

Last revised date : 2023-03-03
MSDS No. :

Safety Data Sheet(SDS)

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

1) Product identifier : HI135

2) Relevant identified uses of the substance or mixture and uses advised against

○ Relevant identified uses

29.Polymer preparations and compounds

○ Uses advised against

3) Supplier information

○ Company name [Manufacture]

Company : LG Chem, Ltd.

Address : 55, Yeosusandan 2-ro, Yeosu-si, Jeollanam-do, Republic of Korea

Emergency number : 82-42-866-2187

2. HAZARD IDENTIFICATION

1) Hazard classification

No data available

2) Allocation label elements

Hazard pictograms

Signal word

- NONE

Hazard statements

No data available

Precautionary statements

No data available

3) Other hazards

○ Product NFPA Level

Health	Flammability	Reactivity
0	0	0

(※ 0 = Stable , 1 = Low , 2 = Medium , 3 = High , 4 = Very High)

3. Composition/Information on ingredients

Components	Common name	CAS No.	PCT(wt%)
N,N'-ethylenedi(stearamide)	N,N'-ethylenedi(stearamide)	110-30-5	0.5-5
ABS resin	ABS resin	9003-56-9	90 ~ 100

Components not listed do not contain hazardous/hazardous substances according to the Occupational Safety and Health Act.

4. FIRST AID MEASURES

1) Following eye contact

- Get medical aid immediately.
- In case of contact with material, immediately flush eyes with running water for at least 15 minutes.

2) Following skin contact

- Launder contaminated clothing and shoes before re-use.

3) Following inhalation

- Seek immediate medical assistance.

4) Following ingestion

- Get medical aid immediately.
- If unconscious but breathing, never give anything by mouth.

5) Advice to physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

1) Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media
 - Large fire: Water spray/fog, regular foam (Suitable extinguishing media).
 - Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).
- Unsuitable extinguishing media
 - High-pressure water (Unsuitable extinguishing media).

2) Special hazards arising from the substance or mixture

- Pyrolytic product
 - No data available
- Risk of fire and explosion
 - Fire may produce irritating and/or toxic gases.
 - Some may burn but none ignite readily.
 - May ignited from heat, friction or contamination.
- Other
 - May cause toxic effects if inhaled.

3) Special protective equipment for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
- Contact may cause burns to skin and eyes.
- Runoff may cause pollution.
- Substance may be transported hot.
- Move containers from fire area if you can do it without risk.
- Protective equipment and precautions to be worn in case of fire: Wear a breathing mask if possible

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- Prevent dust cloud.
- Do not touch or walk through spilled material.
- Please note that materials and conditions to be avoided.
- Stop leak if you can do it without risk.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

2) Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

3) For cleaning up

- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

7. HANDLING AND STORAGE

1) Precautions for safe handling

- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)
- Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.
- Use adequate machine for prevention when package handling.
- CAUTION: High temperature.
- Handling refer to engineering control/personal protection section.
- Please note that materials and conditions to be avoided.

2) Conditions for safe storage (including any incompatibilities)

- Store in a cool/low-temperature, well-ventilated {dry} place {away from heat and ignition sources}
- Store containers: AVOID the place where can be damage and contamination.
- Store in a dry place. Store in a closed container.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
N,N'-ethylenedi(stearamide)	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
ABS resin	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

2) Appropriate engineering controls

- Make sure you have the right exhaust and ventilation in the workplace.
- Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

3) Personal protection equipment

- Respiratory protection
 - If there is a direct contact or exposure, wear a certified appropriate respiratory protection.
- Eye protection
 - Wear an appropriate security diameter.
 - Provide emergency showers and eyewash.
- Hand protection
 - Wear Non-moisture permeable chemical resistance protective gloves(latex, nitrile rubber, PVC) for prevent skin contact.
- Body protection
 - Wear a protective gloves/protective clothes/security diameter/security surface/earplugs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	pellet
Physical state	Solid
Colour	No data available
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability(solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Solubility(ies)	No data available
Vapour density	No data available
Relative density	No data available
n-octanol/water partition coefficient	No data available
Auto ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight(mass)	No data available

10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity
 - May cause toxic effects if inhaled.
 - Fire may produce irritating and/or toxic gases.
 - Some may burn but none ignite readily.
 - Stable under normal temperatures and pressures.
- 2) Conditions to avoid
 - Ignition source(heat, spark, flame, etc.).
- 3) Incompatible materials
 - Combustibles.
- 4) Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

1) Exposure route information

- Inhalation
 - Not applicable
 - Inhalation through respiratory tract : No data available
- Skin Contact
 - Following skin contact: No data
- Eye Contact
 - After eye contact: No data
 - Eye contact : No data available
- Ingestion
 - After ingestion: No data
 - Ingestion by mouth: No data available

2) Health hazard information

- Acute toxicity
 - Acute toxicity(Oral) PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : LD50> 5000 mg / kg, Source: IUCLID
 - ABS resin : No data available
 - Acute toxicity(Dermal) PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : LD50> 2000 mg / kg, Source: IUCLID
 - ABS resin : No data available
 - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
 - Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
 - Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Skin corrosion/irritation PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Serious eye damage/eye irritation PRODUCT : Not classified

- N,N'-ethylenedi(stearamide) : No data available
- ABS resin : No data available
- Respiratory sensitization PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Skin sensitization PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Carcinogenicity PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Germ cell mutagenicity PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : In vitro / audio, Source: IUCLID
 - ABS resin : No data available
- Reproductive toxicity PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Specific target organ toxicity single exposure PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Specific target organ toxicity repeated exposure PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- Aspiration hazard PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

- Fish>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : LC50 11.5 mg / ℓ 96 hr Pimephales promelas, Source: ECOTOX
- Crustacea>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available

- Aquatic algae>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- 2) Persistence and degradation
 - n-octanol water partition coefficient>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : 13.98 log Kow (@ 25 °C), Source: ECHA
 - ABS resin : No data available
 - Degradation>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
 - Biodegradation>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : 15 (%) 28 day, Source: IUCLID
 - ABS resin : No data available
- 3) Bioaccumulative potential>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- 4) Mobility in soil>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available
- 5) Other adverse effects>PRODUCT : Not classified
 - N,N'-ethylenedi(stearamide) : No data available
 - ABS resin : No data available

13. DISPOSAL CONSIDERATIONS

- 1) Disposal methods
 - Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.
- 2) Precautions (including disposal of contaminated container of package)
 - Use a certified waste disposal company.
 - Discuss it according to waste regulation.
 - Empty containers may explode and residues can be ignited when pressured, cut, weld, heated.
 - Empty containers recycled under environmental laws.
 - Do not allow spill material to enter sewers, storm water drains, soil, etc.
 - Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

14. TRANSPORT INFORMATION

- 1) UN No. : Not applicable
 - 2) Proper shipping name : Not applicable
 - 3) Class or division : Not applicable
 - 4) Packing group : Not applicable
 - 5) Marine pollutant : Not applicable
 - 6) Special safety response for transportation or transportation measure :
 - Emergency measures in case of fire : Not applicable
 - Emergency measures in the effluent : Not applicable
- ADR
- Tunnel restriction code : Not applicable
- IMDG
- Marine pollutant : Not applicable
- Air transport(IATA)
- UN No. : Not applicable
 - Proper shipping name : Not applicable
 - Class or division : Not applicable
 - Packing group : Not applicable

15. REGULATORY INFORMATION

- 1) Occupational Safety and Health Act in Korea
PRODUCT : Not applicable
- 2) Toxic Chemical Control Act in Korea
PRODUCT : Not applicable
- 3) Safety Control of Dangerous Substances Act in Korea
PRODUCT : Not applicable
- 4) Wastes Control Act in Korea
PRODUCT : Designated waste

-In case of disposal, it must be disposed of in accordance with Article 13 of the Waste Management Act.

- 5) Other regulations in KOREA and Abroad regulations
 - ETC regulation
 - Act on the registration and evaluation of chemicals PRODUCT : Existing Commercial Chemical Substances
 - N,N'-ethylenedi(stearamide) : Existing Commercial Chemical Substances
 - ABS resin : Existing Commercial Chemical Substances

16. OTHER INFORMATION

1) Reference

- CERI
- Directivw 87/302/EEC, GLP . IUCLID
- ECHA
- ECHA registration data
- ECOTOX
- EU IUCLID
- IUCLID
- Ministry of Employment and Labor
- Ministry of Environment
- NCIS Existing chemical safety test
- OECD SIDS
- OECD SIDS, EU IUCLID
- OECD TG 301 C . OECD SIDS
- OECD TG404, OECD SIDS
- OECD TG423, Ministry of Environment Existing Chemical Safety Test(2001-2004)

2) Print date : 2023-03-03

3) Revision date

- Revised date count : 0
- Last revised date : 2023-03-03
- Last revised history :

4) Other