



Safety data sheet

1. Substance/preparation and company identification

Trade name:

ASTI-TECH Comp. A / ASTI-TECH F (150, 300, 500)

Application of the substance/ the preparation:

Polyurethane component

BEIL

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2. Hazard identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

2.2. Label elements

Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP] No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Preparation based on: polyol, catalyst, additives

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

ethanediol; ethylene glycol

Content (W/W): < 10 %

CAS Number: 107-21-1

EC-Number: 203-473-3

REACH registration number:

01-2119456816-28

INDEX-Number: 603-027-00-1

Acute Tox. 4 (oral)

STOT RE (Kidney) 2

H302, H373



For the classifications not written out in full in this section, including the indication of danger, the hazard symbols and the hazard statements, the full text is listed in section 16.

4. First-Aid Measures

4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled: If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact: Wash thoroughly with soap and water.

On contact with eyes: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion: Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

Hazards: No hazards anticipated.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media: water spray, dry powder, foam, carbon dioxide

5.2. Special hazards arising from the substance or mixture

carbon monoxide, Carbon dioxide, nitrogen oxides The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

6.2. Environmental precautions

Do not empty into drains. Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of contaminated material as prescribed.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and Storage

7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion: No special precautions necessary.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from oxidants. Segregate from acids. Segregate from foods and animal feeds.

Suitable materials for containers: Carbon steel (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE), tinned carbon steel (Tinplate), Stainless steel 1.4301 (V2) Further information on storage conditions: Containers should be stored tightly sealed in a dry place.



7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls and Personal Protection

8.1. Control parameters

Components with occupational exposure limits

107-21-1: ethanediol; ethylene glycol TWA value 52 mg/m³; 20 ppm (OEL (EU))
indicative
STEL value 104 mg/m³; 40 ppm (OEL (EU))
indicative
Skin Designation (OEL (EU))
The substance can be absorbed through the skin.

Components with PNEC

107-21-1: ethanediol; ethylene glycol freshwater: 10 mg/l
marine water: 1 mg/l
intermittent release: 10 mg/l
STP: 199.5 mg/l
sediment (freshwater): 37 mg/kg
soil: 1.53 mg/kg
sediment (marine water): 3.7 mg/kg

Components with DNEL

107-21-1: ethanediol; ethylene glycol worker: Long- term exposure-systemic effects,
Inhalation: 35 mg/m³
worker: Long-term exposure- systemic effects,
dermal: 106 mg/kg
consumer: Long-term exposure- systemic effects,
Inhalation: 7 mg/m³
consumer: Long-term exposure- systemic effects,
dermal: 53 mg/kg

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

General safety and hygiene measures

Wearing of closed work clothing is required additionally to the stated personal protection equipment. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form: liquid
Colour: yellowish
Odour: faint specific odour
pH value: approx. 6 – 8 (20 °C)
solidification temperature: < 0°C
Boiling point: > 150 °C



Flash point:	> 150°C	(DIN 51758)
Flammability:	not applicable	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability:	not flammable	
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Ignition temperature:	> 250 °C	
Vapour pressure:	< 10 mbar (20°C)	
Density:	> 1,05 g/cm ³	(DIN 51757) (20°C)
Solubility in water:	partly soluble	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	800 mPa.s (25°C)	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	
9.2. Other information		
Miscibility with water:	partly miscible	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

10. Stability and reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

10.4. Conditions to avoid

Temperature: < 0 °C

10.5. Incompatible materials

Substances to avoid: acids, oxidizing agents, isocyanates

10.6. Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity:

Assessment of acute toxicity:

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg

Information on: ethanediol; ethylene glycol

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Inhalation-risk test (IRT): No mortality within 8 hours as shown in animal studies. The inhalation of a highly saturated vapor-air mixture represents no acute hazard.

Irritation



Assessment of irritating effects:

Not irritating to the eyes. Not irritating to the skin.

Respiratory/Skin sensitization

Assessment of sensitization:

The chemical structure does not suggest a sensitizing effect.

Germ cell mutagenicity

Assessment of mutagenicity:

The chemical structure does not suggest such an effect.

Carcinogenicity

Assessment of carcinogenicity:

The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The chemical structure does not suggest such an effect.

Assessment of reproduction toxicity:

Developmental toxicity

Assessment of teratogenicity:

The chemical structure does not suggest such an effect.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Repeated dermal uptake of the substance did not cause substance-related effects. Repeated inhalative uptake of the substance did not cause substance-related effects. Repeated oral uptake of the substance did not cause substance-related effects.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

The product has not been tested. The statement has been derived from the properties of the individual components.

12. Ecological information

12.1. Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Information on: ethanediol; ethylene glycol

Toxicity to fish:

LC50 (96 h) 72,860 mg/l, Pimephales promelas (EPA 72-1, static)

Information on: ethylene glycol

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):

Poorly biodegradable.

Elimination information:

Poorly biodegradable.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

Does not significantly accumulate in organisms.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption to solid soil phase is not expected.



12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.7. Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Other ecotoxicological advice:

Do not allow to enter soil, waterways or waste water channels. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. The product has not been tested. The statement has been derived from products of a similar structure or composition.

13. Disposal considerations

Incinerate in suitable incineration plant, observing local authority regulations.

Waste key:

07 02 08 other still bottoms and reaction residues

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. Transport information

Land transport

ADR

Not classified as a dangerous good under transport regulations

RID

Not classified as a dangerous good under transport regulations

Inland waterway transport

AND

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/CAO

Not classified as a dangerous good under transport regulations

15. Regulatory information

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

Prohibitions, Restrictions and Authorizations

If it is intended to use materials for the manufacture of consumer goods (e. g. products which will come into contact with foodstuffs or with the skin, toys) or medical products, national and international regulations have to be observed. Where no regulations exist, consumer goods or medical products must at least comply with European legislation. We recommend contacting our Sales and our Product Safety departments.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not yet performed due to registration timelines. Exposure scenarios for the mixture can not be provided at the moment because exposure scenarios are not yet available for all relevant substances due to registration timelines. For advice on essential measures see sections 7 and 8 of this safety data sheet.

16. Other information

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:



Acute Tox.	Acute toxicity
STOT RE	Specific target organ toxicity — repeated exposure
H302	Harmful if swallowed.
H373	May cause damage to organs (kidney) through prolonged or repeated exposure.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.