

# SAFETY DATA SHEET



SYNTEKO 1357

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

### Identification of the substance or preparation

Product name : SYNTEKO 1357  
 Code : 1357  
 Chemical name : Urea-formaldehyde resin  
 Use of the substance/preparation : Wood Adhesives

### Company/undertaking identification

Manufacturer : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

Distributor : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

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

Emergency telephone number : + 65 6762 2088

## 2. HAZARDS IDENTIFICATION

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

Classification : Carc. Cat. 3; R40  
 R43

Human health hazards : Limited evidence of a carcinogenic effect. May cause sensitisation by skin contact.

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
formaldehyde	50-00-0	1-3	200-001-8	Carc. Cat. 3; R40 [1] [2] T; R23/24/25 C; R34 R43
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

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

## 4. FIRST AID MEASURES

### First-aid measures

**Inhalation** : Move exposed person to fresh air. Get medical attention if irritation occurs.

**Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

**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 if irritation occurs.

Date of issue/Date of revision : 2009-11-03.

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## 4. FIRST AID MEASURES

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

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Special exposure hazards** : No specific fire or explosion hazard.
- 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** : Do not touch or walk through spilt material. Do not breathe dust. Avoid contact with eyes, skin and clothing. Use suitable protective equipment (section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Large spill** : Use a shovel to transfer the material to a convenient waste disposal container. Dispose of via a licensed waste disposal contractor.
- Small spill** : Vacuum or sweep up material and place in a designated, labelled waste container.

## 7. HANDLING AND STORAGE

- Handling** : Do not get in eyes or on skin or clothing. Do not breathe dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.
- Storage** : Keep container tightly closed. Store in a dry, cool and well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
formaldehyde	<b>ACGIH TLV (United States, 1/2007). Skin sensitiser. Notes: Substance identified by other sources as a suspected or confirmed human carcinogen. Refers to Appendix A -- Carcinogens. 2000 Adoption.</b> C: 0,37 mg/m <sup>3</sup> C: 0,3 ppm

### Exposure controls

- Occupational exposure controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use only in well-ventilated areas.
- 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** : If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. Type A2/P2.
- Hand protection** : Neoprene gloves. PVC gloves. Nitrile gloves.
- Eye protection** : Safety glasses.
- Skin protection** : Protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

- Physical state : Solid.  
 Colour : White.  
 Odour : Faint odour.

### Important health, safety and environmental information

- pH : 8 to 9 [Conc. (% w/w): 50%]  
 Flash point : Closed cup: >200°C (>392°F)  
 Density : 0,6 g/cm<sup>3</sup>  
 Solubility : Soluble in the following materials: cold water and hot water.

## 10. STABILITY AND REACTIVITY

- Stability : The product is stable.  
 Conditions to avoid : No specific data.  
 Materials to avoid : No specific data.  
 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 : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.  
 Ingestion : None.  
 Skin contact : May cause sensitisation by skin contact.  
 Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
formaldehyde	LD50 Oral	Rat	100 mg/kg	-

### Potential chronic health effects

- Chronic effects : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
 Carcinogenicity : May cause cancer, based on animal data. Limited evidence of a carcinogenic effect. Risk of cancer depends on duration and level of exposure.  
 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  
 Ingestion : No specific data.  
 Skin : Adverse symptoms may include the following:  
 irritation  
 redness  
 Eyes : Adverse symptoms may include the following:  
 irritation  
 redness  
 Target organs : Contains material which may cause damage to the following organs: mucous membranes, upper respiratory tract, skin, eye, lens or cornea.  
 Other adverse effects : The product contains small amounts of unreacted formaldehyde, which may be given off by curing. Formaldehyde vapor may be irritating to respiratory tract.

## 12. ECOLOGICAL INFORMATION

**Environmental effects** : There is no data available on the preparation itself.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
formaldehyde	Acute EC50 5800 to 7800 ug/L Fresh water	Daphnia - Daphnia pulex	48 hours
	Acute LC50 1,41 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

**Conclusion/Summary** : No known significant effects or critical hazards.

### Biodegradability

**Conclusion/Summary** : No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**European waste catalogue (EWC)** : 08 04 09

08 04 09\* waste adhesives and sealants containing organic solvents or other dangerous substances

**Hazardous waste** : Yes.

## 14. TRANSPORT INFORMATION

### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

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** :



Harmful

**Risk phrases** : R40- Limited evidence of a carcinogenic effect.  
R43- May cause sensitisation by skin contact.

**Safety phrases** : S36/37- Wear suitable protective clothing and gloves.

**Contains** : formaldehyde

200-001-8

**Product use** : Industrial applications.

## 16. OTHER INFORMATION

**Full text of R-phrases referred to in sections 2 and 3 - Europe** : R40- Limited evidence of a carcinogenic effect.  
R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.  
R34- Causes burns.  
R43- May cause sensitisation by skin contact.

**Full text of classifications referred to in sections 2 and 3 - Europe** : Carc. Cat. 3 - Carcinogen category 3  
T - Toxic  
C - Corrosive

### History

**Date of issue/Date of revision** : 2009-11-03.

**Date of previous issue** : 2009-10-29.

**Version** : 2.04

**Prepared by** : Kristofer Modin

Indicates information that has changed from previously issued version.

# SAFETY DATA SHEET

HARDENER 2732



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

### Identification of the substance or preparation

Product name : HARDENER 2732

Code : 2732

Use of the substance/preparation : Hardener

### Company/undertaking identification

Manufacturer : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

Distributor : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

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

Emergency telephone number : + 65 6762 2088

## 2. HAZARDS IDENTIFICATION

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

Classification : Xi; R36

Human health hazards : Irritating to eyes.

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
<input checked="" type="checkbox"/> calcium sulfate	7778-18-9	10-25	231-900-3	Not classified. [2]
<input checked="" type="checkbox"/> ammonium chloride	12125-02-9	10-25	235-186-4	Xn; R22 [1] [2] Xi; R36
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

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

## 4. FIRST AID MEASURES

### First-aid measures

Inhalation :  Move exposed person to fresh air. Get medical attention if irritation occurs.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.Skin contact :  Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. 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.

Date of issue/Date of revision : 2009-11-30.

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## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Special exposure hazards** : No specific fire or explosion hazard.
- Hazardous combustion products** : Decomposition products may include the following materials:  
sulfur oxides  
metal oxide/oxides
- Special protective equipment for fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Do not touch or walk through spilt material. Avoid contact with eyes, skin and clothing. Use suitable protective equipment (section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Large spill** : Use a shovel to transfer the material to a convenient waste disposal container. Dispose of via a licensed waste disposal contractor.
- Small spill** : Vacuum or sweep up material and place in a designated, labelled waste container.

## 7. HANDLING AND STORAGE

- Handling** : Avoid contact with eyes, skin and clothing.
- Storage** : Keep container tightly closed. Store in a dry, cool and well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
calcium sulfate	<b>ACGIH TLV (United States, 1/2007). Notes: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
ammonium chloride	<b>ACGIH TLV (United States, 1/2007).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Fume STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: Fume

### Exposure controls

- Occupational exposure controls** : If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- 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** : If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist.
- Hand protection** : Gloves.
- Eye protection** : Tightly-fitting goggles
- Skin protection** : Protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

- Physical state : Solid. [Powder.]  
 Colour : White.  
 Odour : Faint odour.

### Important health, safety and environmental information

- Density : 1 g/cm<sup>3</sup>  
 Solubility : Miscible in water.

## 10. STABILITY AND REACTIVITY

- Stability : The product is stable.  
 Conditions to avoid : No specific data.  
 Materials to avoid : No specific data.  
 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 : None.  
 Ingestion : None.  
 Skin contact : None.  
 Eye contact : Irritating to eyes.

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ammonium chloride	LD50 Oral	Rat	1650 mg/kg	-

### Potential chronic health effects

- Chronic effects : No known significant effects or critical hazards.  
 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 : No specific data.  
 Ingestion : No specific data.  
 Skin : No specific data.  
 Eyes : Adverse symptoms may include the following:  
 irritation  
 watering  
 redness

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

## 12. ECOLOGICAL INFORMATION

- Environmental effects : There is no data available on the preparation itself.

### Aquatic ecotoxicity

- Conclusion/Summary : No known significant effects or critical hazards.  
 Biodegradability  
 Conclusion/Summary : No known significant effects or critical hazards.



## 13. DISPOSAL CONSIDERATIONS

- Methods of disposal** :  The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
- European waste catalogue (EWC)** : 08 04 09  
08 04 09\* waste adhesives and sealants containing organic solvents or other dangerous substances
- 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>	Not regulated.	-	-	-		-
<b>IMDG Class</b>	Not regulated.	-	-	-		-
<b>IATA Class</b>	Not regulated.	-	-	-		-

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** :



Irritant

**Risk phrases** : R36- Irritating to eyes.

**Product use** : Industrial applications.

## 16. OTHER INFORMATION

**Full text of R-phrases referred to in sections 2 and 3 - Europe** : R22- Harmful if swallowed.  
R36- Irritating to eyes.

**Full text of classifications referred to in sections 2 and 3 - Europe** : Xn - Harmful  
Xi - Irritant

### History

**Date of issue/Date of revision** : 2009-11-30.

**Date of previous issue** : 2007-11-12.

**Version** : 1.01

**Prepared by** : Mikael Olsson

Indicates information that has changed from previously issued version.

# SAFETY DATA SHEET

MODIFIER 2731A



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

### Identification of the substance or preparation

**Product name** : MODIFIER 2731A  
**Code** : 2731A  
**Use of the substance/preparation** : Additive

### Company/undertaking identification

**Manufacturer** : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

**Distributor** : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

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

**Emergency telephone number** : + 65 6762 2088

## 2. HAZARDS IDENTIFICATION

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Not classified.

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
kaolin	1332-58-7	25-50	310-194-1	Not classified. [2]
calcium sulfate	7778-18-9	10-25	231-900-3	Not classified. [2]

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

## 4. FIRST AID MEASURES

### First-aid measures

**Inhalation** : Move exposed person to fresh air. Get medical attention if irritation occurs.

**Ingestion** : Wash out mouth with water. Get medical attention if symptoms appear.

**Skin contact** : Wash contaminated skin with soap and water. Get medical attention if irritation develops.

**Eye contact** : Check for and remove any contact lenses. Rinse with plenty of running water. Get medical attention if irritation occurs.

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

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Special exposure hazards** : No specific fire or explosion hazard.
- Hazardous combustion products** : Decomposition products may include the following materials:  
sulfur oxides  
metal oxide/oxides
- Special protective equipment for fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Use suitable protective equipment (section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Large spill** : Use a shovel to transfer the material to a convenient waste disposal container.
- Small spill** : Vacuum or sweep up material and place in a designated, labelled waste container.

## 7. HANDLING AND STORAGE

- Handling** : Avoid contact with eyes, skin and clothing. Do not breathe dust.
- Storage** : Keep container tightly closed. Store in a dry, cool and well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
kaolin	<b>ACGIH TLV (United States, 1/2007). Notes: 1996 Adoption Refers to Appendix A -- Carcinogens. Respirable fraction; see Appendix C, paragraph C.</b> TWA: 2 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction
calcium sulfate	<b>ACGIH TLV (United States, 1/2007). Notes: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction

### Exposure controls

- Occupational exposure controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- 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.
- Respiratory protection** : Dust-protection mask.
- Hand protection** : Gloves.
- Eye protection** : Safety glasses.
- Skin protection** : No special protection is required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

- Physical state** : Solid.
- Colour** : White.
- Odour** : Faint odour.

### Important health, safety and environmental information

- Density** : 0,8 g/cm<sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Solubility** : Easily soluble in the following materials: cold water.

## 10. STABILITY AND REACTIVITY

**Stability** : The product is stable.

**Conditions to avoid** : No specific data.

**Materials to avoid** : No specific data.

**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** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Ingestion** : None.

**Skin contact** : None.

**Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

### Potential chronic health effects

**Chronic effects** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

**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

**Ingestion** : No specific data.

**Skin** : No specific data.

**Eyes** : Adverse symptoms may include the following:  
irritation  
redness

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

## 12. ECOLOGICAL INFORMATION

**Environmental effects** : There is no data available on the preparation itself.

### Aquatic ecotoxicity

**Conclusion/Summary** : No known significant effects or critical hazards.

### Biodegradability

**Conclusion/Summary** : No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. The product is not regarded as hazardous waste. Disposal should be in accordance with applicable regional, national and local laws and regulations.

**European waste catalogue (EWC)** : 08 04 10

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

**Hazardous waste** : No.

## 14. TRANSPORT INFORMATION

### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

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.

**Risk phrases** : This product is not classified according to EU legislation.

**Product use** : Industrial applications.

### Other EU regulations

## 16. OTHER INFORMATION

### History

**Date of issue/Date of revision** : 2009-11-05.

**Date of previous issue** : No previous validation.

**Version** : 1.01

**Prepared by** : Mikael Olsson

📄 Indicates information that has changed from previously issued version.

# SAFETY DATA SHEET

HARDENER 0556



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

### Identification of the substance or preparation

Product name : HARDENER 0556

Code : 0556

Use of the substance/preparation : Hardener

### Company/undertaking identification

Manufacturer : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

Distributor : CASCO ADHESIVES (ASIA) PTE LTD  
 14 Sungei Kadut Way  
 Singapore 728788, Singapore  
 Phone: +65 6762 2088

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

Emergency telephone number : + 65 6762 2088

## 2. HAZARDS IDENTIFICATION

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.

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
ammonium chloride	12125-02-9	5-10	235-186-4	Xn; R22 Xi; R36 [1] [2]
kaolin	1332-58-7	5-10	310-194-1	Not classified. [2]
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

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

## 4. FIRST AID MEASURES

### First-aid measures

Inhalation : Move exposed person to fresh air. Get medical attention if irritation occurs.

Ingestion : Wash out mouth with water. Get medical attention if symptoms appear.

Skin contact : Wash contaminated skin with soap and water. Get medical attention if irritation develops.

Eye contact : Check for and remove any contact lenses. Rinse with plenty of running water. Get medical attention if irritation occurs.

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

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Special exposure hazards** : No specific fire or explosion hazard.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides
- Special protective equipment for fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Use suitable protective equipment (section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Large spill** : Use a shovel to transfer the material to a convenient waste disposal container.
- Small spill** : Vacuum or sweep up material and place in a designated, labelled waste container.

## 7. HANDLING AND STORAGE

- Handling** : Avoid contact with eyes, skin and clothing. Do not breathe dust.
- Storage** : Keep container tightly closed. Store in a dry, cool and well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
ammonium chloride	<b>ACGIH TLV (United States, 1/2007).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Fume STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: Fume
kaolin	<b>ACGIH TLV (United States, 1/2007). Notes: 1996 Adoption Refers to Appendix A -- Carcinogens. Respirable fraction; see Appendix C, paragraph C.</b> TWA: 2 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction

### Exposure controls

- Occupational exposure controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- 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.
- Respiratory protection** : Dust-protection mask.
- Hand protection** : Gloves.
- Eye protection** : Safety glasses.
- Skin protection** : No special protection is required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

- Physical state** : Solid. [Powder.]
- Colour** : Beige. [Light]

### Important health, safety and environmental information

- Density** : 1,2 g/cm<sup>3</sup>

## 10. STABILITY AND REACTIVITY

- Stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Materials to avoid** : No specific data.
- 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** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Ingestion** : None.
- Skin contact** : None.
- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonium chloride	LD50 Oral	Rat	1650 mg/kg	-

### Potential chronic health effects

- Chronic effects** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- 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
- Ingestion** : No specific data.
- Skin** : No specific data.
- Eyes** : Adverse symptoms may include the following:  
irritation  
redness
- Target organs** : Contains material which may cause damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.

## 12. ECOLOGICAL INFORMATION

- Environmental effects** : There is no data available on the preparation itself.

### Aquatic ecotoxicity

- Conclusion/Summary** : No known significant effects or critical hazards.

### Biodegradability

- Conclusion/Summary** : No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. The product is not regarded as hazardous waste. Disposal should be in accordance with applicable regional, national and local laws and regulations.
- European waste catalogue (EWC)** : 08 04 10  
08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09
- Hazardous waste** : No.



## 14. TRANSPORT INFORMATION

### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

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.

**Risk phrases** : This product is not classified according to EU legislation.

**Product use** : Industrial applications.

## 16. OTHER INFORMATION

**Full text of R-phrases referred to in sections 2 and 3 - Europe** : R22- Harmful if swallowed.  
R36- Irritating to eyes.

**Full text of classifications referred to in sections 2 and 3 - Europe** : Xn - Harmful  
Xi - Irritant

### History

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☑ Indicates information that has changed from previously issued version.