification

Acute toxicity, Category 4, Oral Skin corrosion, Category 1C Serious eye damage, Category 1 Short-term (acute) aquatic hazard, Category 1 Long-term (chronic) aquatic hazard, Category 1

GHS label elements

Hazard pictograms





Signal Word : Danger

Hazard Statements : H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : Prevention:

P260 Do not breathe dusts or mists.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/doctor if you feel unwell. Rinse mouth.

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 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

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 component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Classification	Concentration [% W/W]
Bis (2-hydroxyethyl) tallow alkylamine	61791-44-4	Acute Tox. 4; H302	>= 48 - <= 52
		Skin Corr. 1C; H314	
		Eye Dam. 1; H318	
		Aquatic Acute 1; H400	
		Aquatic Chronic 1; H410	
		M-Factor (Acute): 10	
		M-Factor (Chronic): 1	

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.

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 strenght 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 for as long as possible. Eyelids should be held

away from the eyeball to ensure thorough rinsing.

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.

Notes to physician

Symptoms : The symptoms and effects are as expected from the hazards

as shown in section 2. No specific product related symptoms

are known.

Risks : Harmful if swallowed.

Causes serious eye damage.

Causes severe burns.

Treatment : Treat symptomatically.

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 fire fighting / Specific hazards

arising from the chemical

: Treat as oil fire.

Do not use a solid water stream as it may scatter and spread

Water spray may be ineffective unless used by experienced

firefighters.

Do not allow run-off from fire fighting to enter drains or water

courses.

Combustion products Carbon oxides

Nitrogen oxides (NOx)

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Wear respiratory protection.

Ensure adequate ventilation.

Emergency measures on

accidental release

: Evacuate personnel to safe areas.

Only qualified personnel equipped with suitable protective

equipment may intervene.

Prevent unauthorized persons entering the zone.

: Do not flush into surface water or sanitary sewer system. **Environmental precautions**

Discharge into the environment must be avoided.

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Methods for cleaning up / Methods for containment

: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Reference to other sections : For disposal considerations see section 13.

For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : For personal protection see section 8.

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

: Keep container tightly closed in a dry and well-ventilated

place.

Avoid elevated temperatures.

Reacts with copper, aluminum, zinc and their alloys

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

Appropriate engineering controls

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 : Wear full face mask supplied with:

Combination filter: ABEKP.

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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.

Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : Dustless granules

Color : white

Odor : amine-like

Odor Threshold : No data available

Safety data

pH : Not applicable

Melting point : > 120 °C

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Not classified as a flammability hazard

Flammability (liquids) : Not applicable

Lower explosion limit : No data available

Upper explosion limit : No data available

Vapor pressure : Not applicable

Relative vapor density : Not applicable

Relative density : 0.95 at 20 °C

Bulk density : No data available

Water solubility : at 20 °C

insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

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Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : Not classified as oxidizing.

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

10. STABILITY AND REACTIVITY

Conditions to avoid : Extremes of temperature and direct sunlight.

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

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.

11. TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION:

Hazard Summary

Acute toxicity : Harmful if swallowed.

Skin corrosion/irritation : Causes severe burns.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin : Respiratory sensitization: Not classified based on available sensitization information.

Skin sensitization: Not classified based on available

information.

Germ cell mutagenicity : Not classified based on available information.

Carcinogenicity : Not classified based on available information.

Reproductive toxicity : Not classified based on available information.

STOT-single exposure : Not classified based on available information.

STOT-repeated exposure : Not classified based on available information.

Aspiration hazard : Not classified based on available information.

Potential Health Effects

Inhalation : Thermal decomposition can lead to release of irritating gases

and vapors.

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.

Ingestion : Harmful if swallowed.

Causes burns.

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure : The symptoms and effects are as expected from the hazards

as shown in section 2. No specific product related symptoms

are known.

Toxicology Assessment

Further information : No further data available.

Test result

Acute oral toxicity : Acute toxicity estimate: 1,011 mg/kg

Method: Calculation method

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 component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

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.

TOXICOLOGY DATA FOR THE INGREDIENTS:

Test result

Component: Bis (2-hydroxyethyl) tallow alkylamine

Acute oral toxicity : LD50: > 300 - 2,000 mg/kg

Species: Rat

Method: OECD Test Guideline 401

Skin irritation : Species: Rabbit

Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up

to 14 days.

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Method: OECD Test Guideline 404

Eye irritation : Result: Risk of serious damage to eyes.

Read-across (Analogy)

Sensitization : Maximization Test

Species: Guinea pig Result: negative

Method: OECD Test Guideline 406

Read-across (Analogy)

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).

COMPONENTS:

Test result

Component: Bis (2-hydroxyethyl) tallow alkylamine

Ecotoxicity effects

Toxicity to fish : LC50: > 0.1 - 1 mg/l

Exposure time: 96 h

Species: Danio rerio (zebra fish) 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

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

Exposure time: 72 h

Species: Pseudokirchneriella subcapitata (green algae)

Method: OECD Test Guideline 201

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EC10: > 0.01 - 0.1 mg/l Exposure time: 72 h

Species: Pseudokirchneriella subcapitata (green algae)

Method: OECD Test Guideline 201

M-Factor (Acute) : 10

M-Factor (Chronic) : 1

Toxicity to daphnia and other

aquatic invertebrates

(Chronic toxicity)

: EC10: > 0.001 - 0.01 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Elimination information (persistence and degradability)

Bioaccumulation : Bioconcentration factor (BCF): < 500

Method: Calculation method

Mobility : immobile

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301D

Further information on ecology

Biochemical Oxygen

Demand (BOD)

: No data available

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

Dispose of contents/container in accordance with local

regulation.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 3259

Proper shipping name : Amines, solid, corrosive, n.o.s.

(Tallowbis(2-hydroxyethyl)amine)

Class : 8
Packing group : III
Labels : 8
Packing instruction (cargo : 864

aircraft)

Packing instruction : 860

(passenger aircraft)

Packing instruction (LQ) : Y845 Environmentally hazardous : yes

IMDG-Code

UN number : UN 3259

Proper shipping name : AMINES, SOLID, CORROSIVE, N.O.S.

(Tallowbis(2-hydroxyethyl)amine)

Class : 8
Packing group : III
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : yes

(Tallowbis(2-hydroxyethyl)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.

(Tallowbis(2-hydroxyethyl)amine)

Class : 8
Packing group : III
Labels : 8
ERG Code : 154
Marine pollutant : yes

(Tallowbis(2-hydroxyethyl)amine)

Reportable Quantity : This product does not contain an environmentally hazardous

substance per 49 CFR 172.101, Appendix A.

15. REGULATORY INFORMATION

Notification status

TCSI : YES. On the inventory, or in compliance with the inventory TSCA : YES. All substances listed as active on the TSCA inventory AICS : YES. On the inventory, or in compliance with the inventory DSL : YES. All components of this product are on the Canadian DSL **ENCS** : YES. On the inventory, or in compliance with the inventory ISHL : YES. On the inventory, or in compliance with the inventory : YES. On the inventory, or in compliance with the inventory KECI **PICCS** : YES. On the inventory, or in compliance with the inventory : YES. On the inventory, or in compliance with the inventory **IECSC** NZIoC : YES. On the inventory, or in compliance with the inventory

For explanation of abbreviations, see section 16.

TSCA list

TSCA 5(a)(2) : No substances are subject to a Significant New Use Rule. TSCA 12(b) : No substances are subject to TSCA 12(b) export notification

requirements.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

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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 toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section

302 EHS TPQ.

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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals subject to disclosure and 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 SOCMI 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, 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.

H314 : Causes severe skin burns and eye damage.

H318 : Causes serious eye damage. H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP -

Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO -International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL -International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS -Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Further information

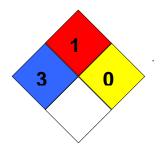
HMIS Classification : Health Hazard: 3

Chronic Health Hazard: /

Flammability: 1 Physical hazards: 0

NFPA Classification : Health Hazard: 3

Fire Hazard: 1 Reactivity Hazard: 0



Notification status explanation

TCSI Taiwan Chemical Substance Inventory (TCSI)

TSCA United States TSCA Inventory

AICS Australia Inventory of Chemical Substances (AICS)

DSL Canadian Domestic Substances List (DSL)

ENCS Japan. ENCS - Existing and New Chemical Substances Inventory

ISHL Japan. ISHL - Inventory of Chemical Substances
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)

NZIoC New Zealand. Inventory of Chemical Substances

Further information

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This data sheet contains changes from the previous version in section(s): Hazards identification Composition/information on ingredients Physical and chemical properties

The information in this 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 c ontext 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 Material 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.