Issue No 1	**DECLARED MATERIALS LIST**	**XMM-OM/MSSL/SP/0129**

PROJECT: X-RAY MULTIMISSION (XMM)
EXPERIMENT: OPTICAL MONITOR (OM)
EXPERIMENTERS: MULLARD SPACE SCIENCE LABORATORY (MSSL)
DEPT OF PHYSICS, UNIVERSITY OF CALIFORNIA, SANTA BARBARA (UCSB)
CENTRE SPATIAL DE LIEGE (CSL)
PREPARED BY: A P Dibbens

CATEGORY: 20. Miscellaneous non-metallic materials

Itm No	Commercial Identification	Chemical Nature Type of Product Form & Condition	Procurement Info., Supplier Spec. Issue	Summary of Processing Parameters	Use & Location	Environmental Code R	A	T	Size Code	Approval Status	ESA Comments
1.	Lacing cord	Braided Dacron 15D96, type II, finish C	Gudebrod Inc	N/A	All parts of the harness	B	V	3/4	W1		
2.	Heat shrink sleeving	Polyolefin, low temperature shrink	Raychem RT-876	Hot air gun	Any part of the harness	B	V	3/4	W1		

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CATEGORY: 19. Wire and cables

Itm No	Commercial Identification	Chemical Nature Type of Product Form & Condition	Procurement Info., Supplier Spec. Issue	Summary of Processing Parameters	Use & Location	Environmental Code R	A	T	Size Code	Approval Status	ESA Comments
1.	Wire	Tinned copper wire, PTFE insulated	Raychem 55A	N/A	All cables	B	V	3/4	W3		

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CATEGORY: 10. Adhesives, coatings and varnishes

Itm No	Commercial Identification	Chemical Nature Type of Product Form & Condition	Procurement Info., Supplier Spec. Issue	Summary of Processing Parameters	Use & Location	Environmental Code R	A	T	Size Code	Approval Status	ESA Comments
1.	Scotch Weld 1838	Commercial product, 2 part epoxy adhesive	3 M's Adhesive Supplies	Mix 1:1 by mass. Cure 4 hrs @ 60 C	Securing lacing cord knots	B	V	3/4	W1		

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CATEGORY: 7. Filler metals and solders

Itm No	Commercial Identification	Chemical Nature Type of Product Form & Condition	Procurement Info., Supplier Spec. Issue	Summary of Processing Parameters	Use & Location	Environmental Code R	A	T	Size Code	Approval Status	ESA Comments
1.	Solder, Elsold	63/37 Sn/Pb eutectic rosin cored. Commercial product, extruded	Bleiwerk Goslar 63 tin solder, as in ESA PSS-01-708	Hand soldering	Connector	B	V	3/4	W0		

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CATEGORY: 1. Aluminium and aluminium alloys

Itm No	Commercial Identification	Chemical Nature Type of Product Form & Condition	Procurement Info., Supplier Spec. Issue	Summary of Processing Parameters	Use & Location	Environmental Code			Size Code	Approval Status	ESA Comments
						R	A	T			
1.	Aluminium foil	Space harness aluminium foil	ESA supplied; DW-AL-99-3/4”-05	N/A	Screen	B	V	3/4	W0		

1. INTRODUCTION

This document identifies the material types used in the XMM-OM 3 STM. The data is based on mature designs and is complete.

2. REFERENCE DOCUMENTS

XMM-OM/MSSL/SP/0031	Product Assurance Plan
XMM PX-RS-0017	Product Assurance Requirements for XMM Experiments
ESA PSS-01-70	Materials and Process Selection and Quality Control
ESA PSS-01-700	The Technical Reporting and Approval Procedure for Materials and Processes

3. QUALITY LEVELS

Material selection shall be as described in the PA Plan, XMM-OM/MSSL/SP/0031paras 8.1 and 8.2.

4. TABLE DESCRIPTION FOR THE DECLARED MATERIALS

The format of the following table is broadly as described in ESA PSS-01-70, Materials and Process Selection and Quality Control for ESA Space Systems and Associated Equipment.

4.1 Categories

Only the following categories are applicable to the OM3:-

1. Aluminium and aluminium Alloys
7. Filler materials and solders
10. Adhesives, coatings and varnishes
19. Wires and cables
20. Miscellaneous non-metallic materials

4.2 Column Description

1. Item number
2. Commercial Identification
3. Nature and Type of Product
4. Procurement Information
5. Summary of Processing Parameters
6. Use and Location
7. Environmental Code
8. Size Code
9. Approval Status
10. ESA Comments

4.3 Abbreviations

N/A = Not applicable
TBA= To be advised

CHANGE RECORD

ISSUE	DATE	PAGES CHANGED	COMMENTS
01	15 April 1997	All New	

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XMM Optical Monitor

MULLARD SPACE SCIENCE LABORATORY
UNIVERSITY COLLEGE LONDON **Author: A P Dibbens**

OM 3 STM DECLARED MATERIALS LIST

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