Safety Data Sheet
ASTC Polymers 3246
Part A

1 Identification of the substance / preparation and of the company

1.1 Product identifier

ASTC 3246 Part A

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant uses

See product information.

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

ASTC Polymers, Inc.
3207 W. Warner Ave.
Santa Ana, Ca 92704
Phone: 714-966-2893,
Fax: 714-966-9105
Homepage:
www.astcpolymers.com

E-mail:
info@astcpolymers.com

1.4 Emergency phone

714-966-2893, (24h) (English) 714-552-6915 & 714-803-1274

2 Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

not applicable

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

Xn-N, R 20-36/37/38-40-42/43-48/20-51/53

2.2 Label elements

Hazard symbols

Harmful

Dangerous for the environment

Contains:

Benzene, 1,1'-methylenebis[isocyanato-, polymer with 1,2-ethanediamine, methyloxirane and oxirane

Polyoxy(methyl-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with 1,1-methylenebisisocyanatobenzene

4,4'-Methylenediphenyl diisocyanate

o-(p-Isocyanatobenzyl)phenyl isocyanate

R-phrases

R 36/37/38: Contact to spray mist Irritating to eyes, respiratory system and skin.
R 40: Limited evidence of a carcinogenic effect.
R 42/43: May cause sensitization by inhalation and skin contact.
R 48/20: May be harmful – spray mist may damage health through inhalation.
R 51/53: Toxic to aquatic organisms.

S-phrases

S 23.3: Do not breathe vapor.
S 36/37: Wear suitable protective clothing and gloves.
S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 60: This material and its container must be disposed of as hazardous waste.
S 61: Avoid release to the environment. Refer to special instructions, safety data sheets.

Special labelling

Contains isocyanates. Observe manufacturer's instructions.

2.3 Other hazards

Physico-chemical hazards See chapter 10.

Human health dangers See chapter 11.

Environmental hazards See chapter 12.

Other hazards Further hazards were not determined with the current level of knowledge.

3 Composition / Information on ingredients

3.1 Substances

The product is a mixture.

3.2 Mixtures

Range [%]	Substance
30 - <60	4,4'-Methylenediphenyl diisocyanate
	CAS: 101-68-8, EINECS/ELINCS: 202-966-0, EU-INDEX: 615-005-00-9
	GHS/CLP: Carc. 2, H351 - Acute Tox. 4, H332 - STOT RE 2, H373 - Eye Irrit. 2, H319 - STOT SE 3, H335 - Skin
	EEC: Xn R20-36/37/38-40-42/43-48/20
7 - <10	Homopolymer of methylene diphenyl diisocyanate
	CAS: 25686-28-6
	Sens. 1: H317- Carc. 2: H351 – STOT SE 3: H335 –STOT RE 2: h373
	EEC: Xn, R 20-36/37/38-40-42/43-48/20
10 - <20	1,2-Benzenedicarboxylic acid, di-C9-11-branched and linear alkyl esters
	CAS: 68515-43-5, EINECS/ELINCS: 271-085-1
	EEC: N R51/53

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For the wording of the listed risk phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

General information Change soaked clothing immediately.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

Ingestion Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
Supply with medical care.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Dry powder.
Carbon dioxide.
Foam.

Extinguishing media that must not be used Full water jet

5.2 Special hazards arising from the substance or mixture

Unknown risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)
Nitrogen oxides (NOx).
Hydrogen cyanide (HCN).
Not combusted hydrocarbons.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.
Wear full protective suit.

Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Use breathing apparatus if exposed to vapors/aerosol.
Use personal protective equipment.
Remove persons to safety.
High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See Section 8+13

7 Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid spilling in enclosed areas.
Vacuuming in situ required.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container. Prevent penetration into the ground.

Do not store with amines
Do not store together with acids.
Do not store with alkalies.
Keep away from water.

Keep container tightly closed.
Keep container in a well-ventilated place.
Keep in a cool place. Store in a dry place.
Protect from heat/overheating and from sun.

7.3 Specific end use(s)

See product use, Section 1.2

8 Exposure controls / personal protection

8.1 Control parameters

not applicable

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Using suitable discharges or exhaust ventilation.
Eye protection	safety glasses
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact Butyl rubber, >480 min (EN 374). In splash contact Butyl rubber, >60 min (EN 374).
Skin protection	Protective overalls.
Other	Avoid contact with eyes and skin. Do not breathe vapor/spray. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Do not eat, drink, smoke or take drugs at work. Remove contaminated soaked clothing immediately and dispose of safely. Eye-wash bottle and showers are preview. Cloths contaminated with product should not be kept in trouser pockets. Clean skin thoroughly after work, apply skin cream. Use barrier skin cream.
Respiratory protection	Breathing apparatus in the event of high concentrations. Short term: filter apparatus, filter A.
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	See Section 6+7.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	yellowish
Odor	musty
Odor threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not determined
Flash point [°C]	not determined
Flammability [°C]	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidizing properties	no
Vapor pressure [kPa]	not determined
Density [g/ml]	1,10-1,14 (20°C)
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	500-900 mPas (25°C)
Relative vapor density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature	not determined

9.2 Other information

none

10 Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with alkalies (yes).
Reactions with amines.
Reactions with acids.
Reactions with alcohols.

10.4 Conditions to avoid

See Section 7.2.

10.5 Incompatible materials

Reactions with water, with formation of carbon dioxide.
See Section 10.3.

10.6 Hazardous decomposition products

In the event of fire: See Section 5.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Range [%]	Substance
30 - <60	4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
	LD50, dermal, Rabbit: > 9000 mg/kg.
	LD50, oral, Rat: > 5000 mg/kg.
	LC50, inhalative, Rat: 0,49 mg/l/4h.
7 - <10	Homopolymer of methylene diphenyl Diisocyanate CAS: 25686-28-6
	LD50, dermal, Rabbit: > 9400 mg/kg.
	LC50, inhalative, Rat: 0,49 mg/l/4h.
10 - <20	1,2-Benzenedicarboxylic acid, di-C9-11-branched and linear alkyl esters, CAS: 68515-43-5
	LC50, inhalative, Rat: > 200 mg/l (4h).
	LD50, dermal, Rabbit: > 2000 mg/kg.
	LD50, oral, Rat: > 2500 mg/kg.

Serious eye damage/irritation	not determined
Skin corrosion/irritation	not determined
Respiratory or skin sensitization	not determined
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	This product is a substance of Carc. Cat. 3 (EU).
General remarks	
	No information available.

12 Ecological information

12.1 Toxicity

Range [%]	Substance
30 - <60	4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8
	IC50, (72h), Desmodesmus subspicatus: 1,5 mg/l.
	EC50, (24h), Daphnia magna: 0,35 mg/l.
7 - <10	Homopolymer of methylene diphenyl Diisocyanate CAS: 25686-28-6
	EC50, (24h), Daphnia magna: > 1000 mg/l.
	LC50, (96h), fish: > 1000 mg/l.

12.2 Persistence and degradability

Behavior in environment compartments	not determined
Behavior in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Do not discharge product unmonitored into the environment or into the drainage.
The product is insoluble in water.

13 Disposal considerations

13.1 Waste treatment methods

Coordinate the waste disposal with the national authorities.

Product

Dispose of as hazardous waste.
For recycling, consult manufacturer.

Waste no. (recommended) 080501*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110*

14 Transport information

14.1 UN number

See section 14.2

14.2 UN proper shipping name

Not Regulated – Single containers not over 5000 lbs or 1800 kg are not regulated

Classification according to ADR Not applicable

- Classification Code Not applicable

- Label

- ADR LQ 51

- ADR 1.1.3.6 (8.6) See section 14.2

Classification according to IMDG MARINE POLLUTANT

- EMS F-A, S-F

- Label

- IMDG LQ 5 l

Classification according to IATA See section 14.2

- Label

14.3 Transport hazard class(es)

See 14.2

14.4 Packing group

See 14.2

14.5 Environmental hazards

See 14.2

14.6 Special precautions for user

Relevant information under 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available.

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2011); IMDG-Code (2011, 35. Amdt.); IATA-DGR (2011).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16 Other information

R-phrases (Chapter 03)	R 51/53: Toxic to aquatic organisms R 20: May be harmful by inhalation. R 36/37/38: Contact may be irritating to eyes, respiratory system and skin. R 40: Limited evidence of a carcinogenic effect. R 42/43: May cause sensitization by inhalation and skin contact. R 48/20: Spray mist may be harmful to health by prolonged exposure through inhalation.
Hazard statements (Chapter 03)	H411 Toxic to aquatic life with long lasting effects. H351 Suspected of causing cancer. H332 Harmful if inhaled. H373 Spray may cause damage to organs through prolonged or repeated exposure. H319 May cause eye irritation. H335 Spray mist may cause respiratory irritation. H315 May cause skin irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 May cause an allergic skin reaction. H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
Observe employment restrictions for people	yes
VOC (1999/13/CE)	not determined

Disclaimer: This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.