

t109_zfmisc_1
(TMWSTy9zDLv3kFttcyPin8j7LNbFE78Kzpu)

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Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (k2_zfmisc_1 (k2_xboole_0 X0 \\ & X1) X2 = k2_xboole_0 (k2_zfmisc_1 X0 X2) (k2_zfmisc_1 X1 X2)) \wedge (k2_zfmisc_1 \\ & X2 (k2_xboole_0 X0 X1) = k2_xboole_0 (k2_zfmisc_1 X2 X0) (k2_zfmisc_1 \\ & X2 X1)) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (k2_zfmisc_1 (k2_tarski X0 X1) \\ & X2 = k2_xboole_0 (k2_zfmisc_1 (k1_tarski X0) X2) (k2_zfmisc_1 (\\ & k1_tarski X1) X2)) \wedge (k2_zfmisc_1 X2 (k2_tarski X0 X1) = k2_xboole_0 \\ & (k2_zfmisc_1 X2 (k1_tarski X0)) (k2_zfmisc_1 X2 (k1_tarski X1))) \end{aligned}$$