1 Identification

1.1 Product identifier

Trade name: AFCONA - 3085
Application of the substance / the mixture: Paint Additives

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Haiman AFCONA Chemicals Co., Ltd
29, Daqing Road, Qing-Long Chemical Industrial Park,
Haimen, Jiangsu Province, 226121, P.R.China
Tel: +82-513-82658995

Information department: Product safety department.

1.4 Emergency telephone number:
For Hazardous Materials [or Dangerous Goods] Incident
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN796211 or
+1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

GHS07

Acute Tox. 4 H312 Harmful in contact with skin.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labeled according to the CLP regulation.

Hazard pictograms

GHS02 GHS07

Signal word Warning

Hazard-determining components of labeling:
2-butoxyethanol

Hazard statements
H226 Flammable liquid and vapor.
H312 Harmful in contact with skin.

(Contd. on page 2)
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P240 Ground/bond container and receiving equipment.
P233 Keep container tightly closed.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash thoroughly after handling.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P312 Call a POISON CENTER/doctor if you feel unwell.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use for extinguition: CO2, powder or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

Health = 2
Fire = 3
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2
Fire = 3
Reactivity = 0

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

3.2 Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

111-76-2 2-butoxyethanol 25-50%

4 First-aid measures

4.1 Description of first aid measures

General information:
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 3)
Trade name: AFCONA - 3085

(Contd. of page 2)

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - For safety reasons unsuitable extinguishing agents: Water with full jet

- 5.2 Special hazards arising from the substance or mixture
No further relevant information available.

- 5.3 Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.

- 6.3 Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.

- 6.4 Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

- Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th>111-76-2 2-butoxyethanol</th>
<th>60 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC-2:</td>
<td>111-76-2 2-butoxyethanol</td>
<td>120 ppm</td>
</tr>
<tr>
<td>PAC-3:</td>
<td>111-76-2 2-butoxyethanol</td>
<td>700 ppm</td>
</tr>
</tbody>
</table>

7 Handling and storage

- 7.1 Precautions for safe handling
  - Keep receptacles tightly sealed.

- Information about protection against explosions and fires:
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.

- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: No special requirements.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions: Keep receptacle tightly sealed.

(Contd. on page 4)
7.3 Specific end use(s)  No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems:  No further data; see item 7.

· 8.1 Control parameters

- Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL Long-term value:</th>
<th>REL Long-term value:</th>
<th>TLV Long-term value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2 2-butoxyethanol</td>
<td>240 mg/m³, 50 ppm</td>
<td>24 mg/m³, 5 ppm</td>
<td>97 mg/m³, 20 ppm</td>
</tr>
<tr>
<td>Skin</td>
<td></td>
<td>Skin</td>
<td>BEI</td>
</tr>
</tbody>
</table>

· Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Substance</th>
<th>BEI 200 mg/g creatinine</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2 2-butoxyethanol</td>
<td>Medium: urine</td>
</tr>
<tr>
<td></td>
<td>Time: end of shift</td>
</tr>
<tr>
<td></td>
<td>Parameter: Butoxyacetic acid with hydrolysis</td>
</tr>
</tbody>
</table>

· Additional information:  The lists that were valid during the creation were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· Breathing equipment:  Not required.

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
### 9 Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

**General Information**

- **Appearance:** Fluid
- **Color:** According to product specification
- **Odor:** Characteristic
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.

**Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 146 °C (295 °F)

**Flash point:** 32 °C (90 °F)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 240 °C (464 °F)

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

**Explosion limits:**

- **Lower:** 1.1 Vol %
- **Upper:** 10.6 Vol %

**Vapor pressure at 20 °C (68 °F):** 1.2 kPa (1 mm Hg)

**Density at 20 °C (68 °F):** 1 g/cm³ (8.345 lbs/gal)

**Relative density** Not determined.

**Vapor density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

**Solvent content:**

- **Organic solvents:** 48.0 %
- **VOC content:** 48.0 %
- **480.0 g/l / 4.01 lb/gl**

**Solids content:** 52.0 %
Trade name: AFCONA - 3085

9.2 Other information

No further relevant information available.

10 Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials:
No further relevant information available.

10.6 Hazardous decomposition products:
No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:
Harmful in contact with skin.

LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>1480 mg/kg (rat)</td>
<td>400 mg/kg (rab)</td>
</tr>
</tbody>
</table>

Primary irritant effect:

- on the skin:
Causes skin irritation.

- on the eye:
Causes serious eye irritation.

Sensitization: Based on available data, the classification criteria are not met.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

111-76-2 2-butoxyethanol 3

NTP (National Toxicology Program)
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Additional ecological information:

General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

### 13 Disposal considerations

- 13.1 Waste treatment methods
  - **Recommendation:**
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - **Uncleaned packagings:**
    - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>UN1866</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>DOT</td>
<td>Resin solution</td>
</tr>
<tr>
<td></td>
<td>ADR</td>
<td>1866 Resin solution</td>
</tr>
<tr>
<td></td>
<td>IMDG, IATA</td>
<td>RESIN SOLUTION</td>
</tr>
</tbody>
</table>

#### DOT

- **Class:** 3 Flammable liquids
- **Label:** 3

#### ADR, IMDG, IATA

- **Class:** 3 Flammable liquids
- **Label:** 3

- **14.4 Packing group**
  - DOT, ADR, IMDG, IATA: III

- **14.5 Environmental hazards:**
  - Marine pollutant: No

- **14.6 Special precautions for user**
  - **Warning:** Flammable liquids
  - **Danger code (Kemler):** 30
  - **EMS Number:** F-E,S-E
  - **Stowage Category:** A

- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.
44.0 Transport/Additional information:

- DOT
  - Quantity limitations
    On passenger aircraft/rail: 60 L
    On cargo aircraft only:

- ADR
  - Excepted quantities (EQ)
    Code: E1
    Maximum net quantity per inner packaging: 30 ml
    Maximum net quantity per outer packaging: 1000 ml

- IMDG
  - Limited quantities (LQ)
    5L
    Code: E1
    Maximum net quantity per inner packaging: 30 ml
    Maximum net quantity per outer packaging: 1000 ml
  - Excepted quantities (EQ)
    Code: E1
    Maximum net quantity per inner packaging: 30 ml
    Maximum net quantity per outer packaging: 1000 ml

- UN "Model Regulation":
  UN 1866 RESIN SOLUTION, 3, III

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  Sara
  - Section 355 (extremely hazardous substances):
    None of the ingredient is listed.
  - Section 313 (Specific toxic chemical listings):
    111-76-2 2-butoxyethanol
  - TSCA (Toxic Substances Control Act):
    Not all ingredients are TSCA listed, only below Ingredient/s is/are listed
    111-76-2 2-butoxyethanol
  - Proposition 65
    - Chemicals known to cause cancer:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for females:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for males:
      None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      None of the ingredients is listed.
  - Cancerogenity categories
    - EPA (Environmental Protection Agency)
      111-76-2 2-butoxyethanol NL
    - TLV (Threshold Limit Value established by ACGIH)
      111-76-2 2-butoxyethanol A3
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      None of the ingredients is listed.
  - 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
16 Other information

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.

- **Department issuing SDS:** Product safety department.
- **Contact:** Mr. Saw Eng Nee
- **Date of preparation / last revision:** 01/18/2017 / -
- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TEL: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Flammable Liquids – Category 3
  - Acute Tox. 4: Acute toxicity – Category 4
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A