<b>LG Chem</b>	Material Safety Data Sheet	Document ID	ABS MP211
	(MSDS)	Issued Date	Jan. 1, 2002
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### 1. Chemical Product & Company Identification

a. Chemical Product Name	Acrylonitrile, 1,3 Butadiene and Styrene Co-polymer
b. Usage	Electronic Goods, Automotive Parts, Package, etc
c. Chemical Type	Thermoplastics
d. Company's Address	LG Chem, Ltd.
	70-1, Hwachi-Dong, Yeosu-City, Jeonranam-Do, 550-280, Korea
e. Phone Number	+82-61-680-1874
f. Prepared By	ABS / EP Division

### 2. Hazards Identification

- a. Threshold Limit
- b. Effect of overexposure

Eye Contact	Solid or dust may cause irritation or corneal injury due to mechanical action
Skin Contact	Essentially nonirritating to skin, Mechanical injury only
Skin Absorption	Unlikely due to physical properties
<ul> <li>Ingestion</li> </ul>	Unlikely due to physical state.
<ul> <li>Inhalation</li> </ul>	Dust may cause irritation to respiratory In case of breathing, fumes released from heated material may cause respiratory irritation
Chronic Effects	Not Available
<ul> <li>Mutagenicity</li> </ul>	Not Available

### 3. Composition / Information On Ingredients

	CAS Number	Contents
a. Acrylonitrile -Styrene-Butadiene Copolymer (ABS) b. Stryene Acrylonitrile Copolymer (SAN)	9003-56-9 9003-54-7	20 ~ 40% 40 ~ 80%
<ul> <li>c. Typical antioxidant and lubricants</li> </ul>		0 - 3%

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### 4. First Aid Measures

a. Eye Contact	Immediately rinse eyes with copious amount of running water and seek medical advice
b. Skin Contact	Essentially nonirritating to skin but rinse with copious water
c. Ingestion	If vomiting occurs, lower the head to ease vomiting and seek for medical Advice
d. Inhalation	In case of breathing, fumes released from heated material may cause respiratory irritation In case of inhaling dense smoke, immediately remove a person to fresh air. If necessary, apply artificial respiration and seek medical attention immediately
e. Mutagenicity	Not Available

## 5. Fire Fighting Measures

a. Flammable Properties

<ul><li>Flash Point</li><li>Method Used</li><li>Auto ignition Temperature</li></ul>	None Not applicable Not applicable
b. Extinguishing Media	Usually use water and use extinguishing media appropriate to surrounding conditions
c. Special Fire Fighting Procedure	Cool Containers with water spray. In closed stores, provide fire fighter with self-contained breathing apparatus in positive pressure mode
d. Usual Fire and Explosion Hazards	Irritating gases and dense smoke

### 6. Accidental Release Measures

c. Cleanup	Sweep up
b. Environmental Precautions	Keep out of irrigation ditches, sewers, and water supplies Spills should be collected to prevent contamination of waterways
a. Personal Precautions	Pellets or beads may present a slipping hazard

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# 7. Handling and Storage

a. Handling	Avoid formation of dust
	Keep bags always closed / Keep container lightly closed
	Avoid pellets / bags from getting wet
b. Storage	Keep bags / containers in a well-ventilated place Avoid pellets / bags from getting wet

# 8. Exposure Controls / Personal Protection

a. Engineering Controls	Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations
b. Personal Protective Equipme	nt
Eye / Face Protection	Use safety glasses. If the is a potential for exposure to particles which Could cause mechanical injury to the eye, wear chemical goggles
Skin Protection	No Precautions other than clean body-covering clothing should be needed
<ul> <li>Respiratory Protection</li> </ul>	For most conditions, no respiratory protection should be needed ; however, If handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator
c. Exposure Guideline (s)	Although some of the additives used in this product may have exposure guidelines, these additives are encapsulated in the product and no exposure would be expected under normal handling conditions

## 9. Physical And Chemical Properties

a. Appearance	Pellet (Colored solid)
b. Odor	Almost Odorless
c. pH	Neutral
d. Boiling Point	Not applicable
e. Evaporation Rate	Not applicable at standard condition
f. Specific Gravity	1.06
g. Vapor Pressure	Not applicable at standard condition
h. Vapor Density	Not applicable at standard condition
i. Solubility in Water	insoluble
j. Solubility in other Solvent	Soluble in THF, Acetone and other Analogous Solvents

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### 10. Stability and Reactivity

a. Stability	Stable under normal condition
b. Storage conditions to avoid	Avoid fire and heating above 60 $^\circ\!\!\!\!\mathrm{C}$
c. Incompatibility	None known
d. Hazardous decomposition products	Not applicable
e. Hazardous polymerization	Not occur

### **11. Toxicological Information**

See Section 3 for Potential Health Effects. For detailed toxicological data, Write or call the address or phone number shown in Section 1.

### 12. Ecological Information

a. Environmental Fate

<ul> <li>Movement &amp; Partitioning</li> </ul>	No bioconcentration is expected because of the high molecular weight (MW>1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.	
<ul> <li>Degradation &amp; Persistence</li> </ul>	This water insoluble polymeric solid is expected to the inert in the environment. Surface degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.	
b. Ecotoxicity	Not Expected to be acutely toxic, but pellets, if ingested by waterfowl or aquatic life, may mechanically cause adverse effects.	

### 13. Disposal Considerations

Disposal : Do not Dump into any sewers, on the ground, or into any body of water.

All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with appliance laws are the responsibility solely of the waste generator.

For unused & uncontaminated product, the preferred options include sending to a licensed, permitted : recycler, reclaim, incinerator or other thermal destruction device.

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### 14. Transport Information

Not classified as hazardous under transport regulations.

#### 15. Regulatory Information

Listed below are chemical substances subject to supplier notification requirements.

U.S. REQULATIONS : TSCA INVENTORY STATUS : This product complies with the Chemical Substance Inventory requirements of the US EPA TSCA. CERCLA SECTION 103 (40CFR302.4) : Not Listed SARA SECTION 313 (40CFR372.65) : Not Listed SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21) ACUTE : Not Listed CHRONIC : Not Listed FIRE : Not Listed REACTIVE : Not Listed SUDDEN RELEASE : Not Listed STATE REQULATIONS : California Proposition 65 : Not Listed EUROPEAN REGULATIONS : EC NUMBER : Not assigned

This product complies with the requirements of resolution of European Parliament (WE) no. 1907/2006 Dated December 18 2006 concerning REACH (European Union Official Register L396 with its changes In EU Official Register no. L136)

### 16. Other Information

Product should be handled, stored, and used in accordance with the generally accepted industrial hygiene practices and in conformity with all the applicable legal regulations. The information provided herein is based on the knowledge possessed at this present time from

the view point of safety requirements.

It should, therefore, not be construed as guaranteeing specific properties.