1 Identification

· 1.1 Product identifier

· Trade name: AFCONA - 3038

· 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.

  GHS08 Health hazard
  Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

  GHS07
  Acute Tox. 4 H332 Harmful if inhaled.
  Eye Irrit. 2A H319 Causes serious eye irritation.
  Skin Sens. 1 H317 May cause an allergic skin reaction.
  STOT SE 3 H335 May cause respiratory 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  GHS08
Signal word Danger

Hazard-determining components of labeling:
Solvent naphtha (petroleum), light arom.
dipentene
2,6-dimethylheptan-4-one
ehtyl lactate

Hazard statements
H226 Flammable liquid and vapor.
H332 Harmful if inhaled.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H304 May be fatal if swallowed and enters airways.

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.
P272 Contaminated work clothing must not be allowed out of the workplace.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P353+P338 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P312 Call a POISON CENTER/doctor if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
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 = 1
Fire = 2
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1
Fire = 2
Reactivity = 0
3 Composition/information on ingredients

3.2 Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-95-6 Solvent naphtha (petroleum), light arom.</td>
<td>50-100%</td>
</tr>
<tr>
<td>108-83-8 2,6-dimethylheptan-4-one</td>
<td>10-25%</td>
</tr>
<tr>
<td>138-86-3 dipentene</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>97-64-3 ethyl lactate</td>
<td>≤ 2.5%</td>
</tr>
<tr>
<td>7397-62-8 butyl glycollate</td>
<td>≤ 2.5%</td>
</tr>
</tbody>
</table>

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.

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. 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: Mouth respiratory protective device.

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). Dispose contaminated material as waste according to item 13.
7 Handling and storage

7.1 Precautions for safe handling
- Keep receptacles tightly sealed.
- Ensure good ventilation/exhaustion at the workplace.

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.

8 Exposure controls/personal protection

8.1 Control parameters
- Components with limit values that require monitoring at the workplace:
  - The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
  - At this time, the other constituents have no known exposure limits.

8.2 Exposure controls
- 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.
Avoid contact with the eyes and skin.

- **Breathing equipment:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **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.

- **Eye protection:**

  **Tightly sealed goggles**

### 9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

  - **General Information**
    - **Appearance:**
      - 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: 168 °C (334 °F)

  - **Flash point:** 43 °C (109 °F)

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

  - **Ignition temperature:** 255 °C (491 °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.
44.0

· Explosion limits:
  Lower: 0.7 Vol %
  Upper: 7.5 Vol %

· Vapor pressure at 20 °C (68 °F):
  5 hPa (4 mm Hg)

· Density at 20 °C (68 °F):
  0.86 g/cm³ (7.177 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: 97.5 %
  VOC content: 97.5 %

· Solvent content:
  838.5 g/l / 7.00 lb/gl

· 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:
  Harmful if inhaled.

· LD/LC50 values that are relevant for classification:
  64742-95-6 Solvent naphtha (petroleum), light arom.

  Oral LD50 >6800 mg/kg (rat)
  Dermal LD50 >3400 mg/kg (rab)
  Inhalative LC50/4 h >10.2 mg/l (rat)

· Primary irritant effect:
  on the skin: Based on available data, the classification criteria are not met.
  on the eye:
  Causes serious eye irritation.

· Sensitization:
  May cause an allergic skin reaction.
### 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 3 (Self-assessment): extremely hazardous for water*
    - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    - Danger to drinking water if even extremely small quantities leak into the ground.
  - **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

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

- **14.2 UN proper shipping name**
  - **DOT**
    - Resin solution
  - **ADR**
    - 1866 Resin solution, ENVIRONMENTALLY HAZARDOUS
  - **IMDG, IATA**
    - RESIN SOLUTION

(Contd. on page 8)
44. Transport hazard class(es)

- **DOT**
  - Class 3 Flammable liquids
  - Label 3

- **ADR**
  - Class 3 Flammable liquids
  - Label 3

- **IMDG, IATA**
  - Class 3 Flammable liquids
  - Label 3

4.4 Packing group

- **DOT, ADR, IMDG, IATA** III

4.5 Environmental hazards:

- Marine pollutant: No
- Special marking (ADR): Symbol (fish and tree)

4.6 Special precautions for user

- Warning: Flammable liquids
- Danger code (Kemler): 30
- EMS Number: F-E,S-E
- Stowage Category A

4.7 Transport in bulk according to Annex II of MARPOL 73/78 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

(Contd. on page 9)
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
- **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 Roote (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

(Contd. on page 10)
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)
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
NFPA: National Fire Protection Association (USA)
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
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1