

REVISED DATE: 03 DECEMBER 2011

1. SUBSTANCE AND COMPANY UNDERTAKING

PRODUCT NAME: DBP, DI-BUTYL PHTHALATE

SUPPLIER: INNUEA PETROCHEM LTD
STREET ADDRESS: PO BOX 3069, ROAD TOWN, TORTOLA, BRITISH VIRGIN ISLANDS
TEL: +1 284 495 0244 FAX: +1 284 495 0245

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES: BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER; DIBUTYL O-PHTHALATE; O-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER; N-BUTYL PHTHALATE; DI-N-BUTYL PHTHALATE; DIBUTYL 1,2-BENZENEDICARBOXYLATE

PREPARATION DESCRIPTION: DI-BUTYL PHTHALATE IS A HIGH PERFORMANCE PLASTICIZER WITH HIGH SOLVATION RATES, FAST INCORPORATION RATES AND MODERATE PERMANENCE AND PLASTICITY.

CONTENT (W/W): > = 99.5%; IMPURITIES: <0.1%

CAS NUMBER: 84-74-2
EINECS NUMBER: 201-557-4
REACH C&L NUMBER: 02-2119787943-19-0000

MOLECULAR FORMULA: $C_6H_4[COO(CH_2)_2CH_3]_2$ MOLECULAR WT: 278.35

3. SALES SPECIFICATION (PHYSICAL AND CHEMICAL PROPERTIES)

| ITEM | UNIT | SPECIFICATION |
|------------------|------------------------------------|---------------|
| COLOUR | APHA | 40 MAXIMUM |
| SPECIFIC GRAVITY | 20/20°C | 1.048 ± 0.003 |
| REFRACTIVE INDEX | 25°C | 1.491 ± 0.003 |
| ACID VALUE | mg/KOH/g | 0.5 MAXIMUM |
| ESTER CONTENT | Wt% | 99.0 MINIMUM |
| MOISTURE | Wt% | 0.05 MAXIMUM |
| HEATING LOSS | Wt% 125°C ± 3°C x 3 hours (NO AIR) | 1.0 MAXIMUM |
| | Wt% 125°C ± 3°C x 3 hours (AIR) | 2.0 MAXIMUM |