***HET-515 P*** *, liquid flame retarted polyester resin of a semi rigid type, medium viscosity and medium reactivity especially projected for construction of sea craft, pipes , transportation vehicles and other FGRP products which require good fire , flame and combustion resistance .*
***HET 515-P*** *can be also utilized in articles in contact with corrosive environments as it processes as well good chemical resistance .*
***HET 515-P*** *contains antioxdants UV , absorbers and UV stabilizers to permit color retention to maximum period of time and to counteract the effect of chlorine atoms that are inherently incorporated into resin backbone.*

## RESIN CHARACTERISTICS ( BEFORE POLYMERISATION )

| PROPERTY | STANDARD |
|---|---|
| State | Liquid |
| Monomer content % | 33 - 37 |
| Viscosity @ 25 ° C ( Brookfield viscometer ) | 500-600 centi poises |
| Aspect | Clear Amber |
| Oxygen Index , Approximately | 28 |
| Hazen colouring | 200 |
| Specific gravity @ 20 ° C | 1.32 ± 0.03 |
| Refractive index @ 25 ° C | 1.55 ± 0.005 |
| Acid index ( mg KOH / g resin ) | 26 ± 3 |
| Conservation @ 25 ° C in closed package min. | 3 months |

## POLYMERIZATION CHARACTERSTICS

*The polymerization can also be effected in cold, in this case, the addition of an accelerator is necessary. The following indicates the gel time obtained in standard work conditions, which can serve as an approximate indication.*

| Accelerator | Catalyst | Temperature | Gel time ( min. ) | Peak temp. |
|---|---|---|---|---|
| C3 1% | M8 2% | 25 ° C | 15-20 | 180-220 ° C |

*C3 =COBALT OCTOATE OF 1.5 % Co* *M8 = MEK PEROXIDE OF 50%*

*****Please note that the gel time is the standard that we produce however, we can modify to suite your requirment***

## APPLICATION:

***HET 515-p*** *, as it contains inherent flame resistance components in its backbone structure, is mainly inteded to be used for making articls that resist fire and does not support flame.The resin when cured and allowed to mature passes an oxygen index test of more than 28 ( quantity of oxygen that is required to start burning ).Improvement in this oxygen index dermand increases by the addition of other well know flame retardant chemicals to the resin such as Antimony TriOxide(ATO).*
*The addition of 5%ATO to the resin increases the oxygen index to more than 38 , which means an increase of the ability to resist flame by about 35% .*
*In addition ,* ***HET 515-P*** *posses higher resistance to corrosive chemicals than standard resin , including acids and bases*

***N.B since operatinge conditions in the user's plant are beyond our control . we cannot assume liabilities which may result from the use of our product .***

*Rev.04*



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