

SCIPINION COLLECTIVE WISDOM REPORT

# Best Practices for Consumer Product Safety Management

Findings from a SciPinion Worldwide Panel of  
Current and Former Industry Executives, Managers and  
Scientists



SciPinion, L.L.C.  
777 E Main St Suite 202  
Bozeman, MT 59772

[info@scipinion.com](mailto:info@scipinion.com)  
(406) 404 6145

## Table of Contents

<b>LIST OF TABLES AND FIGURES .....</b>	<b>1</b>
<b>GLOSSARY.....</b>	<b>2</b>
<b>INTRODUCTION .....</b>	<b>3</b>
<b>BEST PRACTICE INSIGHTS .....</b>	<b>4</b>
<b>BEST PRACTICES #1: USING THIRD-PARTY GUIDELINES AND DATABASES .....</b>	<b>4</b>
<b>BEST PRACTICES #2: ASSESSING THE SAFETY OF RAW MATERIALS.....</b>	<b>6</b>
CONTROLLING TYPE 1 ALLERGENS.....	7
ALTERNATIVE INGREDIENTS.....	7
BANNED INGREDIENTS .....	8
ENDOCRINE DISRUPTORS.....	8
<b>BEST PRACTICES #3: PRECLINICAL SAFETY TESTING OF PRODUCTS.....</b>	<b>9</b>
TYPES OF ASSAYS .....	10
TIMING AND FREQUENCY OF ASSAYS .....	11
APPROACHES TO TESTING .....	11
PACKAGING SAFETY .....	12
ENVIRONMENTAL ASSESSMENTS .....	12
<b>BEST PRACTICES #4: CONDUCTING CLINICAL TESTING .....</b>	<b>12</b>
<b>BEST PRACTICES #5: MAKING PRODUCT CLAIMS AND LABELING.....</b>	<b>14</b>
<b>BEST PRACTICES #6: USING EXPOSURE ASSESSMENT GUIDANCE.....</b>	<b>15</b>
<b>BEST PRACTICES #7: RUNNING POST-MARKET SURVEILLANCE .....</b>	<b>16</b>
<b>BEST PRACTICES #8: MANAGING AND ORGANIZING SAFETY PROGRAMS .....</b>	<b>16</b>
<b>BEST PRACTICES #9: ADDRESSING EXTERNAL RELATIONS ISSUES.....</b>	<b>17</b>
TYPES AND MANAGEMENT OF EXTERNAL RELATIONS ISSUES.....	17
DEFENDING INGREDIENT VS. YIELDING TO PRESSURE .....	19
WHAT WOULD EXPERTS DO DIFFERENTLY? .....	19
<b>BEST PRACTICES #10: INCORPORATING GHS REQUIREMENTS FOR CMRS .....</b>	<b>20</b>
<b>IMPLEMENTING A PRODUCT SAFETY PROGRAM THAT WORKS .....</b>	<b>22</b>
<b>ASSEMBLING A SCIPINION EXPERT PANEL.....</b>	<b>25</b>
<b>APPENDIX A: EXPERT PANEL ON PRODUCT SAFETY PRACTICES .....</b>	<b>28</b>
<b>APPENDIX B: SCIPINION EXPERT PANEL PROCESS.....</b>	<b>28</b>

## List of Tables and Figures

TABLE 1. CROSS-REFERENCE OF CHARGE QUESTIONS.....	4
FIGURE 1. THIRD-PARTY SOURCE OF STANDARDS.....	5
FIGURE 2A. STRATEGIES FOR JUSTIFYING SAFETY .....	9
FIGURE 2B. PRECLINICAL TESTING STRATEGIES.....	10
FIGURE 3. TYPES OF CLINICAL TESTS.....	13
FIGURE 4. EXAMPLE OF A GHS LABEL .....	20
FIGURE 5. KEY ELEMENTS OF A PRODUCT SAFETY PROGRAM .....	22
FIGURE 6. CONSUMER PRODUCT SAFETY EXPERT PANEL COMPOSITION.....	26
FIGURE 7. EXCERPT OF CHARGE QUESTIONS/EXPERT RESPONSES .....	27

## Glossary

3T3	3-day transfer, inoculum $3 \times 10^5$ cells
BCOP	Bovine Corneal Opacity and Permeability
CoA	Certificate of Analysis
CMR	Carcinogenic, Mutagenic, ReproToxic
CPSC	Consumer Product Safety Commission
DOE	Design of Experiment
DPRA	Direct Peptide Reactivity Activation
ERI	External Relations Issues
EU	European Union
FALCPA	Food Allergen Labeling and Consumer Protection Act
GHS	Global Harmonized System of Classification and Labeling of Chemicals
HRIPT	Human Repeat Insult Patch Test
ICLRD	International Cosmetic Legal & Regulatory Database
MST	Microscale Thermophoresis
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
PBPK	Physiologically Based Pharmacokinetic
PCPC	Personal Care Products Council
PCB	Polychlorinated Biphenyl
PLM	Product Lifecycle Management
QRA	Quantitative Risk Assessment
QSAR	Quantitative Structure-activity Relationship
R&D	Research & Development
RIFM	Research Institute for Fragrance Materials
SDS	Safety Data Sheet
SOP	Standard Operating Procedures
TTC	Threshold of Toxicological Concern
US	United States
USEPA	United States Environmental Protection Agency
USFDA	United States Food and Drug Administration
WOE	Weight of Evidence

## Introduction

Assuring the safety of consumer goods is a critical function that all consumer product companies constantly strive to manage, especially in these days of increased scrutiny and social activism. There are many approaches to developing safe products, monitoring for safety claims once in the marketplace, addressing external relations issues, and changing formulations in the face of consumer demands.

This paper presents ten best practices offered by a carefully selected panel of experts assembled from the global scientific community who previously worked for well-recognized consumer goods companies. The experts share their insights on how their employers chose to face the challenges associated with managing consumer product safety. These best practices, which are based on answers to charge questions (Appendix A, Questions/Results 2.1 through 9.10), encompass the following areas:

- using third-party guidelines and databases,
- assessing the safety of raw materials,
- preclinical safety testing of products,
- conducting clinical testing,
- making product claims and labeling,
- using exposure assessment guidance,
- running post-market surveillance,
- managing and organizing safety programs,
- addressing external relations issues, and
- incorporating GHS requirements.

This paper also provides an insightful outline for implementing a product safety program for small- to medium-sized companies, based on the panel's collective experience in the consumer product industry (Appendix A, Question/Result 9.11). Following these recommendations, this paper summarizes SciPinion, L.L.C.'s (SciPinion's) approach to assembling and managing expert panels in order to collect valuable scientific thought on a wide range of subjects. The panel specifically assembled for this report is also described. The last section (Questions/Results 10.1-10.3) of Appendix A covers post-SciPi questions regarding the SciPi process. The full report detailing both the questions and the expert panel answers are provided in Appendices A and B, which are available upon request (please see contact information at the end of this report).

**The collective expert wisdom contained herein can now guide your consumer product company on how best to implement management practices to assure your products are safe and that you maximize efficiency in the process.**

## Best Practice Insights

This section summarizes the expert panel insights to the key product safety areas listed above. These areas correspond to the specific charge questions put forth to the expert panel. Some best practice insights address multiple questions. Table 1 lists each Best Practice with the corresponding question/result numbers found in Appendix A for each of the domains.

Thank you for viewing the limited report preview.

Visit the following URL to download the full 30-page report for free:

[scipinion.com/product-safety-report](http://scipinion.com/product-safety-report)