

**AN OVERVIEW OF THE
CHINESE RADIATION
CURING MARKET
2004 - 2009**

**© IAL CONSULTANTS
December 2004**

CP House, 97-107 Uxbridge Road, Ealing, London W5 5TL
Tel: +44 (0) 20 8832 7780 Fax: +44 (0) 20 8566 4931
Email: ial@brg.co.uk
Web site: www.ialconsultants.com

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the copyright owner.

NOTE

The information given in this report has been compiled from published sources and interpreted from fieldwork based on informed opinions. Whilst every care has been taken in the preparation of the report, there may have been some errors in the information obtained. Although it is impossible to verify every single detail by cross checking, we believe the general picture provided is reasonably accurate and comprehensive.

Many IAL reports contain an overview of selected company financial information and capabilities based on published sources where available. Although the companies represented are believed to be the major suppliers the profiles are meant to be indicative rather than definitive.

It is fundamental to the philosophy of IAL Consultants to constantly seek to extend and improve our service to clients. In pursuit of these aims, we shall be pleased to consider all requests for regular or periodic updating of all or any part of the information contained in this report, or for extensions in coverage in terms of product areas, market sectors and/or geographic regions.

We are, of course, always happy to discuss with any subscriber the possibility of undertaking further work, whether arising out of this report or in different business areas.

MORE INFORMATION ON IAL CONSULTANTS

Should you require more information on either our published reports or our private client services, please contact us at the address given.

Full details on all IAL Consultants published studies (including full tables of contents and tables of tables) and ad-hoc research services can be found on our website :

www.ialconsultants.com

CONTENTS

1. INTRODUCTION.....	1
1.1 SCOPE OF THE STUDY	1
1.1.1 <i>Geographic Scope</i>	1
1.1.2 <i>Raw Materials</i>	1
1.1.3 <i>End-use Markets</i>	2
1.2 METHODOLOGY	3
1.3 PRICES AND VOLUMES	3
1.4 FORECASTS	3
1.5 ABBREVIATIONS.....	4
2. EXECUTIVE SUMMARY.....	5
3. RAW MATERIALS.....	9
3.1 MARKET FOR RAW MATERIALS	9
3.1.1 <i>Monomers</i>	10
3.1.2 <i>Oligomers</i>	11
3.1.3 <i>Photoinitiators</i>	11
3.2 MANUFACTURERS OF OLIGOMERS AND MONOMERS	12
3.2.1 <i>Chinese manufacturers</i>	12
3.2.2 <i>Foreign Manufacturers</i>	14
3.2.3 <i>Chinese Photoinitiator Manufacturers</i>	15
3.3 INDUSTRIAL TRENDS & RESTRUCTURING	15
3.4 RAW MATERIALS SUPPLIERS	17
4. CHINESE MARKET FOR RADIATION CURING FORMULATED PRODUCTS.....	19
4.1 SUMMARY	19
4.2 UV PRINTING INKS AND OVERPRINT VARNISHES	19
4.2.1 <i>Applications by Ink Type</i>	19
4.2.2 <i>Market Data</i>	20
4.2.3 <i>Suppliers</i>	21
4.3 INDUSTRIAL COATINGS	24
4.3.1 <i>Summary</i>	24
4.3.2 <i>Technical Overview</i>	24
4.3.3 <i>Market Data</i>	25
4.3.4 <i>Paper</i>	30
4.3.5 <i>Others</i>	30
4.3.6 <i>Suppliers</i>	31
4.4 OPTO-ELECTRONIC COATINGS	33
4.4.1 <i>Technical Overview</i>	33
4.4.2 <i>Market Data</i>	34
4.4.3 <i>Suppliers</i>	36
4.5 UV ADHESIVES	40
4.5.1 <i>Technical</i>	40
4.5.2 <i>Market Data</i>	41
4.5.3 <i>Suppliers</i>	42
5. MARKET FACTORS & TRENDS	45
5.1 ECONOMIC ASPECTS	45
5.2 ENVIRONMENTAL LEGISLATION	46
5.2.1 <i>State Administration for Entry-Exit Inspection and Quarantine of the PR of China (CIQSA)</i>	46
5.2.2 <i>Beijing 2008 Olympic Games</i>	46
5.3 MARKET OPPORTUNITIES	46
5.3.1 <i>Raw Material Development</i>	46

5.3.2	Formulated Products	46
5.3.3	UV/EB Equipment	48
6.	COMPANY PROFILES OF LEADING CHINESE RADCURE MANUFACTURERS.....	49
6.1	PROFILES OF CHINESE COMPANIES	49
6.1.1	Beijing Eastern Acrylic Chemical Technology (BEACT).....	50
6.1.2	Beijing Huanwei Technology Co., Ltd	51
6.1.3	Beijing Tianshan New Material Technology.....	52
6.1.4	Changfeng Chemical Co., Ltd	53
6.1.5	Changchun Chemical (Jiangsu) Co. Ltd	54
6.1.6	Changzhou Xinghui Chemical Co., Ltd.,.....	55
6.1.7	Chengdu Jiaxing New Material Technology Co. Ltd	56
6.1.8	Chengdu University of Science & Technology (Boshen Hi-Tech).....	57
6.1.9	Chengdu Zhengguang Sci & Tech Co., Ltd.....	58
6.1.10	DSM Desotech Sales Representative Office	59
6.1.11	Eternal Chemical (China) Co.Ltd	60
6.1.12	Eternal Electronic Material Co., Ltd	62
6.1.13	Foshan Yueyang Special Ink Chemical Co. Ltd.	63
6.1.14	Fujikura Kasei.....	64
6.1.15	Guangzhou Longzhu Chemical Co. Ltd.	65
6.1.16	Hangzhou Toka Ink Chemical Co. Ltd.	66
6.1.17	Hangzhou Xingqiao Screen Ink Plant	67
6.1.18	Hangzhou Xinyi Industry.....	68
6.1.19	Hanyu Chemical Textile.....	69
6.1.20	Hitachi Chemical (China).....	70
6.1.21	Huanshan Chemical	71
6.1.22	Hunan Ahda (Yada) Technology Co. Ltd.	72
6.1.23	Liaoning University Experimental Factory.....	74
6.1.24	Nantong Litian Chemical	75
6.1.25	Runtec Chemical Co Ltd	76
6.1.26	Shaanxi New Century Printing Material Co. Ltd.	77
6.1.27	Sartomer China	78
6.1.28	Shanghai Leicheng Chemical Co. Ltd.	79
6.1.29	Shanghai Peony Printing Ink Co. Ltd.	80
6.1.30	Shanghai Toyo Ink Co. Ltd.....	81
6.1.31	Shanghai Wenhua Tech & Trade Co. Ltd.	82
6.1.32	Shantou Dongtai Chemcial	83
6.1.33	Shenzhen Merlia (Meilihua) Screen Ink Product Factory.....	84
6.1.34	Shenzhen Rongda Electronic Material Co., Ltd.....	86
6.1.35	Soasa Technology Co., Ltd.....	87
6.1.36	Suzhou Ruihong Electronic Chemicals Ltd	88
6.1.37	Tianjin Jiuri Chemical	89
6.1.38	Tianjin Tianjiao Chemical Industries Co. Ltd.....	90
6.1.39	Tianjin Toyo Ink Co., Ltd	91
6.1.40	Viochem Corp. (Ziqi Chemical)	92
6.1.41	Weihai Paint Plant.....	93
6.1.42	Wing Shing Chemical.....	94
6.1.43	Wuxi Aermei Photosensitive Chemical.....	95
6.1.44	Wuxi Chemical Industry Research & Design Institute.....	96
6.1.45	Wuxi Chunguang Ink Plant	97
6.1.46	Xinde High Polymer	98
6.1.47	Yixing Hongbo Emulsifiers Co., Ltd.....	99
6.1.48	Zhejiang Jingpen Chemical Co.....	100
6.1.49	Zhongshan Bohai Fine Chemical.....	101
6.1.50	Zhongshan Zhongyi Ink & Coating Co. Ltd.	102
7.	DIRECTORY OF SUPPLIERS.....	103
7.1	SUPPLIERS OF RAW MATERIALS	103
7.1.1	China	103
7.1.2	Japan.....	109

7.1.3	South Korea.....	114
7.2	FORMULATED PRODUCTS.....	115
7.2.1	China.....	115
7.2.2	Hong Kong.....	131
7.2.3	Japan.....	131
7.2.4	South Korea.....	137
7.2.5	Taiwan.....	137
8.	APPENDICES	141
8.1	APPENDIX 1 – TRADE ASSOCIATIONS.....	141
8.1.1	China.....	141
8.2	APPENDIX 2 – PUBLICATIONS	142

TABLE OF TABLES

1. INTRODUCTION.....	1
1.1 SCOPE OF THE STUDY	1
1.2 METHODOLOGY	3
1.3 PRICES AND VOLUMES	3
1.4 FORECASTS	3
1.5 ABBREVIATIONS.....	4
2. EXECUTIVE SUMMARY.....	5
Chinese Radcure Raw Material Market by Volume and Value (2004 & 2009).....	5
Chinese Market for UV Formulated Radcure Products by Value and Volume, (2004 & 2009).....	5
Chinese Radcure Manufacturing Profile (2003), by Manufacturing Sector.....	6
Number of Manufacturing Companies (2003) by Volume (tpa) and Value (RMB Million)	6
Radcure Production in China 2003 & 2004 (Tonnes).....	7
Radcure Equipment Production, 1999 - 2003	7
3. RAW MATERIALS.....	9
3.1 MARKET FOR RAW MATERIALS	9
Chinese Radcure Raw Material Market by Volume and Value (2004 & 2009).....	9
Chinese Market for Radcure Raw Materials, Value & Volume (2004)	10
3.2 MANUFACTURERS OF OLIGOMERS AND MONOMERS.....	12
Chinese Manufacturers of UV Acrylated Monomers & Oligomers.....	12
Foreign Manufacturers of UV Acrylated Monomers & Oligomers	14
Leading Photoinitiator Manufacturers in China (2004)	15
3.3 INDUSTRIAL TRENDS & RESTRUCTURING	15
3.4 RAW MATERIALS SUPPLIERS	17
Main Manufacturers of Radcure Raw Materials by Material Type.....	17
4. CHINESE MARKET FOR RADIATION CURING FORMULATED PRODUCTS.....	19
4.1 SUMMARY	19
4.2 UV PRINTING INKS AND OVERPRINT VARNISHES	19
Chinese Market for UV Printing Inks and Overprint Lacquers (2004 & 2009).....	20
Main Chinese Manufacturers of UV Graphic Arts Products	21
4.3 INDUSTRIAL COATINGS.....	24
Chinese Market for Radcure Industrial Coatings, by Volume and Value, 2004 & 2009	25
Sales of Wood and Bamboo Flooring in China, 1999 – 2003 (M sq.m.)	26
Chinese Market for High Quality UV Plastic Coatings, 2004 (Tonnes)	27
Global Market for Mobile Phones by Region, 2003 & 2008, (M units)	29
Main Chinese Manufacturers of UV Industrial Coatings by Product Type	31
Main Importers of UV Industrial Coatings, by Product Type.....	33
4.4 OPTO-ELECTRONIC COATINGS	33
Chinese Market for Opto-electronic Coatings by Type, 2004 – 2009 (Tonnes)	34
Global Suppliers of Opto-Electronic Coatings	36
Main Chinese Manufacturers of UV Opto-Electronic Coatings in China	39
4.5 UV ADHESIVES.....	40
Chinese Market for UV Structural Adhesives by Volume & Value, 2004-2009	41
Global Suppliers of UV/EB Structural Adhesives	42
Main Manufacturers of UV adhesives in China, by Adhesive Type.....	43
Other Opto-electronic	43
Glass	43
5. MARKET FACTORS & TRENDS	45
5.1 ECONOMIC ASPECTS	45
5.2 ENVIRONMENTAL LEGISLATION	46
5.3 MARKET OPPORTUNITIES	46
6. COMPANY PROFILES OF LEADING CHINESE RADCURE MANUFACTURERS.....	49
6.1 PROFILES OF CHINESE COMPANIES	49
7. DIRECTORY OF SUPPLIERS.....	103

7.1	SUPPLIERS OF RAW MATERIALS	103
7.2	FORMULATED PRODUCTS.....	115
8.	APPENDICES	141
8.1	APPENDIX 1 – TRADE ASSOCIATIONS	141
8.2	APPENDIX 2 – PUBLICATIONS	142