KAWASAKI STEEL TECHNICAL REPORT

KAWASAKI STEEL TECHNICAL REPORT No. 28 June 1993

Development and Application of High-Purity Hexagonal Boron Nitride (h-BN) Powder*

Synopsis:

In the diversification program of Kawasaki Steel, the [illegible]

ramic material around 1985, and began to develop [illegible]

h-BN also transforms into [illegible]

h-BN is its anisotropy. As discussed above, the two- [illegible] and molybdenum disulfide (MoS_2). However, h-BN ofcomplex. At the same time, the degree of purity which

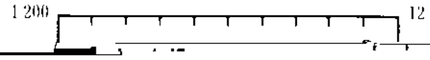


photo of h-BN for lubricant and mould release use; Photo 2 (b) is a ceramics grade product for sintering.

Table 5 Properties of h-BN powder for cosmetics (compared with conventional powder)

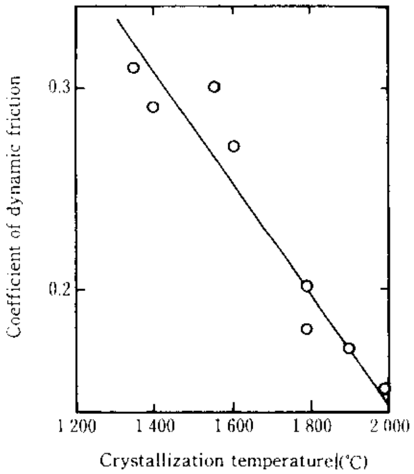


Fig. 4 Effect of crystallization temperature on the

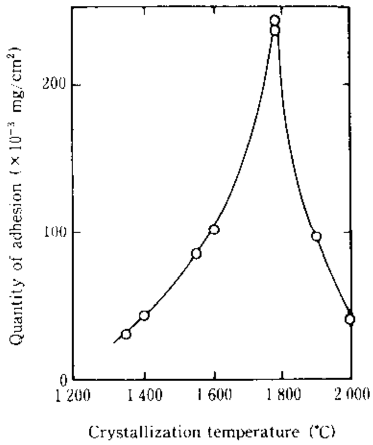
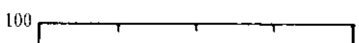
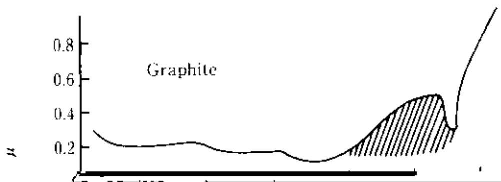


Fig. 6 Effect of crystallization temperature on the



powders for cosmetic applications. In ease of application, the new material is superior to spherical nylon



promising. Conventional graphite/organic binder type coatings may cause carburization defects in products due to the reaction between aluminum and graphite, and deterioration of the working environment due to the decomposition gas released by the organic binder.

5 Conclusions

Hexagonal BN (h-BN) ... [illegible]

is uniformly dispersed in water, silicon oil, or an organic solvent have been developed as high-tem-