



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 8306B

Product type: adhesive hardner and acelerator

Restriction of use: None identified

Company Address: Adhesives and Chemicals
131 Brown Street
Yatesville, PA 18640

Telephone numbers: 570-654-6735

Transport Emergency phone: Chemtrec 800-424-9300

Medical Emergency phone: Poison Contol Center 1.877.671.4608

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture:

Flammable liquids, Category 2 (H225)

Eye irritation, Category 2 (H319)

Sensitization of the respiratory airways, Category 1 (H334)

Specific target organ toxicity (single exposure), Inhalative, Category 3 (H336)

Signal Word: Danger

Hazard Statements:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Pictograms:



GHS02



GHS07



GHS08

Precautionary Statements:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P370 Advice for fire-fighters

P378 Suitable extinguishing media: Carbon dioxide (CO₂), Foam, extinguishing powder. In cases of larger fires, water spray should be used. Don't use high volume water jet.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local regulation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Type of product: Mixture

Mixture

Hazardous components

Thionophosphoric acid-tris-(p-isocyanatophenyl ester)

Concentration [wt.-%]: ca. 27

CAS-No.: 4151-51-3

EINECS-No.: 223-981-9

GHS Classification: Sens. Resp. 1 H334

ethyl acetate

Concentration [wt.-%]: ca. 71

CAS-No.: 141-78-6

EINECS-No.: 205-500-4

Index-No.: 607-022-00-5

GHS Classification: Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336

chlorobenzene

Concentration [wt.-%]: < 1

CAS-No.: 108-90-7

EINECS-No.: 203-628-5

Index-No.: 602-033-00-1

GHS Classification: Flam. Liq. 3 H226 Acute Tox. 4 Inhalative H332 Aquatic Chronic 2 H411

4. FIRST AID MEASURES**Description of first aid measures**

General advice: Take off immediately all contaminated clothing.

If inhaled: If aerosol or vapor is inhaled in high concentrations: Take the person into the fresh air and keep him warm, let him rest; if there is difficulty in breathing, medical advice is required.

In case of skin contact: In case of skin contact wash affected areas thoroughly with soap and plenty of water. Consult a doctor in the event of a skin reaction.

In case of eye contact: Hold the eyes open and rinse with preferably lukewarm water for a sufficiently long period of time (at least 10 minutes). Contact an ophthalmologist.

If swallowed: DO NOT induce the patient to vomit, medical advice is required.

place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Carbon dioxide (CO₂), Foam, extinguishing powder, in cases of larger fires, water spray should be used.

Unsuitable extinguishing media: High volume water jet

Special hazards arising from the substance or mixture:

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapors and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

Advice for fire-fighters:

During fire-fighting respirator with independent air-supply and airtight garment is required.

Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Put on protective equipment (see chapter 8). Keep away from sources of ignition. Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

Environment related measures: Do not allow to escape into waterways, wastewater or soil.

Methods and material for containment and cleaning up: Remove mechanically; cover the remainder with wet, absorbent material (e.g. sawdust, chemical binder based on calcium silicate hydrate, sand). After approx. one hour transfer to waste container and do not seal (evolution of CO₂!). Keep damp in a safe ventilated area for several days.

7. HANDLING AND STORAGE

Precautions for safe handling:

Provide sufficient air exchange and/or exhaust in work rooms. Exhaust ventilation necessary if product is sprayed.

In all areas where isocyanate aerosols and/or vapor concentrations are produced in elevated concentrations, exhaust ventilation must be provided in such a way that the workplace exposure limits (WEL) is not exceeded. The air should be drawn away from the personnel handling the product. The threshold limit values noted in Chapter 8 must be monitored.

Explosion protection required.

The personal protective measures described in Chapter 8 must be observed. The precautions required in the handling of solvents and isocyanates must be taken. Avoid contact with skin and eyes and the inhalation of vapor.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work and use skin-protecting ointment. Keep working clothes separately. Take off all contaminated clothing immediately.

Conditions for safe storage, including any incompatibilities:

Keep container dry and tightly closed in a cool and well ventilated place. Further information on the storage conditions which must be observed to preserve quality can be found in our product information sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

If no airborne exposure limit is indicated for materials listed in Section 3, no limit has been defined.

Control parameters

The product may contain traces of phenylisocyanate.

Exposure controls

Respiratory protection:

Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter is recommended.

Hand protection:

Conditionally suitable materials for protective gloves; EN 374:
Butyl rubber - IIR (≥ 0.5 mm); Break through time: ≥ 60 min
Recommendation: contaminated gloves should be disposed of.

Eye protection:

Wear eye/face protection.

Skin and body protection:

Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: liquid

Colour: yellow to brownish

Odour: ester-like

Odour Threshold: not established

pH: not applicable

Boiling point/boiling range: ca. 77 °C at 1.013 hPa

Flash point: ca. -4 °C DIN 51755

Evaporation rate: not established
Flammability (solid, gas): not established
Burning number: not applicable
Upper/lower flammability or explosive limits:
ethyl acetate upper: 11,5 %(V) / lower: 2,2 %(V)
chlorobenzene upper: 11,0 %(V) / lower: 1,3 %(V)
Vapour pressure: ca. 97 hPa at 20 °C
Vapour density: not established
Density: ca. 1,0 g/cm³ at 20 °C DIN 53217
Miscibility with water: immiscible at 15 °C
Water solubility of ingredients:
ethyl acetate ca. 85 g/l at 20 °C
Surface tension: not established
Partition coefficient
(n-octanol/water):
not established
Autoignition temperature: not applicable
Ignition temperature: ca. 460 °C
Decomposition temperature: not established
Viscosity, dynamic: ca. 3 mPa.s at 20 °C DIN 53019
Explosive properties: not established
Dust explosion class: not applicable
Oxidising properties: not established
Other information: The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions: Exothermic reaction with amines and alcohols; reacts with water forming CO₂; in closed containers, risk of bursting owing to increase of pressure.

Hazardous decomposition products: No hazardous decomposition products when stored and handled correctly.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity, oral:

LD50 rat: > 2.500 mg/kg

Method: OECD Test Guideline 423

Toxicological studies at the product

Acute toxicity, dermal:

ethyl acetate

LD50 rabbit: > 5.000 mg/kg

Acute toxicity, inhalation:

ethyl acetate

LC50 rat: 29,3 - 58,6 mg/l, 4 h

chlorobenzene

LC50 rat, male: ca. 13,9 mg/l, 6 h

LC50 rat: 29,7 mg/l, 4 h

Method: OECD Test Guideline 403

Test substance: vapour

Primary skin irritation:

rabbit

Result: slight irritant

Method: OECD Test Guideline 404

Toxicological studies at the product

Primary mucosae irritation:

rabbit

Result: slight irritant

Method: OECD Test Guideline 405

Toxicological studies at the product

Sensitisation:

Skin sensitisation according to Buehler (epicutaneous test): guinea pig

Result: negative

Method: OECD Test Guideline 406

Toxicological studies at the product

Classification according to Directive 2006/121/EC Annex VI

Classification: May cause sensitization by inhalation.

Subacute, subchronic and prolonged toxicity:

chlorobenzene

Application Route: Inhalative

Species: rat

Exposure duration: 24 Weeks

NOAEL: < 75 ppm

Application Route: Inhalative

Species: rat

Exposure duration: 13 Weeks

LOAEL (Lowest observable adverse effect level): 125 mg/kg

Carcinogenicity:

chlorobenzene

Species: rat

Application Route: Oral

negative

Species: mouse

Application Route: Oral

negative

Genotoxicity in vitro:

Test type: Salmonella/microsome test (Ames test)

Result: No indication of mutagenic effects.

Method: OECD Test Guideline 471

Toxicological studies at the product

CMR Assessment:

Mutagenicity: Not mutagenic in Ames Test. Toxicological studies at the product

Toxicology Assessment:

chlorobenzene

Acute effects: Harmful if inhaled.

Additional information:

Thionophosphoric acid-tris-(p-isocyanatophenyl ester)

Special properties/effects: Over-exposure entails the risk of concentration-dependent irritating effects on eyes, nose throat, and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

Hypersensitive persons may suffer from these effects even at low isocyanate concentrations.

Prolonged or repeated exposure may cause irritation of skin and eyes.

12. ECOLOGICAL INFORMATION

Do not allow to escape into waterways, wastewater or soil.

Toxicity**Acute Fish toxicity:**

Species: Danio rerio (zebra fish)

Exposure duration: 96 h

Method: OECD Test Guideline 203

No toxic effects with saturated solution.

Ecotoxicological studies of the product

Chronic toxicity to Fish:

chlorobenzene

4,8 mg/l

Species: Danio rerio (zebra fish)

Exposure duration: 28 d

Acute toxicity for daphnia:

Species: Daphnia magna (Water flea)

Exposure duration: 48 h

Method: OECD Test Guideline 202

No toxic effects with saturated solution.

Ecotoxicological studies of the product

Chronic toxicity to daphnia:

chlorobenzene

NOEC 0,32 mg/l

Species: Daphnia magna (Water flea)

Exposure duration: 16 d

Acute toxicity for algae:

Tested on: scenedesmus subspicatus Duration of test: 72 h

Method: OECD Test Guideline 201

No toxic effects with saturated solution.

Ecotoxicological studies of the product

Acute bacterial toxicity:

EC50 >10.000 mg/l

Tested on: activated sludge

Method: OECD Test Guideline 209

Ecotoxicological studies of the product

Ecotoxicology Assessment:

chlorobenzene

Toxic to aquatic life.

May cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Biodegradability:

Biodegradation: 58,2 %, 28 d, i.e. not readily degradable

Method: OECD Test Guideline 301 F

Ecotoxicological testing of the solvent-free product

Photodegradation:

chlorobenzene

Degradation (direct photolysis): 55 %

Degradation time (direct photolysis): 24 d

Bioaccumulative potential

Bioaccumulation:

chlorobenzene

Bioconcentration factor (BCF): 3,9 - 40

Accumulation in aquatic organisms is unlikely.

Theoretical oxygen demand (ThOD):

ethyl acetate

ThBOD value: 1.820 mg/g

Partition coefficient (n-octanol/water):

chlorobenzene

log Pow: 2,8 - 3

Additional information on ecotoxicology:

The resin reacts with water at the interface forming CO₂ and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by watersoluble solvents. Previous experience shows that polyurea is inert and non-degradable.

13. DISPOSAL CONSIDERATION

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

Waste treatment methods

After final product withdrawal, all residues must be removed from containers (drip-free, powderfree or paste-free). Once the product residues adhering to the walls of the containers have been rendered harmless, the product and hazard labels must be invalidated. These containers can be returned for recycling to the appropriate centres set up within the framework of the existing takeback scheme of the chemical industry. Containers must be recycled in compliance with national legislation and environmental regulations.

None disposal into waste water.

14. TRANSPORT INFORMATION

Proper shipping name	Flammable liquids, n.o.s. (contains monochlorobenzene, ethyl acetate)
Hazard class or division	3
UN/NA number	UN1993
Packaging group	II
Hazard label	Flammable liquid
RSPA/DOT regulated components	Ethyl acetate, monochlorobenzene
Reportable quantity	6666 lbs.

ADR/RID

UN Number : 1173

Packaging group : II

Hazard identification No : 33

hazard label : 3

Environmentally hazardous : no

Limited quantity regulations applicable in accordance with chapter 3.4 ADR/RID in compliance with threshold value

ADN

UN Number : 1173

Packaging group : II

Hazard identification No : 33

hazard label : 3

Environmentally hazardous : no

This classification data does not apply to transportation by tanker. If required, additional information can be requested from the manufacturer.

IATA

UN Number : 1173

Description of the goods : ETHYL ACETATE, SOLUTION

Class : 3

Packaging group : II

hazard label : 3

Packing instruction (cargo aircraft): 364

Packing instruction (passenger aircraft): 353

IMDG

UN Number : 1173

Description of the goods : ETHYL ACETATE, SOLUTION

Class : 3

Packaging group : II

IMDG-Labels : 3

Marine pollutant : no

Special precautions for user : Highly flammable. Irritating to the eyes.

Keep dry. Avoid heat above +40 °C.

Keep away from foodstuffs, acids and alkalis.

15. REGULATORY INFORMATION**OSHA Hazcom standard rating:** hazardous**PRODUCT IDENTITY: 8306B ADHESIVES AND CHEMICALS, INC. page 9 of 10****US Toxic substances control act:** Listed on the tsca inventory.**US EPA CERCLA hazardous substances (40CFR 302):**

Components	Reportable quantity
Ethyl acetate	5000 lbs
Monochlorobenzene	100 lbs

SARA Section 311/312 hazard categories:

Acute health hazard, chronic health hazard, reactivity hazard

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:** Monochlorobenzene**US EPA resource conservation and recovery act (RCRA) composite list of hazardous wastes and appendix VIII hazardous constituents(40 CFR 261):**

When discarded in its purchased form this product meets the criteria of ignitability, and should be managed as a hazardous waste (EPA hazardous waste number D001). (40 CFR 261.20-24)

Massachusetts, New Jersey or Pennsylvania right-to-know substance lists:

Weight %	Components	CAS no.
60-100%	Ethyl acetate	141-78-6
20-30%	Tris(4-Isocyanatophenyl)thiophosphate	4151-51-3
1-5%	Monochlorobenzene	108-90-7

New Jersey environmental hazardous substances list and/or New Jersey RTK special hazardous substances list:

Weight %	Components	CAS no.
60-100%	Ethyl acetate	141-78-6
1-5%	Monochlorobenzene	108-90-7

California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

NFPA 704M rating

Health	2
Flammability	3
Reactivity	1
Other	

HMIS rating

Health	2
Flammability	3
Reactivity	1
Other	

16. OTHER INFORMATION

Updated: 5/1/15

*****SPECIAL COMMENT REGARDING ALL MATERIALS MANUFACTURED*****

All information, recommendations and suggestions appearing herein concerning our products are based upon test data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity and suitability for use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Adhesives and Chemicals as to the effects or such use, the results to be obtained, or the safety and toxicity of the product nor does Adhesives and Chemicals assume any liability arising out of use, by others, of the product referred to herein. The information herein is not to be considered as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.