1: Identification

- 1.1 Product identifier
  - Trade name: AFCONA - 3730
  - 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
    Skin Irrit. 2 H315 Causes skin irritation.
    Eye Irrit. 2A H319 Causes serious eye irritation.
    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.
Hazard statements
H226 Flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
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.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
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).
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P331 Do NOT induce vomiting.
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 = 1
Fire = 2
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH

Fire = 2

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:

64742-95-6 Solvent naphtha (petroleum), light arom.  10-25%
4: First-aid measures

4.1 Description of first aid measures

· General information: Immediately remove any clothing soiled by the product.
· 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).
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.

7: Handling and storage

7.1 Precautions for safe handling

Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

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>Component</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 Skin</td>
<td>24 mg/m³, 5 ppm Skin</td>
<td>97 mg/m³, 20 ppm BEI</td>
</tr>
<tr>
<td>1330-20-7 xylene</td>
<td>435 mg/m³, 100 ppm</td>
<td>655 mg/m³, 150 ppm</td>
<td>435 mg/m³, 100 ppm BEI</td>
</tr>
</tbody>
</table>

 Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Component</th>
<th>BEI</th>
<th>Medium</th>
<th>Time</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2 2-butoxyethanol</td>
<td>200 mg/g creatinine</td>
<td>urine</td>
<td>end of shift</td>
<td>Butoxyacetic acid with hydrolysis</td>
</tr>
<tr>
<td>1330-20-7 xylene</td>
<td>1.5 g/g creatinine</td>
<td>urine</td>
<td>end of shift</td>
<td>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 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**
  Tightly sealed goggles

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**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
  - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** 155 °C (311 °F)

  - **Flash point:** 41 °C (106 °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:** 0.7 Vol %
    - **Upper:** 10.6 Vol %

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

  - **Density:** Not determined.
  - **Relative density:** Not determined.
  - **Vapour 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.
10: Stability and reactivity

· 10.1 Reactivity: No further relevant information available.
· 10.2 Chemical stability
· 10.3 Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· 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.
· LD/LC50 values that are relevant for classification:

| 64-742-95-6 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: 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 |
| 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.
· 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.
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
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
- 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

<table>
<thead>
<tr>
<th>DOT</th>
<th>Transport/Additional information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity limitations</td>
<td>On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L</td>
</tr>
</tbody>
</table>

ADR

<table>
<thead>
<tr>
<th>Excepted quantities (EQ)</th>
<th>Code: E1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum net quantity per inner packaging: 30 ml</td>
<td></td>
</tr>
<tr>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
<td></td>
</tr>
</tbody>
</table>

IMDG

<table>
<thead>
<tr>
<th>Limited quantities (LQ)</th>
<th>5L</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Code: E1</td>
</tr>
<tr>
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<td></td>
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<tr>
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</tr>
</tbody>
</table>

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):

<table>
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</tr>
</thead>
<tbody>
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</table>

TSCA (Toxic Substances Control Act):

<table>
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<tr>
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</tr>
</thead>
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<tr>
<td>1330-20-7</td>
<td>xylene</td>
</tr>
</tbody>
</table>

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)

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
</tr>
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TLV (Threshold Limit Value established by ACGIH)

<table>
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</tr>
</tbody>
</table>

(Contd. on page 9)
Trade name: AFCONA - 3730

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  None of the ingredients is listed.

- **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.

- **Hazard statements**
  H226 Flammable liquid and vapor.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  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.
  P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
  P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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  P321 Specific treatment (see on this label).
  P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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  P337+P333 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.
  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.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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

(Contd. on page 10)
### Abbreviations and acronyms:
- 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Flammable liquids, Hazard Category 3
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1