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Morphology Terminology

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Morphology Terminology

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Following the conclusion of the Characterization Section on Tuesday, at the request of the Chairman, Prof. P. H. Geil, approximately 25 symposium attendees remained to discuss the general problem of morphology terminology for PVC. As a result the list of terms given in Table 1 was developed. It is strongly recommended that future papers discussing PVC use these terms to permit common understanding of the morphological units being described.

TABLE 1

Term	Approximate size in typical PVC	Origin of Description
Grain	100 μm	Free flowing at room temperature
Agglomerate	10 μm	Formed during polymerization by merging of primary par- ticles
Primary particle	1 μm	Formed from single polymeri- zation site at conversions of 10-50%

(continued)

TABLE 1. (continued)

Term	Approximate size in typical PVC	Origin of description
Domain	100 nm	Presence not clearly proven, possibly formed by mechanical working within or from pri- mary particles
Microdomains	10 nm	Crystallite or nodule?