

SAFETY DATA SHEET Version: R0001.0001 Date of issue: 2020-10-13 According to OSHA Hazcom Standard 29 CFR 1910.1200 Revision date: Not applicable ABS AF366A Change List:

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1. IDENTIFICATION

A. Product name

- ABS AF366A

B. Recommended use and restriction on use

- General use : Manufacture of plastic products
 - Restriction on use : Used for only recommended uses.

C. Manufacturer / Supplier / Distributor information

o Manufacturer information

- Company name : LG Chem, Ltd.

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

- Dept. : FTR Project(Yeosu). Styrenics. Petrochemicals

- Telephone number : 82-61680-1679 - Emergency telephone number : 82-61680-1679

- Fax number

- E-mail address : mirmari@lgchem.com

o Supplier/Distributer information

- Company name : LG Chem, Ltd.

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

- Dept. : FTR Project(Yeosu). Styrenics. Petrochemicals

- Telephone number : 82-61680-1679 - Emergency telephone : 82-61680-1679

number

- Fax number :

- E-mail address : mirmari@lgchem.com

2. HAZARD IDENTIFICATION

A. GHS Classification

- Carcinogenicity : Category1B

B. GHS label elements

o Hazard symbols



o Signal words

- Danger

• Hazard statements

- H350 May cause cancer

o Precautionary statements

1) Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P281 Use personal protective equipment as required.

2) Response

- P308+P313 If exposed or concerned: Get medical advice/attention.

3) Storage

- P405 Store locked up.

4) Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

C. Other hazards which do not result in classification : (NFPA Classification)

○ NFPA grade (0 ~ 4 level)

- Health: 0, Flammability: 0, Reactivity: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene	-	9003-56-9	70.00 ~ 80.00
Diantimony trioxide	Antimony trioxide; Antimony(III) oxide; Antimony sesquioxide; Diantimony trioxide; Antimony oxide (Sb2O3); Antimony oxide (O3Sb2); Antimony oxide (SB2O3); Antimony oxide (SbO1.5);	1309-64-4	1.00 ~ 5.00
Secret	Secret	-	20 ~ 30

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Get medical attention immediately.

B. Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.
- Get medical attention immediately.
- Remove contaminated clothing, shoes and isolate.
- Wear gloves when washing the patient, and please avoid contact with contaminated clothing.

C. Inhalation contact

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.
- Get medical attention immediately.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

D. Ingestion contact

- Please be advised by doctor whether induction of vomit is demanded or not.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.
- If exposed or concerned, get medical attention/advice.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray

- Avoid use of water jet for extinguishing

B. Specific hazards arising from the chemical

- Not available

C. Special protective actions for firefighters

- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Avoid inhalation of materials or combustion by-products.
- Do not approach the tank surrounded by fire until it is extinguished.
- Use appropriate extinguishing measure suitable for surrounding fire.
- Wear appropriate protective equipment.
- Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures

- Wear proper personal protective apparatus as indicated in Section 8 and avoid skin contact and inhalation.
- Must work against the wind, let the upwind people to evacuate.
- Move container to safe area from the leak area.
- Cleanup and disposal under expert supervision is advised.
- Keep unauthorized people away, isolate hazard area and deny entry.

B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notify the central and local government if the emission reach the standard threshold.
- Disposal of waste shall be in compliance with the Wastes Control?Act
- Appropriate container for disposal of spilled material collected.
- Small liquid state spills: Appropriate container for disposal of spilled material collected.
- Put the spilled material in an appropriate containers and clean the contaminated area
- Spilled material should be treated as a potential risk of waste collected.

7. HANDLING AND STORAGE

A. Precautions for safe handling

- Avoid direct physical contact.
- Since emptied containers retain product residue(vapor, liquid, solid) follow all MSDS and label warnings even after container is emptied.
- Avoid contact with incompatible materials.
- Get the manual before use.
- Contaminated work clothing should not be allowed out of the workplace.

B. Conditions for safe storage, including any incompatibilities

- Check regularly for leaks.
- Store according to current laws and regulations
- Avoid direct sunlight.
- Please pay attention to incompatibilities materials and conditions to avoid.
- Keep sealed when not in use.
- By specifying a storage area for carcinogenic substances.
- Collected them in sealed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

o ACGIH TLV

- Not available

OSHA PEL

- [Diantimony trioxide]: 0.5mg/m3

B. Engineering controls

- Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

C. Individual protection measures, such as personal protective equipment

• Respiratory protection

- Respiratory protection is ranked in order from minimum to maximum.
- Consider warning properties before use.
- Dust, mist, fume-purifying respiratory protection
- Air-purifying respirator with high-efficiency particulate filtering
- Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying)
- Self-contained breathing apparatus with a corpuscle filter of high efficiency
- For Unknown Concentration or Immediately Dangerous to Life or Health: Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

○ Eye protection

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

Hand protection

- Wear appropriate glove.

o Skin protection

- Wear appropriate clothing.

o Others

- Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Solid(Pellets)
- Color	Not available
B. Odor	Not available
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	Not available
F. Initial Boiling Point/Boiling Ranges	Not available
G. Flash point	Not available
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	Not available
L. Solubility	Not available
M. Vapour density	Not available
N. Specific gravity(Relative density)	Not available
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	Not available
Q. Decomposition temperature	Not available
R. Viscosity	Not available
S. Molecular weight	Not available

10. STABILITY AND REACTIVITY

A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactions

- Hazardous Polymerization will not occur.

C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

D. Incompatible materials

- Not available

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- o (Respiratory tracts)
 - Not available
- o (Oral)
 - Not available
- (Eye·Skin)
 - Not available

B. Delayed and immediate effects and also chronic effects from short and long term exposure

- o Acute toxicity
 - * Oral
 - Product (ATEmix): >5000mg/kg
 - [Secret] : LD50 > 5000 mg/kg Rat
 - [Secret] : LD50 > 5000 mg/kg (IUCLID)
 - [Diantimony trioxide] : LD50 > 34600 mg/kg Rat(ECHA)
 - [Secret] : LD50 > 2000 mg/kg Rat (OECD TG423, NIER(2001-2004))
 - [Secret]: LD50 > 17000 mg/kg Rat (NLM)
 - * Dermal
 - Product (ATEmix): >5000mg/kg
 - [Secret] : LD50 > 2000 mg/kg (IUCLID)
 - [Diantimony trioxide]: LD50 >8000 mg/kg Guinea pig(ECHA)
 - [Secret] : LD50 > 2000 mg/kg Rat (OECD SIDS, EU IUCLID)
 - [Secret] : LD50 > 2000 mg/kg Rabbit (NLM)
 - * Inhalation
 - Product (ATEmix) : Not available
 - [Secret] : dust LC50 > 1.8 mg/ ℓ Rat(OECD SIDS, EU IUCLID)
- Skin corrosion/irritation
 - Not available
- $\circ \ Serious \ eye \ damage/irritation$
 - Not available
- Respiratory sensitization
 - Not available
- O Skin sensitization
 - Not available
- $\circ \ Carcinogenicity$
 - * IARC
 - [Diantimony trioxide] : Group 2B
 - [Secret] : Group 3
 - * OSHA
 - Not available
 - * ACGIH
 - [Diantimony trioxide] : A2
 - * NTP

- Not available

* EU CLP

- [Diantimony trioxide]: Carc. 2

o Germ cell mutagenicity

- Not available

o Reproductive toxicity

- Not available

o STOT-single exposure

- Not available

o STOT-repeated exposure

- Not available

Aspiration hazard

- Not available

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

o Fish

- [2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene]: LC50 11.5 mg/ ℓ 96 hr Pimephales promelas (ECOTOX)
- [Secret] : LC50 >1.5 mg/ℓ 96 hr Oryzias latipes (OECD TG 203, GLP, NITE)
- [Diantimony trioxide] : LC50 >833 $\,\mathrm{mg/\ell}$ 96 hr Pimephales promelas(U.S. EPA 1975)(EHCA)
- [Secret] : LC50 19.2 mg/ ℓ 96 hr Oryzias latipes (MOE existing chemicals safety test(2001-2004))
- [Secret]: LC50 = 37.79 mg/ ℓ 96 hr Lepomis macrochirus (ECOTOX)

o Crustaceans

- [Secret]: LC50 >1.2 mg/ ℓ 48 hr Daphnia magna (OECD TG 202, GLP, NITE)
- [Diantimony trioxide] : LC50 12.1 mg/ ℓ 48 hr Daphnia magna(EHCA)
- [Secret] : EC50 13.9 mg/ ℓ Daphnia magna (ECOTOX, MOE existing chemicals safety test(2001-2004))
- [Secret] : LC50 = 44.5 mg/ℓ 48 hr Daphnia magna (ECOTOX)

o Algae

- [Secret] : ErC50 >1.6 mg/ ℓ 48 hr Scenedesmus subspicatus (EbC50 > 1.6 mg/ ℓ 72 hr) (OECD TG 201, GLP, NITE)
- [Diantimony trioxide] : EC50 206 $\text{mg/}\ell$ 72 hr (Pseudokirchneriella subcapitata, OECD Guideline 201)(EHCA)
- [Secret]: ErC50 30 mg/l 72 hr Scenedesmus subspicatus (Directivw 87/302/EEC, GLP . IUCLID)

B. Persistence and degradability

o Persistence

- [Secret] : 13.98 log Kow (at 25 $\,^\circ\!\mathbb{C}$) (ECHA)
- [Diantimony trioxide]: log Kow -0.306 (Estimate)
- [Secret] : log Kow 13.41 (Estimate)

o Degradability

- Not available

C. Bioaccumulative potential

o Bioaccumulative potential

- [Diantimony trioxide] : BCF 1 (ECHA)
- [Secret]: BCF ≤ 12 (Carp(Cyprinus carpio) 6 weeks 0.05mg/L)(CERI)

o Biodegradation

- [Secret]: Biodegradability = 15 (%) 28 day (IUCLID)
- $[Diantimony\ trioxide]: Non-biodegradable (because\ there\ is\ no\ data\ for\ rapid\ degradability\ and\ bioaccumulation\ potential)$
- [Secret]: 21 ~ 39 (%) 28 day (OECD TG 301 C. OECD SIDS)

D. Mobility in soil

- Not available

E. Other adverse effects

- Not available

A. Disposal methods

- Stabilization and minimization treatment by incineration or similar method can be applied, if more than two kinds of designated wastes are in mixture state and it is impractical to separate them
- Oil water separation technology shall be applied as pre-waste treatment if it is applicable
- It shall be treated by incineration
- If you have a trouble in incinerating, reclaim in a landfill based on a management and takes care of wastes designated after smashing, cutting or melting it less than 15cm.

B. Special precautions for disposal

- Anyone with business license number who generates industrial wastes shall treat the waste by him/herself or by entrusting to the legal entities who treat the wastes, recycle the wastes of others or install and operate the waste treatment facilities according to the Wastes Control Act
- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

A. UN No. (IMDG)

- Not applicable

B. Proper shipping name

- Not applicable

C. Hazard Class

- Not applicable

D. IMDG Packing group

- Not applicable

E. Marine pollutant

- Not available
- Not applicable

F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- Air transport(IATA): Not subject to IATA regulations.

15. REGULATORY INFORMATION

A. National and/or international regulatory information

- o POPs Management Law
 - Not applicable
- o Information of EU Classification
 - * Classification
 - [Diantimony trioxide] : H351
- **Outs. Federal regulations**
 - * OSHA PROCESS SAFETY (29CFR1910.119)
 - Not applicable
 - * CERCLA Section 103 (40CFR302.4)
 - [Diantimony trioxide] : 453.599 kg 1000 lb
 - * EPCRA Section 302 (40CFR355.30)
 - Not applicable
 - * EPCRA Section 304 (40CFR355.40)
 - Not applicable
 - * EPCRA Section 313 (40CFR372.65)
 - [Diantimony trioxide] : Applicable
- $\circ \ Rotter dam \ Convention \ listed \ ingredients$
 - Not applicable
- o Stockholm Convention listed ingredients

- Not applicable
- o Montreal Protocol listed ingredients
 - Not applicable

16. OTHER INFORMATION

A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- $This \ Safety \ Data \ Sheet \ was \ compiled \ with \ data \ and \ information \ from \ the \ following \ sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS$

B. Issue date

- 2020-10-13

C. Revision number and Last date revised

- Not applicable

D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).