

# SAFETY DATA SHEET

HARDENER 2206



## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Identification of the substance or preparation

Product name : HARDENER 2206

Code : 2206

Use of the substance/preparation : Hardener

### Company/undertaking identification

Manufacturer : CASCO ADHESIVES AB  
 Box 11538  
 SE-100 61 Stockholm, Sweden  
 Phone: + 46 8 743 40 00

Distributor : CASCO ADHESIVES AB  
 Box 11538  
 SE-100 61 Stockholm, Sweden  
 Phone: + 46 8 743 40 00

E-mail address of person responsible for this SDS : hse.adhesives@akzonobel.com

Emergency telephone number : +46 8 33 70 43

## 2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : F; R11  
 Xn; R20  
 Xi; R36/37/38  
 R42/43  
 R52/53

Physical/chemical hazards : Highly flammable.

Human health hazards : Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact.

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See section 11 for more detailed information on health effects and symptoms.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
Ethyl acetate	141-78-6	25-50	205-500-4	F; R11 Xi; R36 R66, R67 [1] [2]
Diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	25-50		Xn; R20 Xi; R36/37/38 R42/43 [1]
Naphtha (petroleum), hydrotreated light	64742-49-0	10-25	265-151-9	F; R11 Xn; R65 Xi; R38 R67 N; R51/53 [1]
See section 16 for the full text of the R-phrases declared above				

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Occupational exposure limits, if available, are listed in section 8.

### 4. FIRST AID MEASURES

- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Get medical attention.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe. Get medical attention if symptoms appear.
- Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. In the event of any complaints or symptoms, avoid further exposure. Get medical attention if irritation develops.
- Eye contact** : Check for and remove any contact lenses. Rinse with plenty of running water. Get medical attention.

See section 11 for more detailed information on health effects and symptoms.

### 5. FIRE-FIGHTING MEASURES

- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Not suitable** : Water jet.
- Special exposure hazards** : Highly flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. In a fire, decomposition may produce toxic gases/fumes.  
Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Special protective equipment for fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Do not touch or walk through spilt material. Avoid contact with eyes, skin and clothing. Eliminate all ignition sources. Avoid breathing vapours of this product. Use suitable protective equipment (section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Water polluting material.
- Large spill** : Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Prevent entry into sewers, water courses, basements or confined areas. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.
- Small spill** : Absorb with an inert material and place in an appropriate waste disposal container. Contaminated absorbent material may pose the same hazard as the spilt product.

### 7. HANDLING AND STORAGE

- Handling** : Keep from any possible contact with water. The product reacts slowly with water, resulting in the production of carbon dioxide. In closed containers, pressure build-up could result in distortion, expansion and, in extreme cases, bursting of the container. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Wash thoroughly after handling. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical

## 7. HANDLING AND STORAGE

(ventilating, lighting and material handling) equipment. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Do not apply the product by spraying. Spray mist is harmful even in small doses.

**Storage** : Keep from any possible contact with water. Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep away from heat and direct sunlight. Store in a segregated and approved area. Eliminate all ignition sources. Separate from oxidizing materials.

### Packaging materials

**Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Ethyl acetate	<b>ACGIH TLV (United States, 1/2007). Notes: 1996 Adoption Refers to Appendix A -- Carcinogens.</b> TWA: 1440 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours.

**Occupational exposure controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Hygiene measures** : Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.

**Respiratory protection** : Wear appropriate respirator when ventilation is inadequate.

**Hand protection** : Chemical-resistant gloves.

**Eye protection** : Safety glasses.

**Skin protection** : Protective clothing.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

**Physical state** : Liquid.

**Colour** : Brown.

**Odour** : Solvent(s)

### Important health, safety and environmental information

**Flash point** : Closed cup: -10°C (14°F)

**Density** : 0,95 g/cm<sup>3</sup>

**Solubility** : Insoluble in the following materials: cold water and hot water.

## 10. STABILITY AND REACTIVITY

**Stability** : The product is stable.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**Materials to avoid** : Highly reactive or incompatible with the following materials: oxidizing materials

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. TOXICOLOGICAL INFORMATION

### Potential acute health effects

- Inhalation** : Harmful by inhalation. May cause sensitisation by inhalation.  
**Ingestion** : Irritating to mouth, throat and stomach.  
**Skin contact** : Irritating to skin. May cause sensitisation by skin contact.  
**Eye contact** : Irritating to eyes.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethyl acetate	LD50 Oral	Rat	5620 mg/kg	-
Diphenylmethanediisocyanate, isomeres and homologues	LD50 Dermal	Rabbit	>9400 mg/kg	-
	LD50 Oral	Rat	49 g/kg	-

### Potential chronic health effects

- Chronic effects** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:  
 respiratory tract irritation  
 coughing  
 wheezing and breathing difficulties  
 asthma
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:  
 irritation  
 redness
- Eyes** : Adverse symptoms may include the following:  
 irritation  
 watering  
 redness

- Target organs** : Contains material which may cause damage to the following organs: kidneys, liver, upper respiratory tract, skin, eye, lens or cornea.

## 12. ECOLOGICAL INFORMATION

- Environmental effects** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
ethyl acetate	Acute LC50 212 to 225 mg/l Fresh water	Fish - Heteropneustes fossilis	96 hours
	Acute LC50 154 mg/l Fresh water	Daphnia - Daphnia cucullata	48 hours

- Conclusion/Summary** : There is no data available on the preparation itself.

### Biodegradability

- Conclusion/Summary** : There is no data available on the preparation itself.

## 13. DISPOSAL CONSIDERATIONS

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal should be in accordance with applicable regional, national and local laws and regulations. Liquid residues and packages contaminated with those shall be treated as hazardous waste. Dried/cured product, with or without packing material, may be handled as normal industrial waste. Consult the local waste contractor and the local authority about the best way of handling cured adhesive.

## 13. DISPOSAL CONSIDERATIONS




European waste catalogue (EWC) : 080501

08 05 01\* waste isocyanates

Hazardous waste : Yes.

## 14. TRANSPORT INFORMATION

### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADR/RID Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		<b>Hazard identification number</b> 33  <b>Limited quantity</b> LQ6  <b>CEFIC Tremcard</b> 30GF1-I+II of 30GF1-sp
<b>IMDG Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		<b>Emergency schedules (EmS)</b> F-E, _S-E_
<b>IATA Class</b>	UN1263	Paint related material	3	II		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 5 L Packaging instructions: 305 <b>Cargo Aircraft Only</b> Quantity limitation: 60 L Packaging instructions: 307 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 1 L Packaging instructions: Y305

PG\* : Packing group

## 15. REGULATORY INFORMATION

### EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols :



Highly flammable, Harmful

Risk phrases

: R11- Highly flammable.  
R20- Harmful by inhalation.  
R36/37/38- Irritating to eyes, respiratory system and skin.  
R42/43- May cause sensitisation by inhalation and skin contact.  
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 15. REGULATORY INFORMATION

- Safety phrases** : S23- Do not breathe vapour.  
S24- Avoid contact with skin.  
S37- Wear suitable gloves.  
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- Contains** : Diphenylmethanediisocyanate, isomeres and homologues
- Product use** : Industrial applications.
- Other EU regulations**
- Additional warning phrases** : Contains isocyanates.

## 16. OTHER INFORMATION

- Full text of R-phrases referred to in sections 2 and 3 - Europe** : R11- Highly flammable.  
R20- Harmful by inhalation.  
R65- Harmful: may cause lung damage if swallowed.  
R36- Irritating to eyes.  
R38- Irritating to skin.  
R36/37/38- Irritating to eyes, respiratory system and skin.  
R42/43- May cause sensitisation by inhalation and skin contact.  
R66- Repeated exposure may cause skin dryness or cracking.  
R67- Vapours may cause drowsiness and dizziness.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Full text of classifications referred to in sections 2 and 3 - Europe** : F - Highly flammable  
Xn - Harmful  
Xi - Irritant  
N - Dangerous for the environment
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