

MATERIAL SAFETY DATA SHEET

| SECTIC | | | |
|----------------|--|---|--|
| | ON 1: Identification of the s | substance/mixture and of the company | |
| I.1. | Produce identifier | | |
| Chemical | name | Lauryl/Myristyl Alcohol | |
| rade nan | ne | TECKNO A1214 | |
| CAS No. | | 80206-82-2 | |
| .2. | Relevant identified uses of th | e substance or mixture and uses advised against | |
| .2.1. | Relevant identified uses | | |
| | | Production of alkyl amines, aluminum rolling lubricants, | tertiary amines, cosmetics, ethoxylates, |
| | | halides/mercaptans, polymerization stabilizers, and sulf | ation. |
| .2.2. | Uses advised against | | |
| | | No additional information available | |
| .3. | Details of the supplier of the | safety data sheet | |
| | | Teck Guan (China) Ltd. | |
| | | No 1 Teck Guan Road, Rugao Port, Jiangsu, China | |
| | | 226532 | |
| | | +86-513-8758 5000 | |
| | | www.teckguan.com/cn | |
| SECTIO | ON 2: Hazards identificatio | n | |
| .1. | GHS classification | | |
| | Environmental hazards | Harzardous to the aquatic environment, acute Cat | tegory 1 |
| | | hazard | |
| .2. | GHS label elements | | |
| | | | |
| | Signal word | Warning | |
| | Signal word | Warning | |
| | Signal word Hazard statement | Warning Warning H410 - Very toxic to aquatic life | |
| | - | | |
| | Hazard statement | | |
| | Hazard statement Precautionary statement | H410 - Very toxic to aquatic life | |
| | Hazard statement Precautionary statement Prevention | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. | ional regulation |
| | Hazard statement Precautionary statement Prevention Response | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. | - |
| .3. | Hazard statement Precautionary statement Prevention Response Storage | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat | - |
| .3. | Hazard statement Precautionary statement Prevention Response Storage Disposal | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat | - |
| | Hazard statement Precautionary statement Prevention Response Storage Disposal | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat Dispose of contents/container in accordance with local/regional/national/internat No additional information available | - |
| | Hazard statement Precautionary statement Prevention Response Storage Disposal Other hazards | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat Dispose of contents/container in accordance with local/regional/national/internat No additional information available ation on ingredients | - |
| | Hazard statement Precautionary statement Prevention Response Storage Disposal Other hazards | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat Dispose of contents/container in accordance with local/regional/national/internat No additional information available ation on ingredients | regional/national/international regulation |
| | Hazard statement Precautionary statement Prevention Response Storage Disposal Other hazards Disposal Other hazards | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat Dispose of contents/container in accordance with local/regional/national/internat No additional information available Attion on ingredients CAS No. Per 80206-82-2 >=5 | regional/national/international regulation |
| | Hazard statement Precautionary statement Prevention Response Storage Disposal Other hazards DN 3: Composition/informa Components ALCOHOLS, C12 ~ 14 | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat Dispose of contents/container in accordance with local/regional/national/internat No additional information available Ation on ingredients CAS No. Per 80206-82-2 >=5 | regional/national/international regulation rcent 98 rcent |
| 2.3. SECTIO | Hazard statement Precautionary statement Prevention Response Storage Disposal Other hazards Other hazards ON 3: Composition/informa Components ALCOHOLS, C12 ~ 14 Constituents 1-DODECANOL | H410 - Very toxic to aquatic life P273 - Avoid release to the environment. Collect spillage. Store in accordance with local/regional/national/internat Dispose of contents/container in accordance with local/regional/national/internat No additional information available Ation on ingredients CAS No. Per 80206-82-2 CAS No. Per Store. | regional/national/international regulation rcent 98 rcent |

| SECTION | 4: First aid measures | |
|-------------|-------------------------------------|---|
| | First aid procedures | |
| | Inhalation | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. |
| | | Call a physician if symptoms develop or persist. |
| | Skin | Rinse skin with plenty of water / Shower. Get medical attention if irritation develops or persists. |
| | Eye | Rinse with a lot of water at lease 15 minutes. Get medical attention if irritation develops or persists. |
| | Ingestion | Never give an unconscious person anything by mouth。 Rinse mouth. If ingestion of a large amount |
| | | does occur, call a poison control center immediately. |
| | Notes to physician | Not applicable. |
| SECTION | 5: Fire-fighting measures | |
| 5.1. | Suitable extinguishing media | |
| | | Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |
| 5.2. | Special hazards arising from the su | ubstance or mixture |
| | | On burning: Release of (carbon monoxide - carbon dioxide) |
| 5.3. | Protective equipment and precauti | ons for firefighters |
| | | In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool |
| | | containers exposed to flames with water until well after the fire is out. Water runoff can cause |
| | | environmental damage. |
| SECTION | 6: Accidental release meas | ures |
| 6.1. | Personal precautions | |
| | | Use proper Personal protective equipment to avoid the inhalation of vapor, fog or gas. Local |
| | | authorities should be advised if significant spillages cannot be contained. |
| 6.2. | Environmental precautions | |
| | | Prevent further leakage or spillage if safe to do so. Do not contaminate water. |
| 6.3. | Methods and material for containm | ient and cleaning up |
| | Methods for containment | Stop the flow of material if this is without risk. Dike the spilled material, where this is possible. |
| | | Collect spillage. |
| | Methods for cleaning up | Large spills: Prevent product from entering drains. Do not allow material to contaminate ground |
| | | water system. Dike for ahead of spill for later disposal. Use a non-combustible material like |
| | | vermiculite, sand or earth to soak up the product and place into a container for later disposal. |
| | | Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to |
| | | remove residual contamination. Following product recovery, flush area with water. |
| | | Never return spills in original containers for re-use. |
| SECTION | 7: Handling and storage | |
| 7.1. | Handling | |
| | | Do not get this material in contact with eyes. When using, don't eat or drink or smoke Wash hands |
| | | thoroughly after handling. Avoid release to the environment. Do not empty into drains. Use care in |
| | | handling / storage. |
| 7.2. | Conditions for safe storage, includ | ing any incompatibilities |
| | | Keep container tightly closed. Keep out of the reach of children. Store in a cool, dry area. Use care |
| | | in handling / storage. Nitrogen blanket recommended for large tanks (capacity 1000 m ³ or higher.) |
| | | Unsuitable containers: copper, copper alloy, zinc, zinc alloy, aluminum, aluminum alloy. |
| SECTION | 8: Exposure controls / pers | onal protection |
| 8.1. | Control parameters | |
| MSDS : A121 | · · · · | Version : 4.00 |

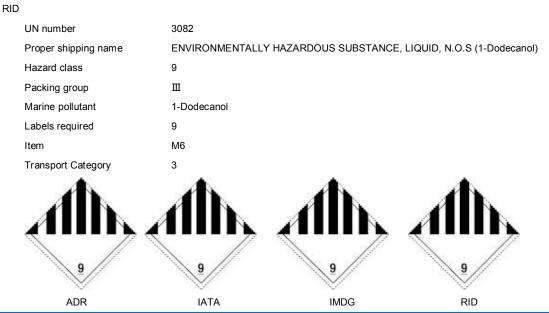
| | | No additional information available |
|--------|-----------------------------------|---|
| 8.2. | Exposure controls | |
| | Personal protective equipment | |
| | Eye / face protection | Not normally needed. |
| | Skin protection | No special protective equipment required. |
| | Respiratory protection | No personal respiratory protective equipment normally required. |
| | Hand protection | Not normally needed. |
| SECTIO | ON 9: Physical and chemica | l properties |
| 9.1. | Information on basic physical a | and chemical properties |
| | Appearance | liquid @ 72 F(22 Deg C) |
| | Color | colorless |
| | Odor | fresh, waxy |
| | Odor threshold | not available |
| | рН | not available |
| | Melting point | 18 ~ 22 Deg C (64.4 ~ 71.6 F) |
| | Boiling point | ≻ 350 F (177 Deg C) @ 760 mmHg (101.3kPa) |
| | Flash point | 290 F (143 Deg C) PMCC |
| | Flammability (Train fire) | Not available |
| | Evaporation rate | Not available |
| | Vapor pressure | <10 mmHg @ 75 F (22 Deg C) |
| | Vapor density | Not available |
| | Specific gravity | 0.82@ 35/25 Deg C |
| | Solubility (H ₂ O) | Negligible @ 77 F (25 Deg C) |
| | Octanol / H ₂ O coeff | Not available |
| | Auto-ignition temperature | Not available |
| | Decomposition temperature | Not available |
| | Viscosity | Not available |
| SECTIO | ON 10: Stability and reactivity | ty |
| 10.1. | Reactivity | |
| | | No additional information available |
| 10.2. | Chemical stability | |
| | | No hazards to be especially mentioned. |
| 10.3. | Possibility of hazardous reaction | ons |
| | | Hazardous polymerization does not occur. |
| 10.4. | Conditions to avoid | |
| | | Not available |
| 10.5. | Materials to avoid | |
| | | Strong oxidizing agents |
| 10.6. | Hazardous decomposition | |
| | | Does not decompose up to 400 F. Complete combustion forms carbon dioxide and water vapor. |
| | | Partial combustion forms also carbon monoxide, soot, aldehydes and ketones. |
| SECTIO | ON 11: Toxicological inform | ation |
| 11.1. | Toxicological data | |
| | Skin corrosion / irritation | Not available. |
| | | |

Serious eye damage / eye irritation Not available.

| | Other information | Not available. |
|---------|-----------------------------|---|
| SECTION | 12: Ecological information | |
| 12.1. | Ecotoxicological data | |
| | Ecotoxicity | Components of this product are hazardous to aquatic life. |
| | Environmental effects | Harmful to aquatic life. |
| | Persistence / degradability | Not established. |
| | Bioaccumulation | Not established. |
| | Aquatic toxicity | Very toxic to aquatic organisms. |
| | Mobility | Not established |
| | Other adverse effects | Not established. |
| SECTION | 13: Disposal considerations | ; |

13.1. **Disposal methods**

| 13.1. | Disposal methods | | |
|-------------|---------------------------|--|---------------|
| | | Do not allow this material to drain into sewers/water supplies. Do not dispose of wast | e into sewe |
| | | Dispose of contents / container in accordance with local/regional/national/international | al regulation |
| SECTION | 14: Transport information | | |
| | ADR | | |
| | UN number | 3082 | |
| | Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (1-Dodecanol) | |
| | Hazard class | 9 | |
| | Packing group | Ш | |
| | Environmental hazards | | |
| | Marine pollutant | 1-Dodecanol | |
| | Labels required | 9 | |
| | Hazard ID | 90 | |
| | Item | M6 | |
| | Transport Category | 3 | |
| | ΙΑΤΑ | | |
| | UN number | 3082 | |
| | Proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (1-Dodecanol) | |
| | Hazard class | 9 | |
| | Packing group | Ш | |
| | Environmental hazards | | |
| | Marine pollutant | 1-Dodecanol | |
| | ERG code | 9L | |
| | IMDG | | |
| | UN number | 3082 | |
| | Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (1-Dodecanol) | |
| | Hazard class | 9 | |
| | Subsidiary hazard class | | |
| | Packing group | Ш | |
| | EmS No. | F-A , S-F | |
| | Environmental hazards | | |
| | Marine pollutant | 1-Dodecanol | |
| MSDS : A121 | /EN | Vor | ion : 4.00 |
| | : 2016/09/26 | | ge 4 of 5 |



SECTION 15: Regulatory information

| Country (s) or region | Inventory name | On inventory (yes/no) ¹ |
|-----------------------------|---|--------------------------------------|
| Australia | Australian Inventory of Chemical Substances. (AICS) | yes |
| Canada | Domestic Substances List (DSL) | yes |
| China | Inventory of Existing Chemical Substances in China(IECSC) | yes |
| Europe | European Inventory of Existing Commercial Chemical Substances | yes |
| | (EINECS) | |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | yes |
| Korea | Existing Chemicals List (ECL) | yes |
| New Zealand | New Zealand Inventory | yes |
| Philippines | Philippine inventory of Chemicals and Chemical Substances | yes |
| | (PICCS) | |
| Switzerland | Switzerland FOPH | No |
| United States & Puerto Pico | Toxic Substances Control Act (TSCA) Inventory | yes |

¹ "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

SECTION 16: Other information Disclaimer

The submission of the MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific product designated herein, and does not relate to use in combination with any other material of any other process. We assume no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the controlled product.

Revision date : 2016/09/23