1 Identification

· 1.1 Product identifier
  · Trade name: AFCONA - 3030
  · 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, Dqing 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

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

  - GHS07
    Skin Irrit. 2 H315 Causes skin irritation.
    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.
  · Hazard pictograms

    GHS02 GHS05 GHS07

· Signal word Danger

(Contd. on page 2)
Hazard-determining components of labeling:
- butanol

Hazard statements
- H226 Flammable liquid and vapor.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- 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 / eye protection / face protection.
- P240 Ground/bond container and receiving equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- 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.
- P332+P313 If skin irritation 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

- HMIS-ratings (scale 0 - 4)
  HEALTH
  Health = 2
  FIRE
  Fire = 3
  REACTIVITY
  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.
### 4 First-aid measures

- **4.1 Description of first aid measures**
  - **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. 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
- **PAC-2**: 78-83-1 butanol 1,300 ppm
- **PAC-3**: 78-83-1 butanol 8000* ppm

### 7 Handling and storage

- **7.1 Precautions for safe handling**
  - Keep receptacles tightly sealed.
44.0

- 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

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-83-1 butanol</td>
</tr>
<tr>
<td>PEL Long-term value: 300 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>REL Long-term value: 150 mg/m³, 50 ppm</td>
</tr>
<tr>
<td>TLV Long-term value: 152 mg/m³, 50 ppm</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

  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

- Form: 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: 108 °C (226 °F)
- Flash point: 27 °C (81 °F)
- Flammability (solid, gaseous): Not applicable.
- Ignition temperature: 390 °C (734 °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: 1.7 Vol %
  - Upper: 12.0 Vol %
- Vapor pressure at 20 °C (68 °F): 12 kPa (9 mm Hg)
- Density at 20 °C (68 °F): 0.91 g/cm³ (7.594 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: 48.0 %
  - VOC content: 48.0 %
  - Solids content: 52.0 %
Trade name: AFCONA - 3030

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
  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: Based on available data, the classification criteria are not met.
  - Primary irritant effect:
    - on the skin: Causes skin irritation.
    - on the eye: Causes serious eye damage.
  - Sensitization: Based on available data, the classification criteria are not met.
  - Additional toxicological information:
    - Carcinogenic categories:
      - IARC (International Agency for Research on Cancer)
        None of the ingredients is listed.
      - 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.
    Must not reach bodies of water or drainage ditch undiluted or unneutralized.
  - 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.
  - 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 mixture
  - ADR 1866 Resin solution mixture
  - IMDG, IATA RESIN SOLUTION mixture

- 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
  - 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.

- Transport/Additional information:
  - DOT
  - Quantity limitations
    - On passenger aircraft/rail: 60 L
    - On cargo aircraft only:
44.0 · 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 MIXTURE, 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):
None of the ingredients is listed.

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)
None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.

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
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
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
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3