

# American Cornerbead Company

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## Safety Data Sheet: Plastic Products

Date: 4-1-15

LABEL ELEMENTS:



### 1. Product and Company Identification

Product Name: ABS Drywall Trim Accessories

Chemical Family: Thermoplastic Polymer

Chemical Name: Extruded Acrylonitrile / Butadiene / Styrene Terpolymer

Synonyms: ABS

Manufacture Name: Clinch-On Cornerbead Company / CCCorp. / American Cornerbead

Address: 500 West Grove Ave., Orange, CA 92865

Phone Number: 714-637-4642

### 2. Hazards Identification

#### Emergency Overview

CAUTION! Color: Natural. Form: Solid sticks. Odor: Slight, sweet, aromatic. 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. May cause mechanical irritation (abrasion). Causes a slipping hazard if spilled. Contact with hot material will cause thermal burns.

#### Potential Health Effects

Primary Routes of Entry: Inhalation, Skin Contact, Eye Contact

Medical Conditions Aggravated by Exposure: Respiratory disorders, Eye disorders, Skin disorders

#### Human Effects and Symptoms of Overexposure

##### Inhalation

Acute Inhalation for Component: Styrene

May be harmful by inhalation. May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion. Causes respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

## Skin

### Acute Skin

For Product: ABS 552

Contact with heated material can cause thermal burns.

For Component: Styrene.

Essentially non-toxic by skin absorption. Causes irritation with symptoms of reddening, itching, and swelling.

### Chronic Skin

For Component: Styrene

May cause defatting of the skin with symptoms of dryness and cracking.

## Eye

### Acute Eye

For Product: ABS 552

May cause mechanical irritation.

For Component: Styrene

Causes irritation with symptoms of reddening, tearing, stinging, and swelling. May cause corneal injury.

## Ingestion

### Acute Ingestion

For Component: Styrene

May be harmful if swallowed. Acute overexposure to this product may cause headache, dizziness, flushing, hypotension, and tachycardia. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. Ingestion and/or vomiting may cause aspiration into the lungs resulting in chemical pneumonitis (inflammation of the lungs).

#### Chronic Ingestion

For Component: Styrene

May cause brain damage. May cause kidney damage. May cause liver damage. May cause lung damage.

#### General Effects of Exposure

Acute Effects of Exposure

For Product: ABS 552

Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

Chronic Effects of Exposure

For Product: ABS 552

Not expected to cause any adverse chronic health effects

Carcinogenicity:

Styrene IARC - Overall evaluation: 2B possible carcinogen.

### 3. Composition/Information on Ingredients

#### Hazardous Components

Weight %:  $\leq 0.25\%$ ; Components: Styrene; CAS-No.: 100-42-5

### 4. First Aid Measures

Eye Contact: In case of contact, flush eyes with plenty of lukewarm water.

Skin Contact: In case of skin contact, wash affected areas with soap and water. Get medical attention if thermal burn occurs.

Inhalation: If inhaled, remove to fresh air.

Ingestion: Get medical attention.

## 5. Fire-Fighting Measures

Suitable Extinguishing Media: water, foam, dry chemical, carbon dioxide (CO<sub>2</sub>)

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Unusual Fire/Explosion Hazards: 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.

## 7. Handling and Storage

Storage Temperature: maximum: 82 °C (179.6 °F)

Storage Period: Not Established

Handling/Storage Precautions: Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Avoid breathing dust.

Further Information on Storage Conditions: Protect equipment (e.g. storage bins, conveyors, dust collectors) with explosion vents.

## 8. Exposure Controls / Personal Protection

Styrene (100-42-5)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 20 ppm

US. ACGIH Threshold Limit Values



Short Term Exposure Limit (STEL): 40 ppm  
US. OSHA Table Z-2 (29 CFR 1910.1000)  
Time Weighted Average (TWA): 100 ppm  
US. OSHA Table Z-2 (29 CFR 1910.1000)  
Ceiling Limit Value: 200 ppm  
US. OSHA Table Z-2 (29 CFR 1910.1000)  
Maximum concentration: 600 ppm (5 minutes in any 3 hours)  
US. ACGIH Threshold Limit Values  
Hazard Designation: Group A4 Not classifiable as a human carcinogen.

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.

Respiratory Protection: Although no exposure limit has been established for this product, the OSHA PEL for Particulates Not Otherwise Regulated (PNOR) of 15 mg/m<sup>3</sup> - total dust, 5 mg/m<sup>3</sup> - respirable fraction is recommended. In addition, the ACGIH recommends 3 mg/m<sup>3</sup> - respirable particles and 10 mg/m<sup>3</sup> - inhalable particles for Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS).

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 and train employees in the safe use and handling of this product. Purgings should be collected as small flat thin shapes or thin strands to allow for rapid cooling. Fumes or vapors emitted from the hot melted plastic during converting operations may condense on cool overhead metal surfaces or exhaust ducts. The condensate, usually in the form of a soft, grease-like semi-solid may contain substances which can be irritating or toxic. Wear rubber gloves when cleaning contaminated surfaces.

## 9. Physical and chemical properties

Form: Solid  
Appearance: Sticks  
Color: Natural  
Odor: Slight, Sweet, Aromatic  
PH: Not Applicable  
Boiling Point/Range: Not Applicable  
Flash Point: 388 – 400° C (730.4 – 752 ° F)  
Lower Explosion Limit: Not Established  
Upper Explosion Limit: Not Established  
Vapor Pressure: Not Applicable  
Density: Not Applicable  
Specific Gravity: Approximately 1.05  
Solubility in Water: Insoluble  
Autoignition Temperature: 495 – 510° C (923 – 950° F)  
Decomposition Temperature: Approximately 260 C (500° F)  
Softening Point: 82 – 107 C (179.6 – 224.6° F)  
Bulk Density: 600 - 700 kg / m<sup>3</sup>

#### 10. Stability and Reactivity

Hazardous Reactions: Hazardous polymerization does not occur.  
Stability: Stable  
Materials to avoid: None known.  
Conditions to avoid: None known.  
Hazardous decomposition products: By Fire and Thermal Decomposition: Carbon Dioxide; Water; Styrene; Acrylonitrile; hydrogen cyanide; Carbon monoxide, hydrocarbons

#### 11. Toxicological Information

Toxicity Data for ABS 552

Toxicity Note: Toxicity data is based on similar ABS resins.

Skin Irritation: rabbit, Non-irritating

Eye Irritation: rabbit, Draize, Slightly irritating

Other Relevant Toxicity Information: Styrene is slightly toxic to practically nontoxic in oral feeding studies (rats) and skin applications studies (rabbits). Repeated inhalation studies in rats for 3 weeks reported effects suggestive of a hearing impairment. Repeated inhalation exposures produced lung irritation in guinea pigs and organ weight changes in rats. An oral study in mice reported slight increases in lung tumors and lymphomas, but the National Cancer Institute reported no convincing evidence for carcinogenicity in repeated oral studies with rats and mice. In standard mutagenicity tests, both positive and negative genetic changes were reported. No birth defects occurred in rats given styrene orally; some toxic effects on the fetus were noted in a limited inhalation study using repeated, extremely high doses.

#### Toxicity Data for Acrylonitrile / Butadiene/ Styrene Terpolymer

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

Acute dermal toxicity: LD50: > 2,000 mg/kg (rabbit) Estimated Value

Skin Irritation: rabbit, Draize, Non-irritating

Eye Irritation: rabbit, Slightly irritating

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

#### Toxicity Data for Styrene

Acute Oral Toxicity: LD50: 1,000 mg/kg (Rat)

Acute Inhalation Toxicity: LC50: 11.8 mg/l, 4 hrs (Rat)

Acute dermal toxicity: LD50: > 20,000 mg/kg (rabbit)

Skin Irritation: rabbit, Draize Test, Moderately irritating

Eye Irritation: rabbit, Draize, Severely irritating

Sensitization: dermal: non-sensitizer (guinea pig, Maximization Test (GPMT))



#### Repeated Dose Toxicity

6 months, inhalation: NOAEL: 6.3 mg/kg, (Monkey, Male/Female, daily)

28 Days, dermal: NOAEL: < 500 mg/kg, (Rat, male, daily)

13 weeks, inhalation: NOAEL: 0.565 mg/l, (Rat, Male/Female, daily)

#### Mutagenicity

##### Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Sister Chromatid Exchange: positive (human lymphocytes, Metabolic Activation: with/without)

##### Genetic Toxicity in Vitro:

Cytogenetic assay: positive (Rat,)

Drosophila SLRL test: positive (Drosophila melanogaster,)

#### Carcinogenicity

Styrene was tested for carcinogenicity in rats in four gavages studies, one drinking-water study and two inhalation studies. Overall, there was no reliable evidence for an increase in tumor incidence in rats. Styrene was tested for carcinogenicity in mice in one inhalation study and four oral gavages studies. In the inhalation study, there was an increase in the incidence of pulmonary adenomas and only an increase in that of carcinomas in the high-dose group. Two of the gavages studies were negative and the other two were considered inadequate for an evaluation of the carcinogenicity of styrene. A screening study by intraperitoneal administration also did not find an increase in tumor incidence or multiplicity in mice. The increased risks for lymphatic and haematopoietic neoplasms observed in some epidemiological studies are generally small, statistically unstable and are not very robust.

#### Toxicity to Reproduction/Fertility

Three generation study, oral, daily, (Rat, Male/Female) NOAEL (parental): 250 ppm, NOAEL (F1): 125 ppm, NOAEL (F2): 125 ppm

No effects on Reproductive parameters observed at doses tested. Other method, inhalation, daily, and (rabbit, female) NOAEL (parental): 2.6 mg/ l, NOAEL (F 1): 2.6 mg/l,

#### Developmental Toxicity/Teratogenicity



Rat, female, inhalation, gestation, NOAEL (teratogenicity): > 600 ppm, NOAEL (maternal): < 300 ppm

No Teratogenic effects observed at doses tested.

Rabbit, female, inhalation, gestation, NOAEL (teratogenicity): > 600 ppm, NOAEL (maternal): > 600 ppm

Fetotoxicity seen only with maternal toxicity.

## 12. Ecological Information

Ecological Data for Acrylonitrile / Butadiene / Styrene Terpolymer

Biodegradation: Not readily biodegradable.

Bioaccumulation: Does not bioaccumulate.

Acute and Prolonged Toxicity to Fish: LC50: 18 mg/l (Common Carp (*Cyprinus carpio*), 96 hrs)

Ecological Data for Styrene

Biodegradation: aerobic, 71 %, Exposure time: 28 d

Biological Oxygen Demand (BOD): 5 Days, 2.46 mg/l

Chemical Oxygen Demand (COD): 2,800 - 2,880 mg/g

Theoretical Biological Oxygen Demand (ThBOD): 3.07 mg/l

Bioaccumulation: Carp, 13.5 BCF

Acute and Prolonged Toxicity to Fish

LC50: 9 mg/l (Sheepshead minnow (*Cyprinodon variegatus*), 96 hrs)

LC50: 29 - 59.3 mg/l (Fathead minnow (*Pimephales promelas*), 96 hrs)

LC50: 25 mg/l (Bluegill (*Lepomis macrochirus*), 96 hrs)

LC50: 2.4 - 4.1 mg/l (Rainbow trout (*Salmo gairdneri*), 96 hrs)

Acute Toxicity to Aquatic Invertebrates: EC50: 4.7 - 23 mg/l (Water flea (*Daphnia magna*), 48 hrs)

Toxicity to Aquatic Plants: EC50: 1.4 mg/l, (Green algae (*Selenastrum capricornutum*), 72 hrs)

Toxicity to Microorganisms:

EC50: approximately 500 mg/l, (Activated sludge microorganisms, 30 min)

EC50: 5.5 mg/l, (*Photobacterium phosphoreum*, 5 min)

EC50: 72 mg/l, (*Pseudomonas putida*, 16 hrs)

### 13. Disposal considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental control laws.

### 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: Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302) - Components: None

SARA Section 311/312 Hazard Categories: Acute Health Hazard, Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA)  
SARA Title III Section 302 Extremely Hazardous Substance (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 (RCRA) Composite List of  
Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

If discarded in its purchased form, this product would not be a hazardous waste  
either by listing or by characteristic. However, under RCRA, it is the responsibility  
of the product user to determine at the time of disposal, whether a material  
containing the product or derived from the product should be classified as a  
hazardous waste. (40 CFR 261.20-24)

#### State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product  
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 Substance Lists:

| Weight%    | Components                                    | CAS-No.   |
|------------|-----------------------------------------------|-----------|
| $\geq 1\%$ | Acrylonitrile/Butadiene/Styrene<br>Terpolymer | 9003-56-9 |

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK  
Special Hazardous Substances Lists:

| Weight%       | Components | CAS-No.  |
|---------------|------------|----------|
| $\leq 0.25\%$ | Styrene    | 100-42-5 |

Pennsylvania Right to Know Special Hazard Substance List:

| Weight%  | Components    | CAS-No.  |
|----------|---------------|----------|
| <=0.01 % | Acrylonitrile | 107-13-1 |

MA Right to Know Extraordinarily Hazardous Substance List:

| Weight % | Components    | CAS-No.  |
|----------|---------------|----------|
| <=0.25%  | Styrene       | 100-42-5 |
| <=0.01%  | Acrylonitrile | 107-13-1 |

California Prop. 65:

Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.

| Weight%  | Components    | CAS-No.  |
|----------|---------------|----------|
| <=0.01 % | Acrylonitrile | 107-13-1 |

16. Other Information

HMIS Rating  
Health 0  
Flammability 1  
Physical Hazard 0

O=Minimal 1 =Slight 2=Moderate 3=Serious 4=Severe  
\* = Chronic Health Hazard

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