

Specifications Covering Identification, Marking and Age on Delivery of Rubber Materiel, Assemblies and Rubber Containing Composites

1. General Conditions

1.1 The conditions of the following standards are to apply to the Articles ordered against this Contract, where they are not covered by a specific procurement specification, production drawings or similar requirement stated in the Contract.

- a) British Standard 4F/68:2002 "Controlled storage and packaging of vulcanised rubbers for use in aerospace applications".
- b) British Standard 3F/69:1979 "Packaging and Identification of vulcanised rubber items".
- c) Defence Standard 81-39 Issue 3 "Packaging of rubber hoses, plastic hoses and hose assemblies".
- d) Defence Standard 81-60 "Packaging of gaskets, seals, 'O' rings, grommets and similar materiel.
- e) BS ISO 2230:2002 – Rubber Products – Guidelines for storage

2. Age of Rubber used in the manufacture of rubber composites and assemblies, i.e. flexible rubber hoses, hose assemblies and bellows.

2.1. Because of the Shelf Life limitation related to items wholly or partially composed of rubber, it is a requirement that at the time of manufacture, the rubber used must be the most recently cured obtainable. The despatch date of the manufactured Article should not normally be later than 12 months from the cure date. The Authority reserves the right to reject any item manufactured where the cure date of the rubber element exceeds 12 months prior to the date of despatch. Where more than one cure date is present then sentence shall be based on the oldest cure date. Where items are offered ex-stock the cure date of the rubber shall be notified to the Government Quality Assurance Representative (GQAR). The agreement of the GQAR shall be obtained prior to the supply of any item where the cure date of that item is more than 12 months previous. DEFSTAN 05-61 Pt 1 issue 4 applies.

3. Age of Rubber on Delivery where the rubber item is produced by a single manufacturing process.

3.1 Because of shelf life limitations imposed on store holders, it is a requirement that the maximum possible initial storage life be available on receipt. Accordingly no item shall be delivered where the cure date is more than six months prior to receipt at MOD Stores Depot (where the specification calls for marking as quarter and year, then not more than one full quarter may have elapsed). The Authority reserves the right to reject any Article manufactured where the cure date exceeds six months prior to date of despatch.

3.2 Items offered Ex Stock - Where items are offered ex-stock, the cure date of the rubber shall be notified to the Commercial Branch stated in the Contract. The agreement of the Commercial Branch shall be obtained prior to the supply of any item where the cure date of the item is more than 6 months previous. DEFSTAN 05-61 Part 1 issue 4 applies.

4. Marking of Components and Assemblies (other than those in Clause 5 below) where rubber is a major component.

4.1 The package containing component(s) or assembly(ies) shall be marked with details a) to g) of Table 1 and, if stated on the Product Specification, Drawing or Contract Narrative, detail h). Where practicable, these details shall also be marked on a non-critical surface of the component or assembly.

5. Marking of Hose, Hose Assemblies and Bellows

5.1 For the purpose of this clause a rubber hose is defined as a "flexible rubber tube with reinforcements but excluding end fittings". This becomes a flexible hose assembly when mated with integral end fittings or flanges.

5.2 For the purpose of this clause Bellows are "a preformed reinforced rubber bellows with single or multiple corrugations and with or without integral moulded end fittings or flanges". Where practicable, each item on the Contract Schedule falling within these definitions shall be identified, on a non-critical surface, in accordance with Table 1.

5.3 Packages containing items within these definitions shall be marked with details a) to g) of Table 1 and, if stated on the Product Specification, drawing or contract narrative, detail h).

Table 1

Position of marking for the Assemblies and Bellows			
	Lay Line	Hose Assembly	Packaging
a) NATO Stock Number, NSN		M	M
b) Cure Date of rubber component by month any year e.g. 6/96 (Coded marking are not acceptable)	M		M
c) Packing date			M
d) Batch number		M	M
e) Manufacturers Release Number			P
f) Manufacturers Identification Number	P		P
g) Lifting Group			M
h) Manufacturers Design Working Pressure		M	M

NB Markings indicated by **M** are mandatory. Markings indicated by **P** are permissive and can be present at the discretion of the Contractor.

Items a), b), d) and h) shall be marked on the hose assembly in the following manner: a), d) and h) by a metal band, attached to the flexible hose assembly; b) to be included in the lay line (branding line or torsion line), moulded into the hose or by a label vulcanised into the hose.