Tradeasia International PTE LTD
133 Cecil Street # 12-03 Keck Seng Tower, Singapore 069535
Tel: +65-6227 6365 Fax: +65-6225 6286
www.chemtradeasia.com

Material Safety Data Sheet

LAURYL ALCOHOL

Section 1 - Product Identification

Synonyms : 1-Dodecanol, Dodecyl alcohol, Alcohol C12
Molecular Weight : 186.34 g/mol
Chemical Formula : $C_{12}H_{26}O$
Company Identification : Tradeasia International Pte. Limited
Address : 133 Cecil Street # 12-03 Keck Seng Tower, Singapore
Tel: +65-6227 6365
Fax: +65-6225 6286
Email: contact@chemtradeasia.com
Recommended use of the chemical and restrictions on use
The product is used in industrial manufacturing, in particular in :
- Soap and Detergent, Textile, Paint, Ink and Coating, and Beauty and Personal Care

Section 2 – Composition/Information on Ingredients

Chemical Name	EC No/CAS No	Purity, %
Lauryl Alcohol	203-982-0/112-53-8	max. 99.9

Section 3 – Hazards Identification

3.1 Classification
Classification according to Regulation (EC) No. 1272/2008 [CLP]

3.2 Label elements
Signal Word
Warning
Hazard Statements
H319 Causes serious eye irritation.
H411 Very toxic to aquatic life with long lasting effects
Precautionary Statements
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Section 4 – Composition/ information on ingredients

4.1 Composition comments
Component Lauryl Alcohol
CAS No. 112-53-8
Weight >95

Section 5 – First-Aid Measures

5.1. Description of first aid measures

Skin contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Inhalation
Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
Ingestion
Clean mouth with water. Do NOT induce vomiting. Get medical attention

5.2. Most important symptoms and effects, both acute and delayed

No information available.

5.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically

Section 6 – Fire Fighting Measures

6.1. Suitable Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6.2. Specific hazards arising from the chemical

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

6.3. Special protective actions for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 7 – Accidental Release Measures

7.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation.

7.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

7.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Section 8 – Handling and Storage

8.1. Precautions for safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe mist/vapors/spray. Wash hands before breaks and immediately after handling the product. Minimize dust generation and accumulation.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothin and gloves, including the inside, before re-use. Wash hands before breaks and after work.

8.2. Conditions for safe storage, including any incompatibilities
Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) Class 11 (Germany)

Section 9 – Exposure Controls/Personal Protection

9.1. Appropriate engineering controls
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

9.2. Individual protection measures, such as personal protective equipment (PPE)
Respiratory protection
No protective equipment is needed under normal use conditions.
Eyes and face protection
Goggles (European standard - EN 166)
Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure.
Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

Section 10 – Physical and Chemical Properties

10.1. Information on basic physical and chemical properties
Appearance : White, Solid
Odour : Organic
Odour threshold : N.A.
pH : 7
Melting point : 22 - 27 °C
Boiling point : 258 - 265 °C
Flash point : 119 °C
Evaporation rate : Not applicable - Solid
Flammability : N.A.
Upper/lower flammability or explosive limits : 4 / 0.6
Vapour pressure : <0.1 mbar @ 20 °C
Vapour density : Not applicable
Relative density : N.A.
Solubility : N.A.
Partition coefficient: n-octanol/water : N.A
Auto-ignition temperature : 260 °C

Decomposition temperature : N.A
Viscosity : N.A

10.2. Other information
Molecular weight : 186.34 g/mol
Specific gravity : 0.835

Section 11 – Stability and Reactivity

11.1. Reactivity
None known, based on information available

11.2. Chemical stability
Stable under normal conditions.

11.3. Possibility of hazardous reactions
Hazardous polymerization does not occur.

11.4. Conditions to avoid:
Incompatible products. Avoid dust formation.

11.5. Incompatible materials
Acids. Alcohols. Acid anhydrides.

11.6. Hazardous decomposition products
Carbon monoxide (CO), Carbon dioxide (CO2)

Section 12 – Toxicological Information

12.1 Health effects associated with ingredients
LD50 Oral >5000 mg/kg (Rat)
LD50 Dermal >5000 mg/kg (Rabbit)

12.2 Health effects associated with compounds formed during processing
No new/additional compounds are expected to be formed during processing.

12.3 Information on likely routes of exposure
Oral, Dermal, Inhalation

Section 13 – Ecological Information

13.1.Ecotoxicity
Freshwater fish
LC50: = 0.1855 mg/L, 96h (Pimephales promelas)
LC50: = 1.01 mg/L, 96h flow-through (Pimephales promelas)
Water Fleas
EC50: = 320 mg/L, 48h (Daphnia magna)

13.2.3. Bioaccumulative potential
Product has a high potential to bioconcentrate

13.4. Mobility in soil
The product is insoluble and floats on water Spillage unlikely to penetrate soil . Is not likely mobile in the environment due its low water solubility. Is not likely mobile in the environment due its low water solubility and propensity to bind to soil particles

13.5. Other adverse effects
This product does not contain any known or suspected substance

Section 14 – Disposal Considerations

14.1. Disposal methods
Waste from Residues/Unused Products
Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging
Dispose of this container to hazardous or special waste collection point.
European Waste Catalogue (EWC)
According to the European Waste Catalog, Waste Codes are not product specific, but application specific.
Other Information
Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not let this chemical enter the environment.

Section 15 – Transport Information

.
15.1. UN number : UN3077
15.2. UN proper shipping name : Environmentally hazardous substances, solid, n.o.s
15.3. Transport of hazard classes : 3
15.4. Packing group : III
15.5. Environmental hazards : Dangerous for the environment. Product is a marine pollutant according to the criteria set by IMDG/IMO
15.6. Special precautions for user : No special precautions required
15.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable, packaged goods

Section 16 – Regulatory Information

15.1. Safety, health and environmental regulations
International Inventories
X = listed, Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), China (IECSC), Japan (ENCS), Australia (AICS), Korea (ECL).

Ensure all national/local regulations are observed.

Section 16 : Additional Information

16.1. Mainly changes made to the previous version of this Material Safety Data Sheet (MSDS):
• This MSDS complies with ISO 11014; the requirements of UN-GHS

Revision No	Revision content
05	• This SDS is updated in accordance with the GHS (Rev.6) (2015)-Guidance on the

	Compilation of Safety data Sheets.

16.2. List of abbreviation and acronyms used in this MSDS
SDS : Safety Data Sheets
Index N° : atomic number of the element most characteristic of the properties of the substance
CAS No : Chemical Abstracts Service number
EC No : EINECS Number : European Inventory of Existing Commercial Substances
Repr. Cat. 2 : Substance presumed human reproductive toxicant
Acute Oral Cat. 5 : Substance which is of relatively low acute oral toxicity.
GHS : Globally Harmonised System of Classification and Labelling
LD_{50} : Median Lethal Dose
LC_{50} : Lethal Concentration, 50%
N.A. : Not Applicable
OSHA : Occupational Safety & Health Administration
Cal OSHA : The State of California Division of Occupational Safety and Health (DOSH)
PEL : Permissible Exposure Limits
ACGIH : American Conference of Governmental Industrial Hygienists
TLV : Threshold Limit Value
Japanese MITI : Japanese Ministry of International Trade and Industry
EC_{50} : Half maximal effective concentration
UN : United Nations
U.S. EPA TSCA Inventory: Inventory of the chemical substances manufactured or processed in the United States according to Toxic Substances Control Act compiled and published under the autority of the Environmental Protection Agency
Canadian DSL: Canadian Domestic Substances List
16.3. List of relevant hazard statements and precautionary statements used in this MSDS
Hazard Statement
H361 d: Suspected of damaging the unborn child
H319: Causes serious eye irritation
H303: May be harmful if swallowed
Precautionary Statements
Prevention
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P281: Use personal protective equipment as required.
P264: Wash eyes thoroughly after handling.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response
P308 + P313: If exposed or concerned: get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
Storage
P405: Store locked up.
Disposal
P501: Dispose of contents/container to in accordance with local regulations.
16.4. References
1. Litovitz T L, Norman S A, Veltri J C, Annual Report of the American Association of Poison Control Centers Data Collection System. Am. J. Emerg. Med. (1986), 4, 427-458

2. Denton SM (1996). Acute oral toxicity study in the rat: anhydrous boric acid. Final report. Report no.: 1341/7-1032.
3. National Toxicology Program (NTP) – Technical Report Series No. TR324, NIH Publication No. 88 2580 (1987), PB88 213475/XAB
4. Fail et al., Fund. Appl. Toxicol. (1991) 17, 225-239
5. Heindel et al., Fund. Appl. Toxicol. (1992) 18, 266-277
6. Birge W J, Black J A, EPA-560/-76-008 (April 1977) PB 267 085
7. Scialli AR, Bonde JP, Brüske-Hohlfeld I, Culver D, Li Y, Sullivan FM; ELSEVIER 2009
8. Robbins WA, Xun L, Jia J, Kennedy N, Elashoff DA, Ping L. ;ELSEVIER 2009;(Reproductive Toxicology)
9. Hansveit and Oldersma, 2000; TNO Nutrition and Food Research Institute. Report No. V99.157.
10. Gersich, FM (1984a). Environ.Toxicol.Chem., 3 #1, 89-94 (1984)
11. Soucek et al., 2010. Illinois Natural History Survey, University of Illinois.
For general information on the toxicology of borates see ECETOC Technical Report No. 63 (1995); Patty's Industrial Hygiene and Toxicology, 4th Edition Vol. II, (1994) Chap. 42, 'Boron'.

16.5. Disclaimer of Liability

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its accuracy, reliability or completeness. The conditions or methods of handling, storage use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the user's responsibility to satisfy himself as to the suitableness and completeness of such information for his own particular use.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.