



SAFETY DATA SHEET

according to the Global Harmonized System and GB standard

2HP

Version 1

Date: 8/02/2018

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Information
Trade name : PALM SECONDARY AMINE

Use of the Substance/Mixture : Specific use(s): Fuel additive
Surfactant

Company : Chem International, Inc.
6099 Ponders Court
Greenville, SC 29615

Telephone : +1 864-458-7868
Telefax : +1 864-458-7783
Emergency telephone number : CHEMTREC : 800-424-9300 (inside U.S. and Canada)

2. HAZARDS IDENTIFICATION

GHS Classification

Acute aquatic toxicity : Category 1
Chronic aquatic toxicity : Category 1

GHS Label element

Hazard pictograms :



Signal word : Warning

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

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.
Response:
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

No further data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Substance

Hazardous substance

Chemical Name	CAS-No.	Classification	Concentration [%]
Di C14-18 alkylamines	68037-98-9	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute): 1 M-Factor (Chronic): 10	<= 100

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

4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- Inhalation : Obtain medical attention immediately.
- Skin contact : Remove contaminated clothing.
Carefully remove paste or solidified product.
Wash skin immediately with 0,5 % acetic acid in water, and then with soap and water.
Skin irritation, if untreated may be prolonged and serious (eg 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 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.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- Ingestion : Clean mouth with water and drink afterwards plenty of water.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Notes to physician

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

5. FIREFIGHTING 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 fire fighting to enter drains or water courses.
Combustion products	: Carbon oxides nitrogen oxides (NOx)
Special protective equipment for firefighters	: 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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: 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.

7. HANDLING AND STORAGE

Handling

Advice on safe handling	: For personal protection see section 8. 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, aluminium, zinc and their alloys.
Other data	: No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

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

Hand protection	:	Nitrile rubber butyl-rubber
Eye/face protection	:	Tightly fitting safety goggles
Skin and body protection	:	Protective suit
Hygiene measures	:	Avoid contact with skin, eyes and clothing. Dry-clean contaminated clothes 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
Colour	:	white
Odour	:	ammoniacal
Odour Threshold	:	no data available

Safety data

pH	:	not applicable
Melting point/range	:	60 - 64 °C
Boiling point/boiling range	:	> 300 °C
Flash point	:	> 200 °C
Evaporation rate	:	not applicable
Flammability (solid, gas)	:	The product is not flammable.
Lower explosion limit	:	not applicable
Upper explosion limit	:	not applicable

Vapour pressure	: < 0.1 hPa at 20 °C
Relative vapour density	: not applicable
Relative density	: 0.81 at 20 °C
Water solubility	: insoluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition 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
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

This 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	: None known.
Materials to avoid	: Reacts with copper, aluminium, 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

Inhalation	: Not expected to be irritating.
Skin	: The product may be absorbed through the skin.
Eyes	: Vapour in the eyes may cause irritation and pain.

Ingestion : Not expected to be irritating.

Toxicology Assessment

Further information : No further data available.

TOXICOLOGY DATA FOR THE COMPONENTS:**Test result****Component: Di C14-18 alkylamines**

Acute oral toxicity : LD50: > 5,000 mg/kg
Species: rat
Read-across (Analogy)

Skin irritation : Species: rabbit
Result: No skin irritation
Read-across (Analogy)

Eye irritation : Species: rabbit
Result: No eye irritation
Read-across (Analogy)

12. ECOLOGICAL INFORMATION**PRODUCT INFORMATION:****Ecotoxicology Assessment**

Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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.

COMPONENTS:**Ecotoxicology Assessment****Component: Di C14-18 alkylamines**

Results of PBT assessment : This substance is not considered to be a PBT (Persistent, Bioaccumulation, Toxic)
This substance is not considered to be vPvB (very Persistent nor very Bioaccumulating)

Test result**Component: Di C14-18 alkylamines**

Ecotoxicity effects

- Toxicity to fish : LC50: > 0.1 - 1 mg/l
Exposure time: 96 h
Species: Fish
Read-across (Analogy)
- Toxicity to daphnia and other aquatic invertebrates : EC50: > 0.1 - 1 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Read-across (Analogy)
- Toxicity to algae : IC50: > 0.1 - 1 mg/l
Exposure time: 72 h
Species: algae
Read-across (Analogy)
- EC10: > 0.0001 - 0.001 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Read-across (Analogy)
- M-Factor : 1
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 0.001 - 0.01 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Read-across (Analogy)

Elimination information (persistence and degradability)

- Bioaccumulation : Bioaccumulation is unlikely.
- Mobility : immobile
- Biodegradability : Result: Not readily biodegradable.
Read-across (Analogy)

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 regulation****IATA-DGR**

UN/ID No. : UN 3077
 Proper shipping name : Environmentally hazardous substance, solid, n.o.s.
 (Alkylamine)
 Class : 9
 Packing group : III
 Labels : 9
 Packing instruction (cargo aircraft) : 956
 Packing instruction (passenger aircraft) : 956
 Packing instruction (LQ) : Y956
 Environmentally hazardous : yes

IMDG-Code

UN number : UN 3077
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
 N.O.S.
 (Alkylamine)
 Class : 9
 Packing group : III
 Labels : 9
 EmS Code : F-A, S-F
 Marine pollutant : yes
 (Alkylamine)

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

Not applicable for product as supplied.

National Regulations**GB 12268**

UN number : UN 3077
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
 N.O.S.
 (Alkylamine)
 Class : 9
 Packing group : III
 Labels : 9
 Environmentally hazardous : yes

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 : NO. Not 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 : NO. Not in compliance with the inventory
 PICCS : NO. Not in compliance with the inventory
 IECSC : YES. On the inventory, or in compliance with the inventory

For explanation of abbreviation see section 16.

Further information

Law on Prevention and Control of Environment Pollution by Solid Waste
Regulation on the Safety Management of Hazardous Chemicals
Provisions on the Safe Use of Chemicals at Workplace
GB13690: General rule for classification and hazard communication of chemicals

National regulatory information

Further information : 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.
Wash skin immediately with 0,5 % acetic acid in water, and then with soap and water.

16. OTHER INFORMATION**Full text of H-Statements**

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Notification status explanation

CH INV Switzerland. New notified substances and declared preparations
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)

Further information

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.