

Last revised date : 2022-12-02

PCN No. :

## Safety Data Sheet(SDS)

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

- 1) Product identifier : ABS AF366A, AF365B and AF367C
- 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 :
  - Company name [Distributor]  
Company : LG Chem Europe GmbH  
Address : Alfred-Herrhausen-Allee 3-5 D-65760 Eschborn, Germany  
  
Emergency number : +49-69-710-445-114

### 2. HAZARD IDENTIFICATION

- 1) Hazard classification
  - Carcinogenicity Category 2

- 2) Allocation label elements

Hazard pictograms



- WARNING

Hazard statements

H351 Suspected of causing cancer

#### Precautionary statements

- Prevention
  - P201 Obtain special instructions before use.
  - P202 Do not handle until all safety precautions have been read and understood.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
- Response
  - P308+P313 If exposed or concerned: Get medical advice/attention.
- Storage
  - P405 Store locked up.
- Disposal
  - P501 Dispose of contents and containers according to the legislation of the waste

#### 3) Other hazards

- o Product NFPA Level

Health	Flammability	Reactivity
0		0

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

### 3. Composition/Information on ingredients

Components	EU REACH No.	CAS No.	PCT(wt%)
ABS resin		9003-56-9	70 ~ 80
Flame retardant			10 ~ 20
Diantimony trioxide		1309-64-4	1 ~ 5
Lubricant			1 ~ 5
Heat stabilizers			Max 1.0
Impact modifier			1 ~ 5

### 4. FIRST AID MEASURES

- 1) Following eye contact
  - In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
  - Seek immediate medial assistance.
- 2) Following skin contact
  - For minor skin contact, avoid spreading material on unaffected skin.
  - In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
  - Remove and isolate contaminated clothing and shoes.
  - Seek immediate medial assistance.
- 3) Following inhalation
  - Administer oxygen if breathing is difficult.
  - Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
  - Keep victim warm and quiet.

- Move to fresh air.
- 4) Following ingestion
  - Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
  - Seek immediate medical assistance.
- 5) Advice to physician
  - Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
  - Exposures require specialized first aid with contact and medical follow-up .

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## 5. FIRE FIGHTING MEASURES

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- 1) Suitable (and unsuitable) extinguishing media
  - o Suitable extinguishing media
    - CO2.
    - Dry chemical.
    - Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
    - Use dry sand or earth to smother fire.
    - Water spray.
  - o Unsuitable extinguishing media
    - Direct water.
- 2) Special hazards arising from the substance or mixture
  - o Pyrolytic product
    - Can decompose at high temperatures forming toxic gases.
    - Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
  - o Risk of fire and explosion
    - Containers may explode when heated.
    - Some may burn but none ignite readily.
  - o Other
    - No data available
- 3) Special protective equipment for firefighters
  - Dike fire-control water for later disposal; do not scatter the material.
  - Evacuate area and fight fire from a safe distance.
  - 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: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
  - Fire involving Tanks: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
  - 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.
  - Rescuers should put on appropriate protective gear.
  - Substance may be transported in a molten form.

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## 6. ACCIDENTAL RELEASE MEASURES

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- 1) Health considerations and protective equipment
  - Clean up spills immediately, observing precautions in Protective Equipment section.
  - Cover with plastic sheet to prevent spreading.
  - Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
  - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
  - Please note that materials and conditions to be avoided.
  - Stop leak if you can do it without risk.
- 2) Environmental precautions
  - Prevent entry into waterways, sewers, basements or confined areas.
- 3) For cleaning up
  - Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
  - Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.
  - Absorb the liquid and scrub the area with detergent and water.

## 7. HANDLING AND STORAGE

- 1) Precautions for safe handling
  - Avoid breathing vapors from heated material.
  - Do not enter storage area unless adequately ventilated.
  - Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
  - Handling refer to engineering control/personal protection section.
  - Loosen closure cautiously before opening.
  - Please note that materials and conditions to be avoided.
  - Use care in handling/storage.
- 2) Conditions for safe storage (including any incompatibilities)
  - Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- 1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
ABS resin	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Flame retardant	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Diantimony trioxide	TWA : Not applicable STEL : Not applicable	TWA : A2mg/m3 STEL : Not applicable	Not applicable
Lubricant	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Heat stabilizers	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Impact modifier	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

- 2) Appropriate engineering controls
  - Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
- 3) Personal protection equipment
  - o Respiratory protection

- If high frequency of use or exposure, wear air respirator.
- Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.
- o Eye protection
  - Wear suitable protective goggles and face shields.
- o Hand protection
  - Wear suitable protective gloves.
- o Body protection
  - Wear suitable protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	No data available
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

- Can decompose at high temperatures forming toxic gases.
- Containers may explode when heated.
- Fire may produce irritating, corrosive and/or toxic gases.
- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Some may burn but none ignite readily.

### 2) Conditions to avoid

- Ignition source(heat, spark, flame, etc.).
- 3) Incompatible materials
  - Combustibles, reducing material.
- 4) Hazardous decomposition products
  - Corrosive/toxic fume.
  - Irritating, corrosive and/or toxic gas.

## 11. TOXICOLOGICAL INFORMATION

### 1) Exposure route information

- Inhalation
  - After inhalation: No data
- Skin Contact
  - Following skin contact: No data
- Eye Contact
  - After eye contact: No data
- Ingestion
  - After ingestion: No data

### 2) Health hazard information

- Acute toxicity
  - Acute toxicity(Oral) PRODUCT : Not classified
    - ABS resin : No data available
    - Impact modifier : LD50> 5000 mg / kg experimental species: Rat, Source: National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>)
    - Flame retardant : No data available
    - Diantimony trioxide : fatal dose> 7500 mg / kg experimental species: Rat, (the route of administration: Diet), Source: ECHA
    - Lubricant : LD50> 5000 mg / kg, Source: IUCLID
    - Heat stabilizers : LD50> 2000 mg / kg experimental species: Rat, Source: OECD TG423, 환경부 기존화학물질안전성시험(2001-2004)
  - Acute toxicity(Dermal) PRODUCT : Not classified
    - ABS resin : No data available
    - Impact modifier : No data available
    - Flame retardant : No data available
    - Diantimony trioxide : LD50> 8300 mg / kg experimental species: Rabbit, Source: ECHA
    - Lubricant : LD50> 2000 mg / kg, Source: IUCLID
    - Heat stabilizers : LD50> 2000 mg / kg experimental species: Rat, Source: OECD SIDS, EU IUCLID
  - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
    - ABS resin : No data available
    - Impact modifier : No data available
    - Flame retardant : No data available
    - Diantimony trioxide : No data available
    - Lubricant : No data available
    - Heat stabilizers : No data available
  - Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified

- ABS resin : No data available
- Impact modifier : No data available
- Flame retardant : No data available
- Diantimony trioxide : No data available
- Lubricant : No data available
- Heat stabilizers : No data available
- Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : LC50> 5.2 mg / l 4 hr experiment Species: Rat, (female / male, OECD TG 403, GLP), Source: ECHA
  - Lubricant : No data available
  - Heat stabilizers : LC50> 1.81 mg / l 4 hr experiment Species: Rat, Source: ECHA 등록자료
- Skin corrosion/irritation PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : No irritation, albino Rabbits, Source: ECHA
  - Lubricant : No data available
  - Heat stabilizers : There is only a very slight irritation: Rabbit, recovered within 7 days, Source: OECD TG404, OECD SIDS
- Serious eye damage/eye irritation PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : Not irritant, Rabbit, corneal opacity (0), Iris (0), conjunctival hyperemia (0.4), conjunctival edema (0), OECD TG 405, Source: ECHA
  - Lubricant : No data available
  - Heat stabilizers : Irritation: test stimulation index: 4/110, Source: EU IUCLID
- Respiratory sensitization PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : No data available
  - Lubricant : No data available
  - Heat stabilizers : No data available
- Skin sensitization PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : No sensitization, Guinea pig, GLP, female, guinea pig maximization test (GMPT): dose levels: 2 ml of a 50% (w / w) suspension in vehicle, reaction: 0/20, OECD TG 406, Source: ECHA
  - Lubricant : No data available

- Heat stabilizers : Guinea Pig: 3 weeks 3 intradermal injection, using 20 animals, no emotional reaction, Source: OECD SIDS
- Carcinogenicity PRODUCT : Category 2
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : 2B (IARC)  
Corresponds (OSHA)  
A2 (ACGHI)  
Special materials management (Korea Occupational Safety and Health Act)  
1B (antimony trioxide (production)), 2 (antimony trioxide (handling and use of water)) (Korea Ministry of Employment and Labor)  
2 (EU CLP), Source: IARC, OSHA, ACGHI, Korea Occupational Safety and Health Act, Korea Ministry of Employment and Labor, EU CLP
  - Lubricant : No data available
  - Heat stabilizers : No data available
- Germ cell mutagenicity PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : In vitro gene using my mammalian cell culture mutagenicity tests results, voice, regardless of the metabolic activation system existence (OECD Guideline 476) Voice, regardless of the return using the in vitro microbial mutagenesis test, metabolic activation system existence (OECD Guideline 471) in vitro regardless of the chromosomal abnormalities in mammalian culture test using the resulting cell, metabolic activity-based or without voice, (OECD Guideline 473) in vivo test for chromosomal abnormalities using mammalian erythrocytes result, speech. (OECD Guideline 474) results, negative Chromosomal Aberration Test Using in vivo mammalian bone marrow cells. (OECD Guideline 475, GLP) in vivo unscheduled DNA synthesis using the mammalian liver (UDS) test results, the voice. (OECD Guideline 486), Source: ECHA
  - Lubricant : In vitro / audio, Source: IUCLID
  - Heat stabilizers : Reverse mutation test: negative, TA98, TA100, TA1535, TA1537, voice over chromosomes with or without metabolic activation system applied in a used WP2uvrA hyayeo 4.1-1000  $\mu\text{g}$  / plate density test: Metabolic activity in voice, 10-100 $\mu\text{g}$  / 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
- Reproductive toxicity PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : There does not affect the quality or the period of estrus females in the male sperm. No histopathological evaluation of reproductive tissues. 50, 100 mg / kg i.p. Search after toxic (lethal) of high level is observed, in the intake rats range check developmental toxicity study using the GLP antimony trioxide, NOEC (maternal toxicity) = Evaluated a 6.07 mg / m<sup>3</sup>, the highest dose, NOEC (developmental toxicity)> 6.07 mg / m<sup>3</sup>, rat, OECD TG 414, GLP, Source: ECHA
  - Lubricant : No data available
  - Heat stabilizers : Rat: 2-generation reproductive toxicity study Reproductive toxicity: NOAEL 315mg / kg bw / day (up to a concentration probably 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

- Specific target organ toxicity single exposure PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : Oral: (1) No toxic effects / 2 Microscopic examination no pathological damage associated with any organic substrate in the transdermal after single application: the significant local reactions or overt signs of systemic toxicity were not observed. Inhalation: During the period after the exposure step and exposure no clinical signs / an animal makes many enemies appear gray lesions (0.1-0.2 mm diameter) to the macroscopic changes in the lung (rat / male / female / OECD TG 403 / GLP), Source: ECHA
  - Lubricant : No data available
  - Heat stabilizers : No data available
- Specific target organ toxicity repeated exposure PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : Orally (sub-chronic), according to repeated twice oral administration study diantimony trioxide can be toxic that, NOAEL (liver toxicity) = 1686 mg / kg / day Sent, Rat inhalation (repeat) between the: harmful effects has not been materialized No , miniature swine, Source: ECHA
  - Lubricant : No data available
  - Heat stabilizers : 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
- Aspiration hazard PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : No data available
  - Lubricant : No data available
  - Heat stabilizers : No data available

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## 12. ECOLOGICAL INFORMATION

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### 1) Aquatic toxicity

- Fish>PRODUCT : Not classified
  - ABS resin : LC50 11.5 mg / ℓ 96 hr Pimephales promelas, Source: ECOTOX
  - Impact modifier : No data available
  - Flame retardant : No data available
  - Diantimony trioxide : LC50 14.4 mg / ℓ 14.4 mg / ℓ 96 hr Pimephales promelas , (exponential manner, fresh water), Source: ECHA
  - Lubricant : No data available
  - Heat stabilizers : LC50 100 mg / ℓ 96 hr Lepomis macrochirus, Source: NCIS 기존화학물질 안전성 시험
- Crustacea>PRODUCT : Not classified
  - ABS resin : No data available
  - Impact modifier : No data available
  - Flame retardant : No data available

- Diantimony trioxide : LC50 1.77 mg / l 1.77 mg / l 96 hr , (exponential manner, fresh water), Source: ECHA
- Lubricant : No data available
- Heat stabilizers : EC50 100 mg / l 24 hr Daphnia magna, Source: NCIS 기존화학물질 안전성시험

● Aquatic algae>PRODUCT : Not classified

- ABS resin : No data available
- Impact modifier : No data available
- Flame retardant : No data available
- Diantimony trioxide : EC50> 36.6 mg / l 72 hr , (OECD TG 201, ISO 8692 (Water Quality - Fresh Water Algal Growth Inhibition Test with Scenedesmus subspicatus and Selenastrum capricornutum), exponential expression, fresh water), Source: ECHA
- Lubricant : No data available
- Heat stabilizers : ErC50> 30 mg / l 72 hr Scenedesmus subspicatus, Source: Directivw 87/302/EEC, GLP . IUCLID

2) Persistence and degradation

● n-octanol water partition coefficient>PRODUCT : Not classified

- ABS resin : No data available
- Impact modifier : No data available
- Flame retardant : 12.111 log Kow, Source: Chemsrsc
- Diantimony trioxide : -0.306 -0.306 01 01
- Lubricant : 13.98 log Kow (@ 25 °C), Source: ECHA
- Heat stabilizers : 13.41 log Kow ((estimated))

● Degradation>PRODUCT : Not classified

- ABS resin : No data available
- Impact modifier : No data available
- Flame retardant : No data available
- Diantimony trioxide : No data available
- Lubricant : No data available
- Heat stabilizers : No data available

● Biodegradation>PRODUCT : Not classified

- ABS resin : No data available
- Impact modifier : No data available
- Flame retardant : No data available
- Diantimony trioxide : (Biological deformable), Source: HSDB
- Lubricant : 15 (%) 28 day, Source: IUCLID
- Heat stabilizers : 39 (%) ~ 21 (%) 28 day, Source: OECD TG 301 C . OECD SIDS

3) Bioaccumulative potential>PRODUCT : Not classified

- ABS resin : No data available
- Impact modifier : No data available
- Flame retardant : No data available
- Diantimony trioxide : 16000 BCF 16000 BCF , (BCF), Source: ECHA
- Lubricant : No data available
- Heat stabilizers : ≤12 (carp (Cyprinus carpio) 6 Day 12 than at 0.05mg / L), Source: CERI

4) Mobility in soil>PRODUCT : Not classified

- ABS resin : No data available
- Impact modifier : No data available
- Flame retardant : No data available
- Diantimony trioxide : , (Kd, 25 °C, pH: 5.73), Source: ECHA
- Lubricant : No data available
- Heat stabilizers : No data available

5) Other adverse effects>PRODUCT : Not classified

- ABS resin : No data available

- Impact modifier : No data available
- Flame retardant : No data available
- Diantimony trioxide : No data available
- Lubricant : No data available
- Heat stabilizers : No data available

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### 13. DISPOSAL CONSIDERATIONS

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#### 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)

- Do not allow spill material to enter sewers, storm water drains, soil, etc.

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### 14. TRANSPORT INFORMATION

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#### 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

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### 15. REGULATORY INFORMATION

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

- Diantimony trioxide

- Lubricant

- Heat stabilizers

- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances (L286, Vol. 52, 31 October 2009)

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. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), 25 June 2019, as amended by Regulation 2021/277, 23 February 2021

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 Reg 2021/2030/EU, 22 Nov 2021

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) 2022/692, OJ L 129, 3 May 2022

- Diantimony trioxide

- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances (L286, Vol. 52, 31 October 2009)

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. 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. 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. F-Gases Subject to Emission Limits/Reporting (Annexes I, II), Regulation 517/2014/EU on FGGs, 20 May 2014

Not applicable

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## 16. OTHER INFORMATION

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### 1) Reference

- CERI
- Chemsrsc
- Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)
- Directivw 87/302/EEC, GLP . IUCLID
- ECHA
- ECHA 등록자료
- ECOTOX
- EU CLP
- EU IUCLID
- HSDB
- IUCLID
- NCIS 기준화학물질 안전성 시험
- NCIS 기준화학물질 안전성시험

- National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>)
- OECD SIDS
- OECD SIDS, EU IUCLID
- OECD TG 301 C . OECD SIDS
- OECD TG404, OECD SIDS
- OECD TG423, 환경부 기준화학물질안전성시험(2001-2004)
- The ECOTOXicology database (ECOTOX)([http://cfpub.epa.gov/ECOTOX/quick\\_query.htm](http://cfpub.epa.gov/ECOTOX/quick_query.htm))

2) Print date : 2022-12-02

3) Revision date

- o Revised date count : 0
- o Last revised date : 2022-12-02
- o Last revised history :

4) Other