

1. SUBSTANCE AND COMPANY UNDERTAKING

PRODUCT NAME: DUP, DI-UNDECYL PHTHALATE

SUPPLIER: INNUA PETROCHEM LTD

STREET ADDRESS: PO BOX 3069, ROAD TOWN, TORTOLA, BRITISH VIRGIN ISLANDS

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES: DI-UNDECYL PHTHALATE; DI-N-UNDECYL PHTHALATE; PHTHALIC ACID, DIUNDECYL ESTER; 1,2 BENZENEDICARBOXYLIC ACID, DI-UNDECYL ESTER.

DESCRIPTION: A HIGH MOLECULAR WEIGHT PHTHALATE ESTER PLASTICISER USED ALMOST EXCLUSIVELY FOR PVC.

CONTENT (W/W): > = 99.0%; **IMPURITIES:** <0.1%

CAS NUMBER: 3648-20-2 **EINECS NUMBER:** 222-884-9 **REACH REFERENCE NUMBER:** 02-2119787949-07-0000

MOLECULAR FORMULA: C₃₀H₅₀O₄ **MOLECULAR WT.:** 474.73

3. SALES SPECIFICATION (PHYSICAL AND CHEMICAL PROPERTIES)

ITEM	UNIT	TEST METHOD	SPECIFICATION
Appearance		VISUAL	Clear, viscous liquid free from matter
Colour	Pt-Co Scale	ASTM D1209	50 Maximum
Specific Gravity @ 25°C		ASTM D1298	0.948 – 0.954
Water	wt%	ASTM E203	0.1 Maximum
Acidity	wt%	ASTM D1045	0.1 Maximum
Ester Content	wt%	ASTM D3465	99.0 Minimum
Refractive Index @ 20°C		ASTM D1045	1.485 - 1.487