# SAFETY DATA SHEET

**(According to CLASS Regulations 2013 [P.U. (A) 310/2013])**

## LDF 260GG

Version 1.6 Revision Date: 8 November 2024

## SECTION 1. Identification of the substance / mixture and of the company

### 1.1 Product identifier

| | |
|---|---|
| Product name | LDF 260GG |

### 1.2 Other means of identification

| | |
|---|---|
| Substance name | Low density polyethylene |
| Synonyms | Ethylene based homopolymer |

### 1.3 Recommended use of the chemical and restrictions on use

| | |
|---|---|
| Identified uses | Manufacture of plastic articles by extrusion, molding or other conversion processes. |
| Prohibited uses | None known. |

### 1.4 Manufacturer details

| | |
|---|---|
| Registered company name | Lotte Chemical Titan (M) Sdn Bhd |
| Address | PLO 312, Jalan Tembaga 4, Pasir Gudang Industrial Estate, 81700 Pasir Gudang, Johor, Malaysia |
| Telephone | +607 – 253 8888 |
| Website | www.lottechem.my |
| Email | css@lottechem.my |

### 1.5 Emergency telephone number

| | |
|---|---|
| Emergency telephone | +607 – 253 8888 Ext: 8899 (Office hours only)<br>Ext: 3359 (24-hours) |

## SECTION 2. Hazard identification

### 2.1 Classification of the substance or mixture

Not a hazardous material according to CLASS Regulations 2013 [P.U. (A) 310/2013].

### 2.2 Label elements

Not a hazardous material according to CLASS Regulations 2013 [P.U. (A) 310/2013].

### 2.3 Other hazards that do not result in classification

1. Molten plastic may cause severe thermal burn if contacted with skin.
2. Fume released during high temperature processing may cause respiratory irritation.
3. Dust generated during further processing, handling or by other means may form combustible dust concentrations in air.

## SECTION 3. Composition / information on ingredients

| Chemical Name | CAS Number | Concentration, wt % |
|---|---|---|
| Ethylene based homopolymer | 9002 – 88 – 4 | > 99 % |
| Additives | Mixture (Trade Secret) | < 1 % |

**NOTE:** The product may contain varying levels of additives such as antioxidants and stabilizers.

## SECTION 4. First-aid measures

### 4.1 Description of first-aid measures

| | |
|---|---|
| Inhalation | ➢ In case of accidental inhalation of fumes from overheating or combustion:<br>• Quickly remove exposed individual to open area with fresh air available.<br>• If symptoms persist, seek for medical attention. |
| Skin contact | ➢ In case of contact with molten resin:<br>• Immediately flush with large amounts of cool running water to cool the affected area.<br>• **DO NOT** attempt to remove the molten resin from the skin.<br>• **DO NOT** pull away clothing which has adhered to the skin as this can cause further injury.<br>• Obtain immediate medical attention if burn is deep. |
| Eye contact | ➢ If this product comes in contact with eyes:<br>• Flush eyes thoroughly with cool running water for several minutes.<br>• If irritation persists, seek for medical attention. |
| Ingestion | • No effects are expected for ingestion of small amounts. May be a choking hazard. If in doubt, seek for medical attention. |

## SECTION 5. Fire-fighting measures

### 5.1 Extinguishing media

| | |
|---|---|
| Suitable extinguishing media | Foam, dry chemical powder, carbon dioxide ($CO_2$) or water spray. |
| Unsuitable extinguishing media | Do not use a solid water stream as it may cause scattering and spreading of fire. |

### 5.2 Physiochemical hazards arising from the chemical

1. Keep away from heat and sources of ignition.
2. Combustible particulate solid may decompose under fire conditions.
3. Heat from fire may melt, decompose polymer, and generate flammable vapours.
4. In case of fire, hazardous thermal decomposition products may be produced such as carbon monoxide, carbon dioxide, hydrocarbons, dense black smoke and soot.
5. The formation of hydrocarbons, aldehydes or ketones is possible in the initial stages of a fire (particularly in between 400 $^{o}$C and 700 $^{o}$C).

### 5.3 Advice for fire-fighters

| | |
|---|---|
| Special protective equipment for fire-fighters | • Wear approved positive pressure self-contained breathing apparatus (SCBA), protective firefighting clothes and heat resistance protective gloves. |
| Special firefighting procedures | • Standard procedures for Class A fires. |
| Other information | • May re-ignite after fire is extinguished. |

## SECTION 6. Accidental release measures

| | |
|---|---|
| Personal precautions, protective equipment and emergency procedures | • Potential combustible dust hazard.<br>• Avoid generating dust.<br>• Potential slipping hazard on smooth surface.<br>• Equip with proper personal protective equipment (PPE) – heat resistance protective glove. |
| Environmental precautions | • Prevent from entering drain or sewer system. |
| Methods and materials for containment and cleaning | • Good housekeeping must be maintained to avoid potential slippery hazard.<br>• Sweep up spilled material into suitable disposal containers to avoid ignition risk.<br>• In case of molten resin spillage, cool it down using water and dispose accordingly. |

## SECTION 7. Handling and storage

| | |
|---|---|
| Precautions for safe handling | • Handle in accordance with proper safety practices.<br>• Ensure good ventilation at the workplace.<br>• Any unavoidable deposit of dust must be regularly removed.<br>• Avoid inhalation of fumes and vapours during processing.<br>• Keep away from sparks and open fire.<br>• Electrostatic charge may build up during handling hence the equipment should be grounded and bonded. |
| Conditions for safe storage | • Store in dry, cool and well-ventilated conditions at temperatures below 60˚C (140˚F) and protect from direct UV light. |
| Incompatible materials | • Strong oxidizing agents. |

## SECTION 8. Exposure controls and personal protection

### 8.1 Control parameters

#### 8.1.1 Exposure monitoring

| Ingredients | CAS No. | Limit Value | Reference |
|---|---|---|---|
| Nuisance dust | N/A | 10 mg/m$^3$ 8h TWA (Inhalable particles)<br>3 mg/m$^3$ 8h TWA (Respirable particles) | USA ACGIH |
| **Limits for hazardous decomposition products** | | | |
| Carbon monoxide | 630-08-0 | 35 mg/m$^3$ 8h TWA | UK HSE |
| Carbon dioxide | 124-38-9 | 9150 mg/m$^3$ 8h TWA | UK HSE |
| Acrylaldehyde (Acrolein) | 107-02-8 | 0.23 mg/m$^3$ 8h TWA | UK HSE |
| Formaldehyde | 50-00-0 | 2.5 mg/m$^3$ 8h TWA | UK HSE |

Consult local authorities for acceptable exposure limits.

### 8.2 Engineering controls

| | |
|---|---|
| Engineering controls | • Use in well-ventilated area.<br>• Extruder should be properly vented. |

### 8.3 Individual protection measures

#### 8.3.1 Personal protective equipment

| | |
|---|---|
| Eye / face protection | • Use safety glasses / goggles. |
| Skin and body protection | • Wear suitable protecting clothes with long sleeve. |
| Hand protection | • Wear heat resistance protective gloves when necessary. |
| Respiratory protection | • No respiratory protection is required. In case of insufficient ventilation, wear suitable respiratory equipment. |
| Hygiene measures | • Always maintain good personal hygiene practice such as wash hand after handling the material and before eating, drinking or smoking.<br>• Take off contaminated clothing and wash it before reuse. |

## SECTION 9. Physical and chemical properties

| | |
|---|---|
| Physical appearance | • Pellets |
| Physical state | • Solid |
| Colour | • Translucent to white |
| Odour | • Mild to no odour |
| Odour threshold | • No data available |
| pH | • Not applicable |
| Melting point | • > 100˚C (212˚F) |
| Boiling point | • Not applicable |
| Flash point | • No data available |
| Evaporation rate | • Not applicable |
| Flammability (solid) | • Polymer will burn but does not easily ignite |
| Lower explosive limit | • Not applicable |
| Upper explosive limit | • Not applicable |
| Vapour pressure @ 20˚C (68˚F) | • Not applicable |
| Vapour density | • Not applicable |
| Relative density / Specific gravity | • 0.900 to 0.935 |
| Water solubility | • Insoluble |
| Partition coefficient: n-octanol/water | • No data available |
| Auto-ignition temperature | • > 357˚C (674.6˚F) estimated |
| Decomposition temperature | • No data available |
| Kinematic viscosity | • Not applicable |
| Dynamic viscosity | • Not applicable |

## SECTION 10. Stability and reactivity

| | |
|---|---|
| Reactivity | • No known dangerous reaction under normal conditions. |
| Chemical stability | • Stable under normal conditions. |
| Possibility of hazardous reactions | • Will not occur. |
| Conditions to avoid | • Heat, direct sunlight, temperatures above 357˚C (674.6˚F)<br>• Open flame<br>• Sparks |
| Incompatible materials | • Strong oxidizing agents. |
| Hazardous decomposition products | • Not expected to decompose under normal conditions |
| Thermal decomposition products | • Carbon dioxide, carbon monoxide, organic vapours, hydrocarbons (ketones and aldehydes), dense black smoke and soot. |

## SECTION 11. Toxicological information

| | |
|---|---|
| Acute oral toxicity | • Not classified<br>Oral (rat) LD50: > 2000 mg/kg |
| Acute dermal toxicity | • Not classified<br>Draize Index = 0.0 |
| Acute inhalation toxicity | • Not classified<br>Inhalation (mouse) ATE: 12 mg/L |
| Skin corrosion / irritation | • Not classified<br>Draize Index = 0.0 |
| Serious eye damage / eye irritation | • No data available |
| Respiratory sensitization | • No data available |
| Skin sensitization | • Not classified |
| Germ cell mutagenicity | • Not classified |
| Carcinogenicity | • Not classified<br>IARC Group 3 - Not classifiable |
| 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 |

## SECTION 12. Ecological information

### 12.1 Ecotoxicity

| | |
|---|---|
| Acute aquatic toxicity | • Not classified |
| Chronic aquatic toxicity | • Not classified |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | • Not readily biodegradable |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | • Not expected to be bioaccumulative |

### 12.4 Mobility in soil

| | |
|---|---|
| Mobility | • Low mobility |

### 12.5 Other adverse effects

The ecotoxicity impact is expected to be minimal based on the low water solubility of polymers. Material is in pellet form. Birds, fish and other wildlife may eat pellets which may obstruct their intestinal tracts.

## SECTION 13. Disposal information

### 13.1 Waste disposal methods

#### 13.1.1 Waste residues

Recycle the material as far as possible. Incineration or landfill of waste material in a permitted facility in accordance with Environmental Quality Act 1974 and relevant regulations under the Act is recommended.

This product is not listed under United States Environmental Protection Agency (US EPA) hazardous waste regulations, 40 CFR 261.33 paragraphs (a) or (f), i.e. chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261 Subpart C.

#### 13.1.2 Contaminated packaging

Empty the remaining contents. Dispose as unused product. Do not reuse empty packaging. Recycle the packaging in accordance with applicable regulations and material characteristic.

## SECTION 14. Transportation information

This material is not regulated as dangerous goods for transportation under UNRTDG 2009 (*Sixteenth revised edition*).

| | |
|---|---|
| UN number | • Not applicable |
| UN proper shipping name | • Not applicable |
| Transport hazard classes | • Not applicable |
| Packing group | • Not applicable |
| Marine pollutant | • Not applicable |
| Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC code) | • Not applicable |
| DOT classification for bulk shipments (non-bulk shipments may differ) | • Not classified |
| DOT proper shipping name | • Not applicable |
| USCG proper shipping name | • Polyethylene |
| ADR / RID classification | • Not classified |
| IMO / IMDG classification | • Not classified |
| ICAO / IATA classification | • Not classified |
| Hazchem / Emergency Action Code | • Not applicable |

## SECTION 15. Regulatory information

### 15.1 Safety, health and environmental regulations specific for the hazardous chemical in question

#### 15.1.1 Local regulations

| | |
|---|---|
| Occupational Safety and Health Act 1994 | • Not listed |
| Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 | • Not listed |
| Environmental Quality Act 1974 | • Not listed |

### 15.1.2 International agreements

| | |
|---|---|
| Montreal Protocol (Ozone Depleting Substances) | • Not listed |
| Stockholm Convention (Persistent Organic Pollutants) | • Not listed |
| Rotterdam Convention (Prior Informed Consent) | • Not listed |
| Basel Convention (Hazardous Waste) | • Not listed |

### 15.2 Global inventory status

| Country / Region | Inventory | Status |
|---|---|---|
| Australia | AICS | • Compliant |
| Canada | DSL | • Compliant |
| China | IECSC | • Compliant |
| Europe | REACH | • Compliant |
| Japan | ENCS | • Compliant |
| Korea | KECI | • Compliant |
| New Zealand | NZIoC | • Compliant |
| Philippines | PICCS | • Compliant |
| United States of America | TSCA | • Compliant |
| Taiwan | TCSCA | • Compliant |

Please visit www.lottechem.my to download the product regulatory compliance statement.
For enquiry, please contact our Technical Service Department.

## SECTION 16. Other information

### Revision

Date of issue / revision: 8 November 2024
Version: 1.6
Revised section(s): SDS review every 5 years as per Class Regulations 2013 requirement.

### References


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2. EH40/2005 Workplace Exposure Limits. 2011. 2nd ed. UK. Health and Safety Executive. HSE Books.
3. ACGIH (American Conference of Governmental Industrial Hygienists). 2016. TLV® Chemical Substances. USA. ACGIH.
4. Bergfeld et al. 2014. "Cosmetic Ingredient Review; Safety Assessment of Polyene Group as Used in Cosmetics." *International Journal of Toxicology* 26 (suppl. 1): 115-127.
5. "Polyethylene." 2008. ChemIDPlus. The National Library of Medicine (US NLM).
6. "List of Classifications, Volume 1-116." 1987. IARC Monographs Programme on the Evaluation of Carcinogenic Risk to Humans. International Agency for Research on Cancer - World Health Organization.
7. Krupp LR and LJ Jewell. 1992. "Biodegradability of modified plastic films in controlled biological environments." *Environmental Science & Technology* 26:193-198.
8. Ndon, U. J., A.D. Levine, B. S. Bradley. 1992. "Evaluation of Biodegradability of Starch-Based Plastics." *Water Science & Technology* 74(1): 2089-2092.
9. "The Montreal Protocol on Substances that Deplete the Ozone Layer." 2000. United Nations Environment Programme.
10. Recommendations on the Transport of Dangerous Goods – Model Regulations Volume 1. 2009. 16th ed. United Nations.

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Telephone: 886-2-2763-1611, Fax: 886-2-2764-5749

# SAFETY DATA SHEET

**According to 1907/2006/EC (Article 31) and its amendment (EC) No. 453/2010, 2015/830**

**Revision: Feb. 07, 2018** **Version 7.2**

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Substance name : Polypropylene Random Copolymer Pellets

Trade name : Globalene 8001, 8002, 6181, PT103, 8181, ST611, ST611M, ST611K, ST861, ST866, ST866M, ST866K, ST868M, ST868K, 868H, 8681, 8682, ST869K, ST860K, 8888, ST612, STM866, ST757M, 6101

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

Raw materials for plastics industry

### 1.3 Details of the supplier of the safety data sheet

LCY Chemical Corp.

Taipei Office : 4F, 83, Sec. 4, Bade Road, Taipei 105, Taiwan

Plant Site : No. 2, Jingjian Road, Dashe District, Kaohsiung City 81567, Taiwan

Phone number : +886 2-2528 8895

### 1.4 Emergency telephone number

24 Hr. Emergency : +886 7-351 3211

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

The products are not classified as hazardous in accordance with 5th Rev. UN GHS, 29 CFR 1910.1200 & HCS 2012, 1272/2008/EC (CLP), 1907/2006/EC (REACH) and following amendments.

### 2.2 Label elements

Not a hazardous substance or mixture, and Labeling not required according to above classification.

### 2.3 Other hazards

The molten product adheres to the skin and causes burns.

Spilled material may present a slipping hazard.

Possible production of electrostatic charge when used.

The steam produced from heating can irritate the eyes as well as the respiratory tract.

## 3. Composition/information on ingredients

### 3.1 Substances

| Composition | Concentration (wt %) | CAS No. |
|---|---|---|
| Poly(ethylene-co-propylene) | 99 ~ 100 | 9010-79-1 |

## 4. First aid measures

**Taipei Office**
4F, 83, Sec. 4, Bade Road, Taipei 105, Taiwan, ROC
**Tel** . 886-2-25288895 **Fax** . 886-2-25288823

**Plant site**
No. 2, Jingjian Road, Dashe District, Kaohsiung City 81567, Taiwan, ROC
**Tel** . 886-7-3513211 **Fax** . 886-7-3515424

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**4.1 Description of first aid measures**

Under normal conditions the products are not expected to be an acute hazard.

**4.2 Most important symptoms and effects, both acute and delayed**

| | |
|---|---|
| Eye Contact: | Flush eyes with water for 15 minutes. Get medical attention. |
| Skin Contact (Molten Resin): | If molten material comes in contact with the skin, cool under ice water or a running stream of water. DO NOT attempt to remove the material from the skin. Removal could result in severe tissue damage. Get medical attention. |
| Inhalation: | Remove affected person to fresh air. If irritation persists then seek medical attention. |
| Ingestion: | Adverse health effects due to ingestion are not anticipated. |

**4.3 Indication of any immediate medical attention and special treatment needed**

No immediate medical attention and special treatment needed.

## 5. Fire-fighting measures

**5.1 Extinguishing media**

Use foam, carbon dioxide, or water spray when fighting fires involving this material.

**5.2 Special hazards arising from the substance or mixture**

In case of fire, hazardous decomposition products may be produced such as Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). The formation of hydrocarbons and aldehydes are possible in the initial stages of a fire (especially in between 400℃ and 700℃)

**5.3 Advice for firefighters**

Use suitable personal protective equipment (full protective clothing, self-contained breathing apparatus, helmet, goggles, fire resistant gloves, boots etc.).

## 6. Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Spilled material can cause a slipping hazard. Clean up immediately and dispose of properly. Wear appropriate respiratory protective equipment when responding to large clean-ups.

**6.2 Environmental precautions**

No specific measures. Material should be recovered and placed in suitable container for recycle or disposal under local regulatory requirements. Avoid generating dust.

**6.3 Methods and material for containment and cleaning up**

Material can be swept, shoveled or vacuumed using suitable equipment.

## 7. Handling and storage

**7.1 Precautions for safe handling**

Avoid contact with any potential sources of ignition. During processing material should be handled in well-ventilated areas and care should be taken to avoid formation and accumulation of dust. Elevated processing temperatures may result in

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some degree of thermal degradation.

**7.2 Conditions for safe storage, including any incompatibilities**

The product is a poor conductor and can accumulate electrostatic charges. Precautions normally used for preventing the accumulation of electrostatic charges, such as proper grounding of processing equipment, should be used during processing. Static charge building up during the handling or within process equipment could lead to the ignition flammable vapors (if present) or increase the potential for dust explosions.

Store the product in a dry and well-ventilated covered place in sealed packaging, away from direct sunlight and heat sources as well as strong oxidizing agents to avoid product degradation. Store at ambient temperatures.

**7.3 Specific end use(s):**

See section 1.2

## 8. Exposure controls/personal protection

**8.1 Control parameters**

There are no occupational exposure standards for this product. The following particulate limits are stated as a guideline as fine particles can be an inherent part of the physical form of certain products.

| **Particulate** | **OSHA PEL** |
|---|---|
| Total Dust (8 hr) | 15 mg/m$^3$ |
| Respirable Fraction (8 hr) | 5 mg/m$^3$ |

**8.2 Exposure controls**

Product should be handled only in areas with suitable exhaust ventilation. When concentrations in air exceed OSHA particulate limits, an approved dust mask or respirator should be used. In processes where heated vapors may be produced a NIOSH approved respirator or engineering controls may be needed to avoid vapor exposure by inhalation.

**Respiratory protection:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use appropriate respiratory protection where atmosphere exceeds recommended limits.

**Hand protection:** Wear gloves that provide thermal protection where there is a potential for contact with heated material.

**Eye protection:** Safety glasses with side shields. In processes where the product is in contact with hot materials a face shield should be worn.

**Skin & body protection:** Cloth or leather work gloves. In processes where the product is in contact with hot materials thermal protection gloves, apron and arm protection should be worn.

**Hygiene measures:** Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Take off contaminated clothing and wash before reuse.

**Environmental exposure controls:** General advice may refer to section 6.

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## 9. Physical and chemical properties

**9.1. Information on basic physical and chemical properties:**

| | |
|---|---|
| **(a) Appearance :** Pellet, transparent to white | **(b) Odor:** Odorless |
| **(c) Odor threshold :** Not applicable | **(d) pH:** Not applicable |
| **(e) Melting point :** >130℃ (266℉) | **(f) Boiling point / boiling range :** Not applicable |
| **(g) Flash point :** Not applicable | **(h) Evaporation rate :** Not Applicable |
| **(i) Flammability (solid, gas)** : Not available | **(j) Explosive limit :** Not applicable |
| **(k) Vapor pressure :** Not applicable | **(l) Vapor density :** Not applicable |
| **(m) Relative density :** 0.88 ~ 0.92 | **(n) Solubility(ies) :** Insoluble in water |
| **(o) Partition coefficient (n-octanol/water):** Not applicable | **(p) Ignition temperature :** >400℃ (752℉) |
| **(q) Decomposition temperature :** >300℃ (572℉) | **(r) Viscosity :** Not available |
| **(s) Explosive properties :** Not applicable | **(t) Oxidizing properties** : Not applicable |

## 10. Stability and reactivity

**10.1 Reactivity**

The product is stable and inert in the recommended storage and handling conditions (see section 7).

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Exposure to direct sunlight, ultraviolet light or elevated temperatures over prolonged periods of time may cause degradation and discoloring. Accumulation of product in equipment, processes or areas exposed to elevated temperatures over extended periods of time and in the presence of air may lead to combustion of the product.

**10.4 Conditions to avoid**

Strong oxidizing substances, open flames or heat sources.

**10.5 Incompatible materials:**

Material may be softened by some hydrocarbons.

**10.6 Hazardous decomposition products:**

Under normal conditions processing of product will not be expected to produce hazardous decomposition products.
Thermal decomposition: Although dependent on temperature and environmental conditions, if the product is exposed to an unusual heat or ignition source then thermal decomposition may occur leading to potential formation of hazards (Refer to Special Exposure Hazards in Section 5).

## 11. Toxicological information

**11.1 Information on toxicological effects**

General comments: Refer to Section 2 for potential hazards to health. Toxicological information for this product has not been determined.

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## 12. Ecological information

**12.1 Toxicity**

The product being a high molecular weight polymer is non-toxic and biologically inactive.

**12.2 Persistence and degradability**

Not expected to be biodegradable.

**12.3 Bioaccumulative potential**

Not expected to bioaccumulate.

**12.4 Mobility in soil**

The product will float on water and will remain on the surface of soil.

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

**12.6 Other adverse effects**

No data available on this product.

## 13. Disposal considerations

**13.1 Waste treatment methods**

- These products may be used or recycled according to the regulation of Guideline EC 94/62.
- Incineration including energy recovery of waste material in a permitted facility in accordance with local, state or provincial, and federal regulations.
- Landfilling in a licensed facility in accordance with local, state or provincial and federal regulations.

## 14. Transport information

The product is not classified as dangerous material for transport in accordance with ADR/RID, IMO, IATA, U.S. Department of Transportation.

**14.1 UN number :** Not applicable

**14.2 UN proper shipping name :** Not applicable

**14.3 Transport hazard class(es) :** Not applicable

**14.4 Packing group :** Not applicable

**14.5 Environmental hazards :** Not applicable

**14.6 Special precautions for user :** Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code :** Not applicable

## 15. Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

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The product is not subject to below requirements:

- Montreal Protocol: on Ozone Depleting Substances (ODS)
- Stockholm Convention: on Persistent Organic Pollutants (POPs)
- Rotterdam Convention: on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Basel Convention: on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

Environmental, Health and Safety (EHS) :

Regulatory compliance relevant to the products is specified in the Regulatory Affairs Product Stewardship Information Data Sheet (RAPIDS) which may be reached through sales channel.

**15.2 Chemical safety assessment**

Not required in accordance with article 14 to REACH (1907/2006/EC)

## 16. Other information

**Manufacturer disclaimer:**

The information contained in this SDS has been compiled from sources, which LCY considers reliable and accurate to the best of LCY's Knowledge. The information relates only to the specific product described above, and not to use of the product in combination with another material. Customers and other users should read this SDS and the product label carefully before using the product. LCY neither assumes, nor authorizes anyone to assume on LCY's behalf, any liability in connection with the use of the information in this SDS.

Customers and other users should do their own testing before making commercial use of the product to ensure that the product is fit for the intended application and that the product can be used, and any waste material disposed of, safely, properly, and legally based on the customer's or other user's circumstances.

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# KUANG TAI METAL IND. CO., LTD.

No. 20 Kung Yeh Road, Erh Chen Tsun,
Kuan Tien Hsiang, Tainan Hsien, Taiwan, R.O.C.
TEL: 886-6-6987615~9 FAX: 886-6-6988792, 6987315


# INSPECTION CERTIFICATE EN 10204 3.1

Date: 2010.04.28

| | | | | | | |
|---|---|---|---|---|---|---|
| Article | Stainless Steel Wire for Springs | | | | | |
| P/O No. | | Grade | N-304H | Quantity | 20 | Packs |
| Cert. No. | DM21030201 | Size | 0.80 mm | Net Weight | 994.2 | Kgs |
| Customer | 詮鑫彈簧工業社 | | | | | |

## CHEMICAL COMPOSITION

| Component | C | Mn | Si | P | S | Cu | Ni | Cr | Mo | N |
|---|---|---|---|---|---|---|---|---|---|---|
| Specification | 0.08 | 2.00 | 1.00 | 0.045 | 0.03 | — | 8.00- | 18.00- | — | — |
| SUS 304-WPB | Max | Max | Max | Max | Max | — | 10.50 | 20.00 | — | — |
| Heat No. E24858 | 0.073 | 1.26 | 0.43 | 0.028 | 0.004 | 0.41 | 8.01 | 18.03 | 0.18 | 0.040 |

## PHYSICAL PROPERTIES

| Test No. | Diameter mm | Yield Strength | Tensile Strength N/mm2 | Elongation % | Grain Size | Resistance | Condition of Sectional Area | Surface |
|---|---|---|---|---|---|---|---|---|
| 01 | 0.80 | — | 1951 | — | — | — | Good | Good |

KUANG TAI METAL IND. CO., LTD.

*Quality Assurance Department.*