1: Identification

1.1 Product identifier
- Trade name: AFCONA - 2050
- 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

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.

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
  - GHS08

- Signal word Danger

- Hazard-determining components of labeling:
  Distillates (petroleum), hydrotreated light

- Hazard statements
  H226 Flammable liquid and vapor.
  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.
  P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 2)
Trade name: AFCONA - 2050

(Contd. of page 1)

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.
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.
P331  Do NOT induce vomiting.
P370+P378  In case of fire: Use for extinction: CO2, powder or water spray.
P405  Store locked up.
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 = 0
    Fire = 2
    Reactivity = 0
  · HMIS-ratings (scale 0 - 4)
    HEALTH
    Health = 0
    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:
    64742-47-8 | Distillates (petroleum), hydrotreated light | 25-50%
    108-65-6 | 2-methoxy-1-methylethyl acetate | 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: Supply fresh air; consult doctor in case of complaints.
  · After skin contact: Immediately rinse with water.
  · After eye contact: Rinse opened eye for several minutes under running water.
  · 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.

(Contd. on page 3)
Trade name: AFCONA - 2050

(Contd. of page 2)

· 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.

· 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:
  108-65-6 2-methoxy-1-methylethyl acetate
  \[\text{WEEL} \text{ Long-term value: 50 ppm}\]

· 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.

· Breathing equipment: Not required.

· Protection of hands:
  Protective gloves

(Contd. on page 4)
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 breakthrough 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

<table>
<thead>
<tr>
<th>9.1 Information on basic physical and chemical properties</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td>Fluid</td>
</tr>
<tr>
<td><strong>Form:</strong></td>
<td>Fluid</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>According to product specification</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Characteristic</td>
</tr>
<tr>
<td><strong>Odour threshold:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>pH-value:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Melting point/Melting range:</strong></td>
<td>Undetermined.</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range:</strong></td>
<td>146 °C (295 °F)</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>44 °C (111 °F)</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Ignition temperature:</strong></td>
<td>210 °C (410 °F)</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Auto igniting:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Lower:</strong></td>
<td>0.5 Vol %</td>
</tr>
<tr>
<td><strong>Upper:</strong></td>
<td>10.8 Vol %</td>
</tr>
<tr>
<td><strong>Vapor pressure at 20 °C (68 °F):</strong></td>
<td>3.4 kPa (3 mm Hg)</td>
</tr>
<tr>
<td><strong>Density at 20 °C (68 °F):</strong></td>
<td>0.84 g/cm³ (7.01 lbs/gal)</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

| Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
41.2.14

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

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

- Solvent content:
  - Organic solvents: 64.5 %
  - VOC content: 64.5 %
  - 541.8 g/l / 4.52 lb/gl

- Solids content: 35.5 %

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: Based on available data, the classification criteria are not met.
  - Primary irritant effect:
    - on the skin: Based on available data, the classification criteria are not met.
    - on the eye: Based on available data, the classification criteria are not met.
  - 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.

(Contd. on page 6)
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
  - 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  Not applicable.
Transport/Additional information:

- DOT
- Quantity limitations
  - On passenger aircraft/rail: 60 L
  - On cargo aircraft only: 220 L

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

- 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):
  - 64742-47-8 Distillates (petroleum), hydrotreated light
  - 108-65-6 2-methoxy-1-methylethyl acetate

- 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
  - None of the ingredients is listed.

- 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.

- Labelling according to Regulation (EC) No 1272/2008
  - The product is classified and labeled according to the CLP regulation.
Safety Data Sheet
acc. to OSHA HCS

Trade name: AFCONA - 2050

(Contd. of page 7)

· Hazard pictograms

GHS02  GHS08

· Signal word Danger

· Hazard-determining components of labeling:
Distillates (petroleum), hydrotreated light

· Hazard statements
H226 Flammable liquid and vapor.
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.
P280 Wear protective gloves / eye protection / face protection.
P240 Ground/bond container and receiving equipment.
P233 Keep container tightly closed.
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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.
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P405 Store locked up.
P403+P235 Store in a well-ventilated place. Keep cool.
P301 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.

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 10/27/2015 / -

· 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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1