



## HPL Additives Limited

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## MIKROFINE<sup>®</sup> ADC - 3052/ 3072/3012

MIKROFINE<sup>®</sup> ADC-3052/3072/3012 is a self-dispersible universally employed chemical blowing agent in powder form for the production of cellular plastics. MIKROFINE<sup>®</sup> ADC-3052/3072/3012 are available in a range of particle sizes with a very close distribution.

### 1 PRODUCT INFORMATION

|                                       |   |   |
|---------------------------------------|---|---|
| Main constituent                      | : | Azodicarbonamide<br>CAS Number [123-77-3]<br>Mol. Formula C <sub>2</sub> H <sub>4</sub> N <sub>4</sub> O <sub>2</sub><br>Mol. wt. 116 |
| Physical form                         | : | Pale yellow free flowing powder   |
| Odour                                 | : | Odourless   |
| Solubility                            | : | Insoluble in water and benzene.<br>Soluble in dimethylformamide.  |
| Health, safety & handling information | : | Relevant information can be found in sheet No. HPLA/MSDS/M/CBA/01   |

### 2 SPECIFIED PROPERTIES

|  |   |           |
|--|---|-----------|
| Decomposition temperature (°C)<br>(Open capillary tube method) | : | 200 ± 3   |
| Gas content<br>(ml/gm at STP)                                  | : | 235 ± 5   |
| Volatility (%w/w)  | : | 0.5 max.  |
| pH<br>(5% aqueous suspension at 25°C)                          | : | 7.0 ± 0.5 |
| Average particle diameter (micron)                             | : |           |
| ADC 3052   | : | 4.5 - 5.5 |
| ADC 3072   | : | 6.5 - 7.5 |
| ADC 3012   | : | 10 - 12   |

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## SPECIAL FEATURES

MIKROFINE<sup>®</sup> ADC- 3052/3072/3012 are completely dispersible. The products have a narrow particle size distribution for reliable performance.

MIKROFINE<sup>®</sup> ADC-3052/3072/3012 has been specially developed to produce white foams in PVC plastisol applications where it can be incorporated into PVC-plastisol as a dry powder during the normal mixing cycle. A pre-dispersion in a plasticizer is not needed.

Setting problems experienced with most blowing agent - plasticizer dispersions are eliminated with MIKROFINE<sup>®</sup> ADC- 3052/3072/3012 grades.

MIKROFINE<sup>®</sup> ADC- 3052/3072/3012 are free flowing powders, which do not agglomerate. This makes these product ideal for metering in hopper blender units on extruders and injection moulding machines.

MIKROFINE<sup>®</sup> ADC- 3052/3072/3012 can be incorporated into rubber compounds at the end of the mixing process and disperses easily in all compounds (even with relatively low viscosity).

With MIKROFINE<sup>®</sup> ADC-3052/3072/3012 products vulcanizates with fine, uniform cell structure and smooth surface can be obtained and these products do not impart discoloration or odor to vulcanizates.

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## APPLICATIONS

MIKROFINE<sup>®</sup> ADC- 3052/3072/3012 are used in a wide variety of polymers for the production of foamed articles based on plasticized or unplasticized PVC, HDPE/LDPE, EVA co-polymers, natural & synthetic rubber, polypropylene & ABS where in it produces whiter foams with uniform & fine cell structure. It is especially suitable for PVC plastisol application

MIKROFINE<sup>®</sup> ADC-3052/3072/3012 are blowing agent for rubber compounds where it can be easily incorporated at the end of mixing process and results in even dispersion. With MIKROFINE<sup>®</sup> ADC- 3052/3072/3012 vulcanizes with extremely fine uniform cell structure free from any discoloration or odor, can be obtained. Wall papers, artificial leather cloth, floor and wall coverings, thermo insulating materials, insulating sealant, carpet backing, cellular ceramic, door sealing strips, profiles, sheets, foot wear midsoles /insoles and automotive components are some of the application areas.

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## DOSAGE

0.5 - 6.0 PHR depending on the polymer used and the extent of expansion required.

## 6 PACKING

MIKROFINE<sup>®</sup> ADC- 3052/3072/3012 are packed in 25 kg HDPE bags /20 kg or 25kg UN approved corrugated cartons with a polythene liner inside or as per customer's requirement

The information given in this document is only a recommendation, believed to be reliable and is given in good faith but without warranty. Our advice does not release users from the obligation of checking its validity. The user should test the product to ascertain the suitability for the intended use. Specified properties mentioned in this document are based on our historical production performance and these properties or the whole document is subject to change without any prior notice, at our sole discretion. We are under no obligation to recall earlier issued documents.

### **HPL ADDITIVES LTD.**

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