1 Identification

1.1 Product identifier

Trade name: AFCONA - 6700
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, Daling 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.

GHS08 Health hazard
Carc. 2 H351 Suspected of causing cancer.

GHS05 Corrosion
Eye Dam. 1 H318 Causes serious eye damage.

GHS07
Acute Tox. 4 H312 Harmful in contact with skin.
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

2.2 Label elements

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

(Contd. on page 2)
Safety Data Sheet
acc. to OSHA HCS

Printing date 02/13/2017
Reviewed on 02/13/2017

Trade name: AFCONA - 6700

(Contd. of page 1)

- Hazard pictograms

GHS02 GHS05 GHS07 GHS08

- Signal word Danger

- Hazard-determining components of labeling:
  butanol
  xylene
  2-butanone oxime

- Hazard statements
  H226 Flammable liquid and vapor.
  H312 Harmful in contact with skin.
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
  H317 May cause an allergic skin reaction.
  H351 Suspected of causing cancer.
  H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- Precautionary statements
  P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  P261 Avoid breathing dust/fume/gas/mist/vapors/spray
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P261 Avoid breathing dust/fume/gas/mist/vapors/spray
  P243 Take precautionary measures against static discharge.
  P264 Wash thoroughly after handling.
  P271 Use only outdoors or in a well-ventilated area.
  P272 Contaminated work clothing must not be allowed out of the workplace.
  P201 Obtain special instructions before use.
  P202 Do not handle until all safety precautions have been read and understood.
  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.
  P310 Immediately call a POISON CENTER/doctor.
  P321 Specific treatment (see on this label).
  P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  P363 Wash contaminated clothing before reuse.
  P308+P313 IF exposed or concerned: Get medical advice/attention.
  P333+P335 If skin irritation or rash occurs: Get medical advice/attention.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P362+P364 Take off contaminated clothing and wash it before reuse.
  P405 Store locked up.
  P403+P233 Store in a well-ventilated place. Keep container tightly closed.
  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

(Contd. on page 3)
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.
- **After inhalation:**
  Supply fresh air and to be sure call for a doctor.
  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. Then 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.

- **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**
  Dilute with plenty of water.
  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).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
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

PAC-1:
- 78-83-1 butanol: 150 ppm
- 1330-20-7 xylene: 130 ppm
- 96-29-7 2-butanone oxime: 30 ppm

PAC-2:
- 78-83-1 butanol: 1,300 ppm
- 1330-20-7 xylene: 920* ppm
- 96-29-7 2-butanone oxime: 56 ppm

PAC-3:
- 78-83-1 butanol: 8000* ppm
- 1330-20-7 xylene: 2500* ppm
- 96-29-7 2-butanone oxime: 250 ppm

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.

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>Chemical</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-83-1 butanol</td>
<td>PEL: 300 mg/m³, 100 ppm</td>
</tr>
<tr>
<td></td>
<td>REL: 150 mg/m³, 50 ppm</td>
</tr>
<tr>
<td>1330-20-7 xylene</td>
<td>PEL: 435 mg/m³, 100 ppm</td>
</tr>
</tbody>
</table>

(Contd. on page 5)
**Trade name: AFCONA - 6700**

<table>
<thead>
<tr>
<th>REL</th>
<th>Short-term value: 655 mg/m³, 150 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long-term value: 435 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>TLV</td>
<td>Short-term value: 651 mg/m³, 150 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 434 mg/m³, 100 ppm</td>
</tr>
<tr>
<td></td>
<td>BEI</td>
</tr>
</tbody>
</table>

**96-29-7 2-butanone oxime**

<table>
<thead>
<tr>
<th>WEEL</th>
<th>Long-term value: 10 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSEN</td>
<td></td>
</tr>
</tbody>
</table>

**Ingredients with biological limit values:**

<table>
<thead>
<tr>
<th>1330-20-7 xylene</th>
<th>BET 1.5 g/g creatinine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medium: urine</td>
</tr>
<tr>
<td></td>
<td>Time: end of shift</td>
</tr>
<tr>
<td></td>
<td>Parameter: Methylhippuric acids</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 skin.
    - Avoid contact with the eyes and skin.
  - Breathing equipment: Not required.
  - Protection of hands:

  ![Protective gloves](image)

  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.

- Eye protection:

  ![Tightly sealed goggles](image)
## 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:** 100 °C (212 °F)
- **Flash point:** 24 °C (75 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 315 °C (599 °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:** 50.0 Vol %
- **Vapor pressure at 20 °C (68 °F):** 23 hPa (17 mm Hg)
- **Density at 20 °C (68 °F):** 0.88 g/cm³ (7.344 lbs/gal)
- **Relative density**
  - Not determined.
- **Vapor density**
  - Not determined.
- **Evaporation rate**
  - Not determined.

- **Solubility in / Miscibility with**
  - **Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.

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

- **Solvent content:**
  - **Organic solvents:** 68.6 %
  - **Water:** 11.1 %
  - **VOC content:** 68.6 %
    - 669.0 g/l / 5.58 lb/gl
- **Solids content:** 21.1 %

**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.
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>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 xylene</td>
<td>4300 mg/kg (rat)</td>
<td>2000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>96-29-7 2-butanone oxime</td>
<td>3700 mg/kg (rat)</td>
<td>200-2000 mg/kg (rat)</td>
<td>20 mg/l (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - on the skin:
    Causes skin irritation.
  - on the eye:
    Causes serious eye damage.
  - Sensitization:
    May cause an allergic skin reaction.

Additional toxicological information:

- Carcinogenic categories

  - IARC (International Agency for Research on Cancer)
    1330-20-7 xylene 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.
- Persistence and degradability: No further relevant information available.
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.

Additional ecological information:

- General notes:
  Water hazard class 2 (Self-assessment): hazardous for water
  Do not allow product to reach ground water, water course or sewage system.
  Must not reach bodies of water or drainage ditch undiluted or unneutralized.
  Danger to drinking water if even small quantities leak into the ground.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

(Contd. on page 8)
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.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

14.1 UN-Number
DOT, ADR, IMDG, IATA
UN1866

14.2 UN proper shipping name
DOT
Resin solution
ADR
1866 Resin solution
IMDG, IATA
RESIN SOLUTION

14.3 Transport hazard class(es)

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
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.
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
  - 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):
      - 1330-20-7 xylene
        - TSCA (Toxic Substances Control Act):
          - All ingredients are listed.
    - 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)
      - 1330-20-7 xylene [1]
    - TLV (Threshold Limit Value established by ACGIH)
      - 1330-20-7 xylene [44]
    - 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** 02/13/2017 / -
- **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
  - TLV: Threshold Limit Value
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Flam. Liq. 3: Flammable liquids – Category 3
  - Acute Tox. 4: Acute toxicity – Category 4
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Carc. 2: Carcinogenicity – Category 2
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3