LG Chem

Issuing(Revision) Date : 06/01/2024
Version number : 0

Safety Data Sheet(SDS)

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

1.1 Product identifier

Product identifier : ASA LI913

Other means of identification : N/A

UFI Code. : N/A

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

Relevant identified uses : 48.Others (Manufacture of plastics products))

Uses advised against : Used only recommended uses

1.3 Details of the supplier of the safety data sheet

○ Company name [Manufacturer]

Name : LG Chem Ohio Petrochemical, Inc.

Address : 310 Rayann Pkwy, Ravenna, OH-44266

Emergency number : 1-800-424-9300

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008

- Not classified

2.2 Label elements

Hazard pictogram

The product does not require a hazard warning label in accordance with GHS criteria.

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Signal word

- NONE

Hazard statements

- Not required

Precautionary statements

-Not required

2.3 Other hazards

- According to Annex XIII of (EC) No 1907/2006, the substance does not meet PBT or vPvB criteria.
- According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- The substance is not listed in Article 59
- No other hazards have been identified

SECTION 3. Composition/information on ingredients

3.1. Substances

Not applicable

3.2 . Mixtures

Substance name	CAS No. EC No. EU REACH No.	Classification	SCL M-Factor	ATE	PCT(wt%)
2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile	26299-47-8 No data available No data available	No data available	No data available No data available	No data available	90 ~ 99.9
Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate	2082-79-3 218-216-0 No data available	No data available	No data available No data available	No data available	< 1
Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester	52829-07-9 258-207-9 No data available	No data available	No data available No data available	Acute toxicity(Inhalation:Dust/mist) : 500mg/L	< 1

※ Classification according Regulation(EC) No. 1272/2008 [EU CLP]

SCL

M-Factor

AT : the acute toxicity estimate

SECTION 4. First aid measures

4.1 Description of first aid measures

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

○ 4.1.2 Following skin contact
- Get medical aid immediately.
- In case of contact with material, immediately flush skin with running water for at least 15 minutes.
- Launder contaminated clothing and shoes before re-use.
- Remove and isolate contaminated clothing and shoes.

○ 4.1.3 Following inhalation
- Administer oxygen if breathing is difficult.
- Give artificial respiration if victim is not breathing.
- Move to fresh air.
- Seek immediate medical assistance.

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

4.2 Most important symptoms and effects, both acute and delayed

- No data available

4.3 Indication of any immediate medical attention and special treatment needed

- Do not apply drugs of the adrenaline ephedrine group.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5. Firefighting measures

5.1 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).

5.2 Special hazards arising from the substance or mixture(Hazardous combustion products)

- No data available

5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Move containers from fire area if you can do it without risk.
- Runoff may cause pollution.
- Substance may be transported hot.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

○ Emergency procedures
- Removal of ignition sources, provision of sufficient ventilation.

○ Protective equipment
- The wearing of suitable protective equipment to prevent any contamination of skin, eyes and personal clothing.

6.1.2 For emergency responders
- No data available

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

6.3.1 For containment
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

6.3.2 For cleaning up
- Clear spills immediately.
- Don't use a brush or compressed air for cleaning surfaces or clothing.

6.3.3 Other information
- No data available

6.4 Reference to other sections

- Section 8 (protective equipment), section 13 (disposal instructions)

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SECTION 7. Handling and storage

7.1 Precautions for safe handling

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

7.2 Conditions for safe storage, including any incompatibilities

- Choose a place that can be protected from strong oxidizers and acid.
- Drum Handling: Must work at safe place., Loading more than 3 stack is prohibited.
- Store containers: AVOID the place where can be damage and contamination.
- Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources

7.3 Specific end uses

- See section 1 for recommended use.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Components	Occupational exposure	ACGIH regulations	Biological limit values	DNEL/DMEL	PNEC-Values
2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile	TWA : Not applicable	TWA : Not applicable	No data available	Not applicable	Not applicable
	STEL : Not applicable	STEL : Not applicable			
Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate	TWA : Not applicable	TWA : Not applicable	No data available	Not applicable	Not applicable
	STEL : Not applicable	STEL : Not applicable			
Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester	TWA : Not applicable	TWA : Not applicable	No data available	Not applicable	Not applicable
	STEL : Not applicable	STEL : Not applicable			

* The ACGIH has a TLV-TWA of 10 mg/m3 (as total dust) for particulates having a quartz content of less than 1 percent.

8.2 Exposure controls

8.2.1 Appropriate engineering controls
- No data available

8.2.2 Individual protection measures, such as personal protective equipment

○ Eye/face protection
- No data available

○ Respiratory protection
- No data available

○ Skin protection

(i) Hand protection
- No data available

(ii) Other
- No data available

○ Thermal hazards
- Wear a protective gloves/protective clothes/security diameter/security surface/earplugs.

8.2.3 Environmental exposure controls
- Ensure not to cause environmental pollution by discharging into rivers or other waterways.

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SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	solid	No data available
Relative Vapour density	No data available	No data available
Density/Relative density	1.07	No data available
Kinematic viscosity	No data available	No data available
Decomposition temperature	No data available	No data available
Auto ignition temperature	No data available	No data available
Partition coefficient(n-octanol/water)	No data available	No data available
Solubility	No data available	No data available
Vapour pressure	No data available	No data available
Upper/lower flammability or explosive limits	No data available	No data available
Flammability(solid, gas)	No data available	No data available
Flash point	No data available	No data available
Initial boiling point and boiling range	No data available	No data available
Melting point/freezing point	No data available	No data available
pH	No data available	No data available
Odour	No data available	No data available
Colour	No data available	No data available
Particle characteristics	No data available	No data available

9.2 Other information

9.2.1 Information with regard to physical hazard classes

No data available

9.2.2 Other safety characteristics

No data available

SECTION 10. Stability and reactivity

10.1 Reactivity

- Containers may explode when heated.
- Fire may produce irritating and/or toxic gases.
- May cause toxic effects if inhaled.
- Some may burn but none ignite readily.
- Stable under normal temperatures and pressures.

10.2 Chemical stability

- No data available

10.3 Possibility of hazardous reactions

- No data available

10.4 Conditions to avoid

- No data available

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- No data available

SECTION 11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

○Acute toxicity

●Acute toxicity(Oral) > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : LD50> 2000 ㎎ / ㎏ experimental species: Rat, Source: OECD TG423, Ministry of Environment Existing Chemical Safety Test(2001-2004)

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : LD50> 5000 ㎎ / ㎏ experimental species: Rat, (GE Specialty Chemicals)

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

●Acute toxicity(Dermal) > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : LD50> 2000 ㎎ / ㎏ experimental species: Rat, Source: OECD SIDS, EU IUCLID

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : LD50> 2000 ㎎ / ㎏ experimental species: Rabbit, (GE Specialty Chemicals)

●Acute toxicity(Inhalation:Gases) > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : LD50> 2000 ㎎ / ㎏ experimental species: Rabbit, (GE Specialty Chemicals)

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

●Acute toxicity(Inhalation:Vapours) > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

●Acute toxicity(Inhalation:Dust/mist) > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : LC50> 1.81 ㎎ / ℓ 4 hr experiment Species: Rat, Source: ECHA registration data

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : LC50 500 ㎎ / ㎥ 4 hr experimental species: Rat, Source: National Library of Medicine(NLM)

○Skin corrosion/ irritation > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : There is only a very slightirritation: Rabbit, recovered within 7 days, Source: OECD TG404, OECD SIDS

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○Serious eye damage/ irritation > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : Irritation: test stimulation index:4/110, Source: EU IUCLID

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○Respiratory or skin sensitisation > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○Skin sensitization > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : Guinea Pig: 3 weeks 3 intradermal injection, using 20 animals, no emotional reaction, Source: OECD SIDS

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○Carcinogenicity > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○ Germ cell mutagenicity > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : Reverse mutation test: negative,TA98, TA100, TA1535, TA1537, voice over chromosomes with or without metabolic activationsystem applied in a used WP2uvrA hyayeo 4.1-1000μg / plate density test: Metabolic activity invoice, 10-100μg / ml with or without speech-based application-Dominant lethal in vivo assay:voice, NMRI mouse: 1000-3000 mg / kg bw Somatic mutation assay: voice, chinese hamster:500-2000 mg / kg bw, Source: OECD SIDS, EU IUCLID
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable
- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○ Reproductive toxicity > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : Rat: 2-generation reproductivetoxicity study Reproductive toxicity: NOAEL 315mg / kg bw / day (up to a concentrationprobably has no effect), NOAEL for pup development: reduced newborn (96-111mg / kg bw /day's survival and growth at the highest concentration), Source: OECD SIDS

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○ Specific target organ toxicity (single exposure) > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○ Specific target organ toxicity (repeated exposure) > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : rat (dust / mist inhalation, 21 days 5 days, 6 hours of exposure to one day per week): NOAEL> 0.543mg / L (EU IUCLID), Rat: NOEL 30mg / kg bw / day 28 day 0, 5, 30 , gavage result of exposure to 100 and 300 mg 100, 300mg / kg bw / day group weight gain between the male 100, increases in Microsomal enzymes group 300 and the female 300mg / kg bw / day group, Source: OECD SIDS
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available
- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

○ Aspiration hazard > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available
- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

11.2. Information on other hazards

○ 11.2.1. Endocrine disrupting properties

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.
- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

○ 11.2.2. Other information

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No other hazards have been identified
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No other hazards have been identified
- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No other hazards have been identified

SECTION 12. Ecological information

12.1 Toxicity > PRODUCT : Not classified

●Fish

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : LC50 100 ㎎ / ℓ 96 hr Lepomis macrochirus, Source: NCIS Existing chemical safety test

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : LC50 4.3 ㎎ / ℓ 96 hrOncorhynchus mykiss (solubility <1mg / L), Source: OECD Screening Information DataSet(http://cs3-hq.oecd.org/scripts/hpv/)

●Crustaceans

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : EC50 100 ㎎ / ℓ 24 hr Daphniamagna, Source: NCIS Existing chemical safety test

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

●Aquatic Algae

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : ErC50> 30 ㎎ / ℓ 72 hrScenedesmus subspicatus, Source: Directivw 87/302/EEC, GLP . IUCLID

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : EC50 1.9 ㎎ / ℓ 96 hrScenedesmus subspicatus (solubility <1mg / L), Source: OECD Screening Information DataSet(http://cs3-hq.oecd.org/scripts/hpv/)

12.2 Persistence and degradability

●Persistence

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : 13.41 log Kow ((estimated))
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : (Not applicable)
- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : 6.50 log Kow (estimated)

●Degradability

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

●Biodegradation

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : 39 (%) ~ 21 (%) 28 day, Source: OECD TG 301 C . OECD SIDS
- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available
- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : ~ 10 24 (%) (%) 28 day (biodegradable), Source: OECD Screening Information Data Set(http://cs3-hq.oecd.org/scripts/hpv/)

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12.3 Bioaccumulative potential

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : ≤12 (carp (Cyprinus carpio) 6 Day 12 than at 0.05mg / L), Source: CERI

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : 638 (solubility <1mg / L), Source: Quantitative Structure Activity Relation(QSAR)

12.4 Mobility in soil

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No dataavailable

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

12.5 Results of PBT and vPvB assessment

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : NOT_APPLICABLE

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : NOT_APPLICABLE

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : NOT_APPLICABLE

12.6 Endocrine disrupting properties

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : According to Regulation(EU) 2017/2100 and 2018/605, the

12.7 Other adverse effects > PRODUCT : Not classified

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate : No data available

- 2-Propenoic acid butyl ester polymer with ethenylbenzene and 2-propenenitrile : No data available

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester : No data available

SECTION 13. Disposal considerations

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal

- Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste codes / waste designations according to LoW

- No data available

13.1.2 Waste treatment-relevant information

- Disposal according to local regulations.

13.1.3 Sewage disposal-relevant information

- Disposal according to local regulations and avoid release to the environment.

13.1.4 Other disposal recommendations

SECTION 14. Transport information

14.1 UN number or ID 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 precaution for user

Emergency measures in case of fire : Not applicable

Emergency measures in the effluent : Not applicable

14.7 Maritime transport in bulk according to IMO instruments

- **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

SECTION 15. Regulatory information

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

●ETC regulation - EU. Chemicals & Articles Subject to Export Ban: Annex V (Art. 15), Regulation 649/2012/EU, as amended by Regulation 2022/643, OJ L 118, 20 April 2022
- Not applicable

●ETC regulation - EU. Directive 2012/18/EU on major accident hazards involving dangerous substances, Annex I, OJ (L 197)1, 24 July 2012
- Not applicable

●ETC regulation - EU. F-Gases Subject to Emission Limits/Reporting (Annexes I, II, III), Regulation (EU) 2024/573 on Fluorinated Greenhouse Gases, 20 February 2024
- Not applicable

●ETC regulation - EU. GHS Classification. CLP Regulation (EC) No 1272/2008, Annex VI, Table 3, Harmonized List of Hazardous Substances, as amended by Regulation (EU) 2024/197, OJ L of 5 January 2024
- Not applicable

●ETC regulation - EU. Ozone Depleters, Annex I to Regulation 2024/590 on Substances that Deplete the Ozone Layer, 20 February 2024
- Not applicable

●ETC regulation - EU. Polluting Substances: Annex II, Directive 2010/75/EU on Industrial Emissions (IPPC), 17 December 2010
- Not applicable

●ETC regulation - EU. REACH, Annex XIV, Substances Subject to Authorization (Authorization List), as amended through Regulation (EU) 2022/586, 11 April 2022

- Not applicable

●ETC regulation - EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended by Regulation (EU) 2023/2055, OJ L 238, 27 September 2023

- Not applicable

●ETC regulation - EU. REACH: Candidate List of Substances of Very High Concern for Authorization (SVHC) (last inclusion as of 23 January 2024)

- Not applicable

●ETC regulation - EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs)

(recast), 25 June 2019, as amended by Commission Delegated Regulation (EU) 2023/1608, OJL 198, 8 August 2023

- Not applicable

●ETC regulation - EU. Substances that Deplete the Ozone Layer (Annex II) Regulation (EU) 2024/590, 20 February 2023

- Not applicable

●Global Inventory - EU. European Inventory of Existing Commercial Chemical Substances (EINECS)

- Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester

- Octadecyl 3-(3,5-di-t-butyl-4-hydroxy phenyl) propionate

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out.

SECTION 16. Other information

16.1 Key literature references and sources for data

- CERI
- Ministry of Environment
- Ministry of Environment Existing Chemical Safety Test
- NCIS Existing chemical safety test
- National Library of Medicine(NLM)
- OECD SIDS
- OECD SIDS, EU IUCLID
- OECD Screening Information Data Set(http://cs3-hq.oecd.org/scripts/hpv/)
- OECD TG 301 C . OECD SIDS
- OECD TG404, OECD SIDS
- OECD TG423, Ministry of Environment Existing Chemical Safety Test(2001-2004)
- Directivw 87/302/EEC, GLP . IUCLID
- Quantitative Structure Activity Relation(QSAR)
- SIDS
- ECHA
- ECHA registration data

- EPIWIN
- EU CLP
- EU IUCLID
- IUCLID
- International Uniform ChemicaL Information Database(IUCLID)(http://ecb.jrc.it/esis)

16.2 Issuing date : 06/01/2024

16.3 Indication of changes

Revision number : 0

Revision date : 06/01/2024

Revision history : -

16.4 Abbreviations and acronyms

+135-3858-6433 (GuangDong)
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