FROM (LOCATION)

DATE

SUBJECT

REFERENCE

TO

Organic Research Department
Research Center - W-Bldg.

January 25, 1967

Tentative Process
Therminol FR-O Lo Temp.
(Formerly MCS 523)

cc: CWILLiams
GSIDO
WAULT
SSHAW
MCMEWen
WRichard 2nd, Res.
Safety Review Committee

R. G. Moody

Anniston

It is the intention of the Organic Marketing Department to start selling Therminol FR-O Lo Temp. as a new fire resistant -20°F. to 400°F. heat transfer fluid. This material differs from Therminol FR-O, which you now manufacture, only in concentrations of components; therefore, this memo will serve as a Tentative Process for FR-O Lo Temp.

Therminol FR-O Lo Temp is a blend of:

50% by weight Aroclor 1242
50% by weight tri-tetrachlorobenzene blend.

The same raw materials that go into Therminol FR-O (which is 20% tri-tetra and 80% 1242) are used in the blend. No special precautions are necessary for the blending. The tri-tetra blend used as a raw material has a last crystal point of about 30°F., so if this material has been stored in temperatures below 40°F., heating to about 70°F. is advised before the material is removed from shipping containers. The toxicity of tri-tetrachlorobenzene and Aroclor 1242 are well known and normal precautions should be observed in handling these materials.

Attached are the tentative specifications for Therminol FR-O Lo Temp. These specifications come from a minimum amount of lab data and should be reviewed after the first few plant batches are made.

C. P. Duncker

cp

MONS 096440

TENTATIVE SPECIFICATIONS
Therminol FR-O Lo Temp

| | | |
|---|---|---|
| | Appearance | clear, colorless liquid |
| | Density (lbs./cu.ft./25°C.) | 89.2 - 90.5 |
| | Acid No. (Mg. KOH/g.) | 0.05 max. |
| | Moisture - Ppm. | 75 max. |
| * | Viscosity at 70°F. - centipse. | 8.0 - 9.0 |
| | Fire Point, °F. | None to boiling |
| | Specific heat, Btu/lb.°F. | 0.26 min. at 100°F. |
| | Thermal conductivity Btu/hr.cu.ft.,°F./ft. | .062 min. at 100°F. |
| * | Viscosity at 100°F. centp. | 5.1 max. |
| * | at 210°F. centp. | - |

* Report viscosity in centipoise and SUS.

1-25-67

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