

SAFETY DATA SHEET

Version 5.6
Revision Date 02/27/2015
Print Date 04/30/2016

1. PRODUCT AND COMPANY IDENTIFICATION**1.1 Product identifiers**

Product name : Butylated hydroxytoluene

Product Number : W218405
Brand : Aldrich

CAS-No. : 128-37-0

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

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

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word : Warning

Hazard statement(s)
H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273

Avoid release to the environment.

P391

Collect spillage.

P501

Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Synonyms : 2,6-Di-tert-butyl-4-methylphenol
BHT
DBPC

2,6-Di-tert-butyl-p-cresol
Butylhydroxytoluene
Butylated hydroxytoluene

Formula : C₁₅H₂₄O
Molecular weight : 220.35 g/mol
CAS-No. : 128-37-0
EC-No. : 204-881-4

Hazardous components

Component	Classification	Concentration
2,6-di-tert-Butyl-p-cresol		
	Aquatic Acute 1; Aquatic Chronic 1; H410	<= 100 %

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

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
2,6-di-tert-Butyl-p-cresol	128-37-0	TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Not classifiable as a human carcinogen		
		TWA	10.000000 mg/m3	USA. NIOSH Recommended Exposure Limits

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Form: crystalline Colour: white
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	Melting point/range: 69 - 73 °C (156 - 163 °F) - lit.
f) Initial boiling point and boiling range	265 °C (509 °F) - lit.
g) Flash point	127.0 °C (260.6 °F) - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	0.01 hPa (0.01 mmHg) at 20.0 °C (68.0 °F)
l) Vapour density	No data available
m) Relative density	1.05 g/cm ³ at 20 °C (68 °F)
n) Water solubility	0.0004 g/l at 20 °C (68 °F) - slightly soluble
o) Partition coefficient: n-octanol/water	log Pow: 5.1
p) Auto-ignition temperature	470.0 °C (878.0 °F)
q) Decomposition temperature	No data available
r) Viscosity	3.47 mm ² /s at 80 °C (176 °F) -
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

Solubility in other Toluene - soluble

solvents	Methanol - soluble Acetone - soluble
Dissociation constant	12.2

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Acid chlorides, Acid anhydrides, Oxidizing agents, Bases, Brass, Copper

10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - > 6,000 mg/kg
(OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2,000 mg/kg
(OECD Test Guideline 402)

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Eyes - Rabbit
Result: No eye irritation
(Read-across (Analogy))

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

Ames test
S. typhimurium
Result: negative

Mouse - male and female
Result: negative

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2,6-di-tert-Butyl-p-cresol)

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.

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

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 25 mg/kg
RTECS: GO7875000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - *Oryzias latipes* - 5.3 mg/l - 48 h

Toxicity to daphnia and other aquatic invertebrates static test EC50 - *Daphnia magna* (Water flea) - 0.48 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to bacteria Growth inhibition EC50 - Protozoa - 1.7 mg/l - 24 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

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

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-di-tert-Butyl-p-cresol)
 Marine pollutant:yes

IATA

UN number: 3077 Class: 9 Packing group: III
 Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (2,6-di-tert-Butyl-p-cresol)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

15. REGULATORY INFORMATION**SARA 302 Components**

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

SARA 313 Components

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.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

	CAS-No.	Revision Date
2,6-di-tert-Butyl-p-cresol	128-37-0	1993-04-24

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
2,6-di-tert-Butyl-p-cresol	128-37-0	1993-04-24

New Jersey Right To Know Components

	CAS-No.	Revision Date
2,6-di-tert-Butyl-p-cresol	128-37-0	1993-04-24

California Prop. 65 Components

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

16. OTHER INFORMATION**Full text of H-Statements referred to under sections 2 and 3.**

Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

HMIS Rating

Health hazard:	0
Chronic Health Hazard:	
Flammability:	1
Physical Hazard	0

NFPA Rating

Health hazard:	2
Fire Hazard:	1
Reactivity Hazard:	0

Further information

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Preparation Information

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.6

Revision Date: 02/27/2015

Print Date: 04/30/2016

SAFETY DATA SHEET
CYDPER

Date Revised: January 2021
Supersedes: N/A

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : CYDPER
Product Number : N/A
Product Form : Pure pheromone attractant absorbed on rubber septum
Brand : Alpha Scents

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

Identified uses : Insect Lure for Box Tree Moth *Cydalima perspectalis*

1.3 Details of the supplier of the safety data sheet

Company : Alpha Scents, Inc
360 S. Sequoia Pkwy.
CANBY OR 97013
USA
Telephone : 503-342-8611
Fax : 314-271-7297

1.4 Emergency telephone number

Emergency Phone # : 800-222-1222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS-none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

(1) Chemical Name : E-11-Hexadecenal
Synonyms : E11-16Ald
E-Hexadec-11-enal
cis-11-Hexadecenal

Formula : C16H30O
Molecular weight : 238.41
CAS-No. : 57491-33-5
EC Number : N/A

(2) Chemical Name : Z-11-Hexadecenal
Synonyms : Z11-16Ald
Z-11-Hexadecenal

Formula : C16H30O
Molecular weight : 238.41
CAS-No. : 53939-28-9
EC Number : N/A

The exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water..

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

None required).

Skin protection

Handle with gloves. None required if lure is in foil pouch. Gloves should be used when handling lures removed from foil pouch.

Wash and dry hands.

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

None required.

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

(1) (E)-11-Hexadecenal

a) Appearance	Form: liquid Color: colorless to pale yellow
b) Odor	Powerful, waxy
c) Odor threshold	No data available
d) pH	No data available
e) Melting point/freezing	No data available
f) Initial boiling point and boiling range	250°C
g) Flash point	110 °C (230°F)
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	Insoluble
o) Partition coefficient n-octanol/water	logP: 6.49
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available
u) Other information	
Refractive index:	1.451:1.457 at 20°C
Specific gravity:	0.842:0.850 at 20°C

(2) (Z)-11-Hexadecenal

a) Appearance	Form: liquid Color: colorless to pale yellow
b) Odor	Powerful, waxy
c) Odor threshold	No data available
d) pH	No data available
e) Melting point/freezing	No data available.
f) Initial boiling point and boiling range	250 °C

g) Flash point	110 °C (230°F)
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	Insoluble
o) Partition coefficient n-octanol/water	logP: 6.49
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available
u) Other information	
Refractive index:	1.451:1.457 at 20°C
Specific gravity:	0.842:0.850 at 20°C

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong bases, Strong oxidizing agents, Strong reducing agents

10.6 Hazardous decomposition products

Other decomposition products-No data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available

LD50 Dermal -Rabbit-> 5,000 mg/kg

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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

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

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.

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

Reproductive toxicity
No data available
Specific target organ toxicity -single exposure
No data available
Specific target organ toxicity -repeated exposure
No data available
Aspiration hazard
No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product Offer surplus and non-recyclable solutions to a licensed disposal company

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

15. REGULATORY INFORMATION

EPA Exempted from label requirements; CFR 40 152.25(b) if used for monitoring purposes in traps.

16. OTHER INFORMATION

HMIS Rating
Health hazard : 1
Chronic Health Hazard : 0
Flammability : 0
Physical Hazard : 0
NFPA Rating
Health hazard : 1
Fire Hazard : 0
Reactivity Hazard : 0

Further information

Copyright 2015 Alpha Scents, Inc. The information contained herein is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Alpha Scents, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.



21 Finance Drive | Danbury, CT 06810 | Phone: 203-830-4000 | FAX: 203-830-4010
 Web: <http://www.bedoukian.com> Email: customerservice@bedoukian.com

MATERIAL SAFETY DATA SHEET
 Printed: Aug 03, 2007 15:07:50

Product #: P4040-93 BEDOUKIAN Z-11-HEXADECENAL TECHNICAL PHEROMONE

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Bedoukian Research, Inc.	Emergency Phone Numbers:
21 Finance Drive	1-800-424-9300 Chemtrec (North America)
Danbury, CT 06810-4192	1-703-527-3887 Chemtrec (International)
UNITED STATES	
Phone: 1-203-830-4000	

Product Code: P4040-93
 Product Name: BEDOUKIAN Z-11-HEXADECENAL TECHNICAL PHEROMONE
 Last Revision: Feb 08, 2007

SECTION 2. HAZARDS IDENTIFICATION

HMIS HAZARD CLASSIFICATIONS

HEALTH = 1 FLAMMABILITY = 1 REACTIVITY = 0 PROTECTION = B

LABEL PRECAUTIONARY STATEMENTS

U.S. HAZARD LABELING

Keep cold.
 Keep under inert gas.
 May be irritating to skin and eyes.
 Trimerizes!

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 53939-28-9

MF: C16H30O

EC NO: 258-876-7

ADDITIONAL INFORMATION

EPA Registration No. 52991-14

SYNONYM(S)

11-Hexadecenal, (11Z)-
 APM pheromone
 Artichoke plume moth pheromone
 BRI Z-11-HEXADECENAL TECHNICAL PHEROMONE
 DBM pheromone component
 Diamondback moth pheromone component
 Virelure
 Z11-16Ald
 cis-11-Hexadecen-1-ol

SECTION 4. FIRST-AID MEASURES

INHALATION EXPOSURE: Remove to fresh air. Give oxygen and call a physician.
 EYE CONTACT: Flush with water for 15 min. Seek medical help if necessary.
 SKIN CONTACT: Wash area well with water. Seek medical help if necessary.
 INGESTION: Administer water and call a physician or poison control center immediately. Do not induce vomiting.

SECTION 5. FIRE FIGHTING MEASURES**EXTINGUISHING MEDIA**CO₂, FOAM, DRY CHEMICAL**SPECIAL FIRE FIGHTING PROCEDURES**

Use standard fire fighting procedures.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

None.

SECTION 6. ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**

Standard absorbents can be used.

Wet used absorbent with water; store in air-tight container.

WASTE DISPOSAL METHOD: Incineration or sanitary landfill in accordance with local, state, and federal regulations.

SECTION 7. HANDLING AND STORAGE**HANDLING**

Observe all warnings and precautions listed for the product. Use in accordance with good manufacturing and industrial hygiene practices. Use product in a properly ventilated work area. Do not eat, drink or smoke while handling product.

STORAGE

Store tightly sealed under inert gas below 0 deg. C

FIRE PROTECTION

Keep away from heat, sparks, and open flame.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**VENTILATION:** Mechanical (general)**RESPIRATORY:** Usually not required**SKIN:** Rubber gloves**EYES:** Splash-proof safety glasses**OTHER PROTECTIVE EQUIPMENT:** Safety shower, eye wash

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**PHYSICAL STATE:** Liquid**APPEARANCE:** colorless to pale yellow**ODOR DESCRIPTION:** powerful, waxy**BOILING POINT:** 130C @ < 0.1 mm Hg**VAPOR PRESSURE :** Not found**VAPOR DENSITY (Air = 1):** > 1**SPECIFIC GRAVITY @ 25C (water = 1):** 0.8420:0.8500**SOLUBILITY IN WATER:** Insoluble in water; soluble in alcohol.**FLASH POINT (CC):** 230 F 110 C

SECTION 10. STABILITY AND REACTIVITY**INCOMPATIBILITIES****CONDITIONS TO AVOID:** Presents no special reactivity hazard.**MATERIALS TO AVOID:** Strong oxidizing agents**HAZARDOUS COMBUSTION PRODUCTS**CO, CO₂, water

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

Most likely route of entry is through the skin.
Full strength may be irritating to skin and eyes.

TOXICITY DATA

LD50 Dermal (rabbit) > 2 g/kg.

LD50 Oral (rat) > 5 g/kg.

THRESHOLD LIMIT VALUE (TLV): Not established

OSHA PERMISSABLE EXPOSURE LIMIT (PEL): Not established

LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA?: NO

SECTION 12. ECOLOGICAL INFORMATION

GENERAL

Prevent contamination of soil, ground- and surface water.

SECTION 13. DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD: Incineration or sanitary landfill in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

	Class	Pack Group	Sub. Risk	UN No.
Road(U.S.-DOT):	not regulated.			
Air (IATA):	not regulated.			
Sea (IMDG):	not regulated.			

SECTION 15. REGULATORY INFORMATION

EUROPEAN INFORMATION

Based on toxicological studies in the published literature, there are no risk and safety phrases to assign for this product.

REVIEWS, STANDARDS, AND REGULATIONS

This chemical is listed on the following inventories:

TSCA NDSL EINECS(258-876-7) ENCS

LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA?: NO

SECTION 16. OTHER INFORMATION

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SDS for Trans 11-Hexadecanal alone is not available