



SAFETY DATA SHEET

Alloy Exchange, Inc.
300 Rockford Park Dr.
Rockford, MI 49341 USA

1. Product and Company Identification

Product Name: ABS
Material Number: 001
Chemical Family: Thermoplastic Polymer
Company: Alloy Exchange, Inc.
300 Rockford Park Dr.
Rockford, MI 49341
Recommended use: Production of molded plastic products
Emergency Phone #: Chemtrec 800-424-9300
Emergency Transportation Phone #: Chemtrec 800-424-9300

2. Hazards Identification

GHS Classification:

This product is not hazardous in the form in which it is shipped by the manufacturer

GHS Label Elements:

Signal word: Warning

Hazardous statements: If fine particles are generated during further processing, handling or by other means, product may form combustible dust concentrations in the air.

Warning: **Color:** Gray or Black **Form:** Solid pellets **Odor:** Odorless

Melted product is flammable and produces intense heat and dense smoke during burning. Irritating gases/fumes may be given off during burning or thermal decomposition. Causes a slipping hazard if spilled. Contact with hot material will cause thermal burns.

3. Composition/Information on Ingredients

Hazardous components

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication 2012.

4. First Aid measures

- Eye Contact:** In case of contact, flush eyes with plenty of lukewarm water.
- Skin Contact:** Cool melted product on skin with plenty of water. Do not remove solidified product. Get medical attention if thermal burns occur.
- Inhalation:** Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
- Ingestion:** Get medical attention.

5. Firefighting measures

- Suitable extinguishing media:** Water fog, Dry Chemical, Carbon Dioxide (CO₂), Foam
- Special Fire Fighting Procedures:** Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritation fumes.
- Hazards from Combustion Products:** Fire will produce a dense smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments, hydrogen cyanide, and nitrogen oxides.
- Unusual Fire/Explosion Hazard:** Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Dust may form explosive mixtures with air.

6. Accidental release measures

- Spill and Leak Procedures:** If molten, allow material to cool and place into an appropriate marked container for disposal. Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

- Storage temperature Maximum:** 49 C (120.0 F)
- Storage period:** Containers should be tightly closed to prevent contamination with foreign materials and moisture.
- Handling/Storage:** Handle in accordance with good industrial hygiene and safety. Wash thoroughly after handling. Avoid creating dust. Provide for appropriate exhaust ventilation and dust collection.
- Further Info on Storage:** Protect equipment (e.g. storage bins, conveyors, dust collectors) with explosion vents.
- Substances to avoid:** Strong acids, strong oxidizing agents.

8. Exposure controls/personal protection

Country specific exposure limits have not been established or are not applicable.

Chemical Name	US OSHA PEL(8 Hr.)	ACGIH	Canada – Alberta	Mexico OEL Data
Styrene 100-42-5	FRL_STEL: 425 mg/m ³ FRL_TWA: 215 mg/m ³	STEL: 40ppm; TWA: 20ppm; Not classifiable as human carcinogen, BEI; Crit Eff: CNS impairment, Peripheral neuropathy	OEL_15 mins: 170 mg/m ³ , 40ppm OEL_8hr: 85mg/m ³ 20ppm	LMPE-PPT: 50ppm, 215mg/m ³ LMPE-CT 100ppm, 425mg/m ³ : CONN: Skin

Industrial Hygiene/Ventilation Measures: General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines, especially during cutting, grinding and high heat operations.

Respiratory protection: Although no exposure limit has been established for this product, the OSHA PEL for Particulates Not Otherwise (PNOR) of 15 mg/m³ – total dust, 5 mg/m³ – respirable fraction is recommended. In addition, the ACGIH recommends 3 mg/m³ – respirable particles and 10 mg/m³ – inhalable particles for PNOR. In the event that these limits are exceeded, an air purifying respirator equipped with particulate (P100) cartridges is recommended.

Hand protection: Wear heat resistant gloves when handling molten material.

Eye protection: Safety glasses with side-shields

Skin and body protection: No special skin protection requirements during normal handling and use.

Additional protective measures: Employees should wash their hands and face before eating, drinking or using tobacco products. Educate employees in the safe use and handling of this product. Purging should be collected as small flat thin shapes or thin strands to allow for rapid cooling.

9. Physical and Chemical properties

Form:	solid
Appearance:	pellets
Color:	Gray or Black
Odor:	Odorless
pH:	No Data Available
Melting Point:	220 C (428 F)
Boiling Point:	No Data Available
Flash Point:	320 C (608 F)
Evaporation Rate:	No Data Available
Flammability:	No Data Available
Lower explosion limit:	No Data Available
Upper explosion limit:	No Data Available
Vapor Pressure:	No Data Available
Density:	ca. 1.1 – 1.2 g/cm ³ (DIN 53479)
Solubility in Water:	practically insoluble
Partial Coefficient: (n-octanol/water)	No Data Available
Auto-ignition Temp:	No Data Available
Decomposition Temp:	>=380 C (716 F)
Softening point:	>100 – 200 C (212-392 F)
Dynamic Viscosity:	Not applicable
Kinematic Viscosity:	No Data Available

10. Stability and Reactivity

Hazardous Reactions: Hazardous polymerization does not occur.

Stability: Stable

Materials to avoid: Strong acids, strong oxidizing agents.

Conditions to avoid: Creation of dust clouds

Hazardous decomposition products: By fire and Thermal Decomposition: Phenol; Styrene; Acrylonitrile; Carbon oxides; Hazardous decomposition products due to incomplete combustion.

11. Toxicological Information

Toxicity Data for ABS001: No data available for this product.

Toxicity Data for Acrylonitrile/Butadiene/Styrene Terpolymer:

Acute dermal toxicity: LD50: > 2,000 mg/kg (Rabbit)

Acute Oral toxicity: LD50: >5,000 mg/kg (Rat)

Skin irritation: Rabbit, Draize, Non-irritation

Eye irritation: Rabbit, Slightly irritating

Sensitisation: dermal: non-sensitizer (Guinea pig, Buehler Test)

12. Ecological Information

Ecological Data for ABS001: No data available for this product. The components in this product are either non-hazardous or do not have any ecotoxicity data associated with them.

13. Disposal Considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental control laws. Recycling of this material is encouraged.

14. Transportation Information

Land transport (DOT): Non-regulated

Sea transport (IMDG): Non-regulated

Air transport (ICAO/IATA): Non-regulated

15. Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard Rating: Non-Hazardous

US Toxic Substances Control Act: Listed on the TSCA Inventory

US EPA CERCLA Hazardous Substances (40 CFR 30): Components: Styrene – Reportable quantity: 1000lbs.

SARA Section 311/312 Hazard Categories: Non-Hazardous under section 311/312

US EPA Emergency Planning and Community Right-to-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): Components: None

US EPA Emergency Planning and Community Right-to-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) Supplier Notification Required: Components: Styrene

US EPA Resource Conservation and Recovery Act Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261): Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is hazardous waste.

State Right-to-Know Information: The following chemicals are specifically listed by individual states: other products specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

The concentrations reported below in units of parts per million (ppm) or parts per billion (ppb) are maximum values.

Massachusetts, New Jersey or Pennsylvania Right to Know Substances List:

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Bisphenol A Polycarbonate	25971-63-5
>=1%	Styrene/Acrylonitrile Copolymer	9003-54-7
>=1%	Acrylonitrile/Butadiene/Styrene	9003-56-9

New Jersey Environmental hazardous substances List:

0.1-1%	Styrene	100-42-5
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MA Right to Know Extraordinary Hazardous Substances List:

0.1-1%	Styrene	100-42-5
<=3ppm	Methylene Chloride	765-09-2
<=100ppm	Acrylonitrile	107-13-1
<0.1%	Styrene	100-42-5

California Prop.65: Warning! This product contains chemical(s) known to the State of CA to be Carcinogenic. Developmental toxin, female reproductive toxin and male reproductive toxin.

<=3ppm	Methylene Chloride	75-09-2
<0.1%	1,3 Butadiene	106-99-0
<=100ppm	Acrylonitrile	107-13-1

HMIS Rating (0= Minimal, 1= Slight, 2= Moderate, 3= Serious, 4= Severe, *= Chronic Health Hazard)

Health 0

Flammability 1

Physical Hazard 0

16. Other Information

The method of hazard communications for Alloy Exchange, Inc. is comprised of Product Labels and Material Safety Data Sheets.

Contact person: Product Safety Supervisor

Telephone: 616-863-0640

Version Date: 06/24/2015

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