

Event	EU project "RISKCYCLE" (226552) 1st Management Board meeting Istituto di Ricerche Farmacologiche Mario Negri
Location	Via La Masa 19 Milano, Italy



Table of content

1	Minutes	2
2	List of Participants	6

1 Minutes

Topics:

1 Assessment of the latest RISKCYCLE workshop in Ha Noi

2 Assessing the future needs of the project work

3 China meeting - bullets

4 Evaluating the project progress so far

5 Riskcycle book - discussion

6 Other business

Decisions:

- 1 Partner UPC will be responsible for the dissemination of the 1st workshop executive summary in an (online) journal.
- 2 Partner TUD will send around the executive summary of the Ha Noi workshop again until Monday 26th July.
- 3 Partner TUD will send around the workshop proceedings until Wednesday 28th July and everybody will check the document and reply until **10th September 2010**.
- 4 The workshop proceedings will be sent to the commission as a "first" version. (It will be checked again from all partners and printed until the end of September by TUD)
- 5 Partner CSIC suggested to present the project again in May/June 2011 in front of the Spanish, Swedish and German delegations of the European commission in Brussels.
- 6 Partner IVL suggested to inform ECHA (Finland) about the project and ask them for support. Partner IRFMN also has contacts to ECHA and ECB.
- 7 The link to the database of chemical additives will be included on the projects website www.wadef.com/projects/riskcycle
- 8 Partner CSIC will provide an Excel template which will make it easier to send new data about additives to them and to include them into the database.
- 9 All collected information within the database will be included on a CD in the second RISKCYCLE book.

10 Partner CSIC mentioned that nearly all partners have the obligation to send information for the database to them (1 workmonth) in WP3 → Feedback from all partners is necessary to improve the database

11 Partner IRFMN is working on the final stage for the deliverable D4.1 and is in contact to all other members of work package 4.

12 Partner UPC informed everybody that deliverable D5.1 was handed in in time and that deliverable D5.2 is in progress.

13 All partners agreed that the best known and used methodologies for WP5 will be discussed in China and from then on the best one will be applied.

14 Partner IVL pointed out that properties (needed for LCIA) or factors need to be defined and included into the database template.

15 More case studies are necessary for the RISKCYCLE book Volume 1, especially about lubricants, plastics and leather and also case studies from Japan and USA. Partner IVL mentioned that a first version of a case study about plastics and additives in shoes is in progress. They also have contacts to OECS task force and UNEP secretary and will contact them.

16 Partner Nordeconsult will be contacted if they could provide information about a case study about leather.

17 Partner UPC will send around an e-mail with a list of necessary information for the case studies until 15th September.

18 The RISKCYCLE book Volume 2 will be discussed during the final workshop in Dresden and it is planned to finalise and publish it in autumn 2012.

19 A common way of how to name the documents/files within the internal literature data base was decided.

documents/files:

author_journal_year_ topic_research field

structure for folders:

fraction1-6 → subtopic → documents/files

20 A list of references used within the project will be published online. The files itself will be saved on the internal database to avoid copyright issues.

21 The next workshop in China was discussed an the following schedule and decisions were taken:

2nd RISKCYCLE workshop

Risk of chemical additives and recycled materials
- State of the art, new challenges and future trends –

Session 1: Introduction

- Aims of the project and state of the art (Bernd)
- local speakers (scientists, politicians), fate and impact of chemicals in PR China

Session 2: Fate and behaviour of chemicals and products

- *presentation of WP 3 (aims achieved and future goals)* (Damia)
- recycling technologies for plastics (or another fraction) in PR China
- analysis/control of immissions and emissions occurring during recycling processes

Session 3: Alternative testing methods (toxicity, chemical properties)

- *presentation of WP 4 (aims achieved and future goals)* (Emilio + Diego)
- application of in-vitro testing
- use of QSAR models in estimating toxicity

Session 4: Risk assessment methodologies

- *presentation of WP 5(aims achieved and future goals)* (Joaquim + Rosa)
- modelling of risks
- uncertainty models and probabilistic methods
- exposure, occurrence and effects data

Session 5: Life cycle assessment applied to additives

- *presentation of WP 6 (aims achieved and future goals)* (Ester)
- content of additives in products and recycling products
- process performance of recycling (Input/Output balance)

Session 6: Socio-economic aspects related to chemical risks

- *presentation of WP 7 (aims achieved and future goals)* (Mohammed)
- safety control of products from recycling materials
- socio-economic data of material flows (International trade)
- damage costs related to environmental and health effects from additives
- New and future regulations (impact and possible impact)

Work to do:

“presentation of WP” → need to be given a specific title **until 15th September**
→ content: work done until then within the WPs

Presentations length: 10min + 10min discussions (afterwards)

Extended Abstracts (3 - 6 pages) for the proceedings: **deadline = 29th October**

Final workshop programme and flyer: **deadline = 15th September**

Abstracts for the Executive Summary of the workshop: **deadline = 30th November**

We propose to **book Crowne Plaza in Shenyang by yourself early in advance.**

Workshop Agenda (15th – 19th November 2010)

Monday: internal meeting (afternoon)

Tuesday + Wednesday: Conference

Thursday: internal meeting

Friday: field trip (informal sector)

2 List of Participants

TUD: Bernd Bilitewski
 Veit Grundmann

CSIC: Damiá Barceló
 Antoni Ginebreda

UPC: Rosa Mari Darbra

IVL: Tomas Rydberg

IRFMN: Diego Baderna
 Alessandra Roncaglioni



RISKCYCLE BOOK

Global Risk-Based Management of Chemical Additives

**Volume I. Production, usage and environmental
ocurrence**

**Volume II. Environmental and Health risk and Life
Cycle Assessment**



VOLUME I

INTRODUCTION

Chapter 1. Introduction (Responsible: Damià + Bernd)

- 1.1. Chemical additives
- 1.2. Industrial sectors
- 1.3. Selected Substances

PART A. CHEMICAL ADDITIVES IN A GLOBAL CONTEXT

Chapter 2. Additives in the **Paper Industry** (Responsible: Antoni Ginebreda)

Chapter 3. Additives in the **Leather Industry** (Responsible: Mira Petrovic)



Chapter 4. Additives in the **Electronics** (Responsible: Mohammed Belhaj)

Chapter 5. Additives in the **Textile Industry** (Responsible: R.M. Darbra)

Chapter 6. Additives in **Lubricants** (Responsible: Emilio Benfenati)

Chapter 7. Additives in **Plastics** (Responsible: Ester van der Voet)



PART B. CASE STUDIES

Chapter 8. Problems in paper recycling in **Vietnam** (Responsible: Prof. Nguyen Thi Diem Trang)

Chapter 9. Case study on printed matter in **Denmark** (Responsible: Prof. Larsen)

Chapter 10. Reuse of potential chemical sludge- a hazardous waste in the textile drying process –**India** (Responsible: Dr. Suneel Pandey)

Chapter 11. E-waste management and recycling in **Vietnam** (Responsible: Prof. Do Quang Trung)



CONCLUSIONS

Chapter 12. **Conclusions** (Responsible: Bernd+ Damià)

We need to add a case study from Japan and USA, any ideas?

Try to cover the industrial sectors that are not treated yet in the case studies



List of authors

Series: The Handbook of Environmental Chemistry

Volume: **Global Risk-Based Management of Chemical Additives I: Production, Usage and Environmental Occurrence**

Editors: B. Billitewski, R.M. Darbra, D. Barceló

Title	Name	Institute	contribution/ tentative title	co-author(s)	e-mail address (principal author)	phone number	fax number
INTRODUCTION							
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PART A. CHEMICAL ADDITIVES IN A GLOBAL CONTEXT							
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Dr	Rosa Mari Darbra	UPC	Chapter 5. Additives in the textile industry	Alba Agueda Joaquim Casal Ettore Capri Gabriella Fait Marta Schuhmacher Martí Nadal Joaquim Rovira Veit Grundmann Damià Barceló Antoni Ginebreda Daniel Guillén	rm.darbra@upc.edu	+34934016675	+34934011750
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PART B. CASE STUDIES

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CONCLUSIONS

Prof.	Bern Billitewski/Da mià Barceló	TUD	Chapter 12 Conclusions		abfall@mail.zih.tu- dresden.de	+490350153003 0	+49035015300 22
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Case studies : Japan+ USA



Extent of the chapter: 20-30 pages

A template will be provided

Deadline: 30th November 2010

Organization:

- **Each WP leader should establish the internal deadlines for their partners to send their contributions on time**
- **A final chapter will be sent following the format to Rosa Mari Darbra (rm.darbra@upc.edu)**



VOLUME II

1. General Introduction
2. Database production
3. Environmental fate models
4. Toxicology studies for additives (Emilio's case study)
5. Risk assessment
6. Life Cycle assessment
7. Economic assessment
8. Conclusions



Further information will be provided in the future concerning the elaboration of this second volume

Deadline: at the end of the project when the information is available



Thank you very much!



EUROPEAN
COMMISSION

Community Research



SEVENTH FRAMEWORK
PROGRAMME



Design and management of a data-base of chemical additives

(WP3 Progress)

Damià Barceló^{1,2}, Antoni Ginebreda¹, Daniel Guillén¹

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²ICRA - Catalan Institute for Water Research, Girona, Spain





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SEVENTH FRAMEWORK
PROGRAMME



Content:

- **Presentation of RISKCYCLE database (Now available for any interested part)**
 - **Search and selection of additives.**
 - **Access to available information (chemical properties, risk assessment, PDF, links, images...)**
- **Use of templates for exchange information between different WP participants.**
- **Contact with the database administration/maintenance personnel.**



Search screen



RISKCYCLE Risk-based management of chemicals and products in a circular economy at a global scale

User:anonim Production Environment

Chemicals List

[Upload a file](#) [Send e-mail](#) [Login](#) [Help](#)

To select

Search

(Additive name or CAS Number)

- **‘Basic Search’ by Additive name or CAS number search.**
- **‘Advanced Search’ allows searching by sector or additive type, or by any property of interest.**



Search results screen



RISKCYCLE Risk-based management of chemicals and products in a circular economy at a global scale

User:anonim Production Environment

Chemicals List

Selected (10)

[Upload a file](#) [Send e-mail](#) [Login](#) [Help](#)

To select

To	Name	CAS Number	Sector	Additive use
See	Ethyl methacrylate	97-63-2	Leather	Binder
See	2-Ethylhexyl Acrylate	103-11-7	Leather	Binder
See	Ethyl acrylate	140-88-5	Leather	Binder
See	Isobutyl Acrylate	106-63-8	Leather	Binder
See	Dodecyl acrylate	2156-97-0	Leather	Binder
See	Methyl acrylate	96-33-3	Leather	Binder
See	Methyl methacrylate	80-62-6	Leather	Binder
See	n-butyl acrylate	141-32-2	Leather	Binder
See	n-hexyl acrylate	2499-95-8	Leather	Binder
See	tert-Butyl acrylate	1663-39-4	Leather	Binder

Example of 'Advanced Search' : by clicking the [See](#) button direct access to the properties & information of the desired additive is possible



Selected additive screen

Toxicology

Production

Physico-Chemical
Properties

Legislation

Identification

Economy

Table of contents

+ Expand all

- Contract all

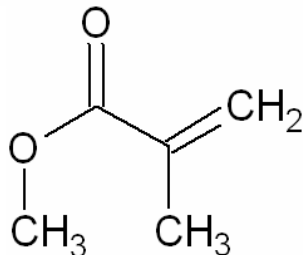
Show selected

- Full Record
- Economy
- Identification
 - CAS Number
 - Molecular formula
 - Molecular Weight
 - Name
 - Other names
 - Structure
- Legislation
 - Legislation
 - Pictograms
 - Risk phrases
 - Safety phrases
- Physico-Chemical Properties
 - Boiling point
 - Density
 - Flash Point
 - Freezing point
 - logP
 - Melting Point
 - Water solubility
- Production
- Toxicology
 - Conditions/Hazards to avoid
 - Corrosive Properties
 - Hazardous decomposition products
 - Hazardous Decomposition/Polymerization

Name

Ethyl methacrylate

Structure



Other names

2-Methyl-2-propenoic acid, ethyl ester
Ethyl 2-methyl-2-propenoate
Ethyl methacrylate monomer
Methacrylic acid, ethyl ester
2-Methylacrylic acid, ethyl ester
2-Propenoic acid, 2-methyl-, ethyl ester
4-02-00-01523 (Beilstein Handbook Reference)
AI3-25421
BRN 0471201
CCRIS 4817
EINECS 202-597-5
Ethyl 2-methacrylate
Ethyl 2-methyl-2-propenoate
Ethyl alpha-methylacrylate
Ethylester kyseliny methakrylove
Ethylester kyseliny methakrylove [Czech]
HSDB 1332
NSC 24152
RCRA waste number U118
Rhoplex AC-33
2-Propenoic acid, 2-methyl-, ethyl ester
Methacrylic acid, ethyl ester
2-Propenoic acid, 2-methyl-, ethyl ester
Methacrylic acid, ethyl ester
RCRA waste no. U118
UN2277

Boiling point

117 °C (760 mm Hg)

CAS Number

97-63-2

Conditions/Hazards to avoid

Content:

- Identification (name, synonyms, CAS number, SMILES...)
- Chemical Structure
- Physico-chemical properties
- Toxicology
- Risk assessment
- Other interest information.

Content Format:

- Text
- Images
- PDF
- Links to other webs or other databases



Table of contents

Table of contents
[+ Expand all](#)
[- Contract all](#)

- Full Record**
- Economy**
- Identification**
 - CAS Number
 - Molecular formula
 - Molecular Weight
 - Name
 - Other names
 - Structure
- Legislation**
 - Legislation
 - Pictograms
 - Risk phrases
 - Safety phrases
- Physico-Chemical Properties**
 - Boiling point
 - Density
 - Flash Point
 - Freezing point
 - logP
 - Melting Point
 - Water solubility
- Production**
- Toxicology**
 - Conditions/Hazards to avoid

Name
Ethyl methacrylate

Other names
 2-Methyl-2-propenoic acid, ethyl ester
 Ethyl 2-methyl-2-propenoate
 Ethyl methacrylate monomer
 Methacrylic acid, ethyl ester
 2-Methylacrylic acid, ethyl ester
 2-Propenoic acid, 2-methyl-, ethyl ester
 4-02-00-01523 (Beilstein Handbook Reference)
 A13-25421
 BRN 0471201
 CCRIS 4817
 EINECS 202-597-5
 Ethyl 2-methacrylate
 Ethyl 2-methyl-2-propenoate
 Ethyl alpha-methylacrylate
 Ethylester kyseliny methakrylove
 Ethylester kyseliny methakrylove [Czech]
 HSDB 1332
 NSC 24152
 RCRA waste number U118
 Rhoplex AC-33
 2-Propenoic acid, 2-methyl-, ethyl ester
 Methacrylic acid, ethyl ester
 2-Propenoic acid, 2-methyl-, ethyl ester
 Methacrylic acid, ethyl ester
 RCRA waste no. U118
 UN2277

Boiling point
117 °C (760 mm Hg)

Density
0.9135 g/l (20 °C)

Flash Point
20 °C

Melting Point
- 75 °C

Water solubility

logP
1,94

- Content bar allows select different properties and create a customized list.

- This list can be printed or saved as a PDF document.



Additives Upload system

WP1
WP2
WP3
WP4
WP5
WP6
WP7
WP8



- The EXCEL template allows the exchange of standardized information for subsequent uploading.
- Templates are submitted to WP3 team (DB administrators). After internal checking, they are uploaded to the RISKCYCLE data base server.
- The database contains a section for user support, which explains how fill and send these templates.
- There is an e-mail address available to contact with the database maintenance/administration

personnel: riskcycle.db@idaea.csic.es



Exchange information template

Microsoft Excel - TCMTB

Archivo Edición Ver Insertar Formato Herramientas Datos Ventana ? PDF de Adobe

Calibri 11

	A	B	C	D	E
1	Name	Property	index	Value	Reference
2	Thiocyanic acid, (2-benzothiazolylthio)methyl	Use	0	Biocide	
3	Thiocyanic acid, (2-benzothiazolylthio)methyl	Sector	0	Leather	
4	Thiocyanic acid, (2-benzothiazolylthio)methyl	Sector	1	Paper	
5	Thiocyanic acid, (2-benzothiazolylthio)methyl	CAS Registry Number	0	21564-17-0	
6	Thiocyanic acid, (2-benzothiazolylthio)methyl	Molecular structure	0	C ₉ H ₆ N ₂ S ₃	
7	Thiocyanic acid, (2-benzothiazolylthio)methyl	Smiles	0	c12c(sc(n1)SCSC#N)cccc2	
8	Thiocyanic acid, (2-benzothiazolylthio)methyl	Molecular Weight	0	238.35 g/mol	
9	Thiocyanic acid, (2-benzothiazolylthio)methyl	Melting point	0		
10	Thiocyanic acid, (2-benzothiazolylthio)methyl	Boiling point	0	191 °C	Pesticide Properties DataBase (PPDB)
11	Thiocyanic acid, (2-benzothiazolylthio)methyl	Density	0	1,4 g/ml	Pesticide Properties DataBase (PPDB)
12	Thiocyanic acid, (2-benzothiazolylthio)methyl	Water solubility	0	125 mg/l (24 °C)	Brownlee BG et al; Environ Toxicol Chem 11: 1158-68(1992)
13	Thiocyanic acid, (2-benzothiazolylthio)methyl	Flash Point	0		
14	Thiocyanic acid, (2-benzothiazolylthio)methyl	LogP	0	3.3 (pH 7, 20°C)	Pesticide Properties DataBase (PPDB)
15	Thiocyanic acid, (2-benzothiazolylthio)methyl	Vapour Pressure	0		
16	Thiocyanic acid, (2-benzothiazolylthio)methyl	Henry constant	0	6.58 X 10-07 (Pa m ³ mol-1)	Pesticide Properties DataBase (PPDB)
17	Thiocyanic acid, (2-benzothiazolylthio)methyl	Toxicology	0		
18	Thiocyanic acid, (2-benzothiazolylthio)methyl	Hazardous decomposition products	0		
19	Thiocyanic acid, (2-benzothiazolylthio)methyl	Risk phrases	0	R22, R26, R36/38, R43, R50/53	
20	Thiocyanic acid, (2-benzothiazolylthio)methyl	Safety phrases	0	S23	
21	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	0	2-(Thiocyanatomethylthio)benzo[d]thiazole	
22	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	1	2-(Thiocyanomethylthio)benzothiazole	
23	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	2	2-[(Thiocyanatomethyl)thio]benzothiazole	
24	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	3	Afrotin CRO; Alentisan	
25	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	4	Argent; Argent 30; Ascend	
26	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	5	BN 30; Benthiazole	
27	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	6	Bulab 6009	
28	Thiocyanic acid, (2-benzothiazolylthio)methyl	Other Names	7	Busan 1030	

References

Single or multiple properties



European Commission
RESEARCH



<http://www.oqpbcn.com/RISKCYCLE>



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SEVENTH FRAMEWORK
PROGRAMME



Updates from WP4

Alternative Toxicity Testing for additives

Milano, 23 July 2010
Benfenati, Baderna, Roncaglioni, Boriani



Deliverables

Time	Year 1						Year 2						Year 3					
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
WP 4					*	*				*		*		*		*		

D4.1. Report, containing a discussion on the identified criteria, and their scores, for alternative methods (Month 10).

D4.2. List of databases and meta-databases with assessment (Month 12)



D4.1. Report, containing a discussion on the identified criteria, and their scores, for alternative methods (Month 10).

The document has been prepared (see attachment). Further contributions and comments are possible.



D4.2. List of databases and meta-databases with assessment (Month 12)

A list of possible data collections was identified by IRFMN. The preliminary list was sent to WP4 partners to include the databases they are currently using.

On the basis of the replies so far obtained the target number of DB has been reached.

IRFMN prepared the deliverable.



About LUBRICANTS (and books)

We contacted COOU (Italian national consortium for used oils) in order to write the chapter on lubricants. A meeting has been fixed for the first week of August, to achieve their decision (probably they will contribute)

Furthermore, this week we will meet Stazione Sperimentale dei Combustibili (SSC) to obtain additional info.

Possible solutions will be sent to Rosa Mari before the deadline at September 15th



WP5 progress



WP 5

Objective

Identification of different methodologies used to assess the risk of chemical products (additives) for human health and environment



WP5. Risk Assessment Methodologies

WP leader: UPC (Participant num. 4)

Total person month: 13,75

Partners involved: TUDD (1), CSIC (2), URV (2),
UCSC (1,5), BRGM (0,75), UPC (6,5)

Start/End: Month 3 - Month 30



Tasks:

- 5.1 Definition of potential risk scenarios during the chemicals' life (already finished)
- 5.2. Review of the diverse methodologies used in risk assessment (on progress)
- 5.3. Quantitative approach: estimating frequencies of the typical scenarios and analyzing uncertainties
- 5.4. Estimation of the ultimate consequences of the selected scenarios



Deliverables:

D.5.1. Definition of risk scenarios and historical analysis (Month 9)
(delivered)

D.5.2. Methodologies, frequencies and uncertainties (Month 22)
(future deliverable)

D. 5.3. Mathematical modelling of effects and example application
(Month 30)



Milestones:

M.5.1. Review of methodologies (Month 22)

M.5.2. Successful test case (Month 30)

Using as a basis the selected substances of the
different

industrial sectors



WP 5 discussion in Vietnam

- Future work: Research on different Risk Assessment Methodologies used to assess the selected substances
- Assess: availability of data, advantages and disadvantages of the found methodologies, gaps, strengths, etc.
- Come up with a final document summarizing the existent methodologies, highlighting gaps, proposing examples for future use (e.g. uncertainty models), etc.

D. 5.2.

M. 5.1.



- Prepare case studies applying the best methodologies to the selected substances to assess their risk for human health and environment

D. 5.3.

M. 5.2.

Difficulties:

- Assessing the last part of the product's life (not enough information)
- Scenarios at global scale/country scale (different exposures)



List of substances



Leather and Paper (WP3): **Nonylphenol**, Bisphenol-A, Biocides

Lubricants (WP4): PFO's/PFOA's, NPAA (p-Nonylphenol Acetic Acid),

Textiles (WP5): HBCDD, Triclosan (Biocide)

Plastics (WP6+Veit): Phtalates (DEHP), Pb, Organotins

Electronics (WP7): TPP, PBDE's (polibrominated diphenols), Pb



Thank you very much!

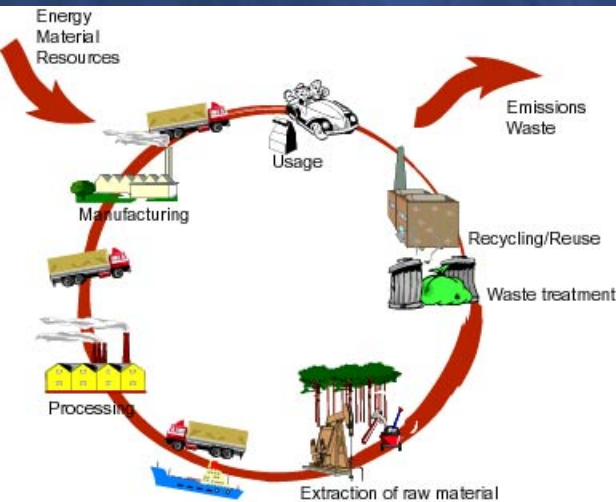
RiskCycle

– WP leader meeting Milano, July 23 , 2010

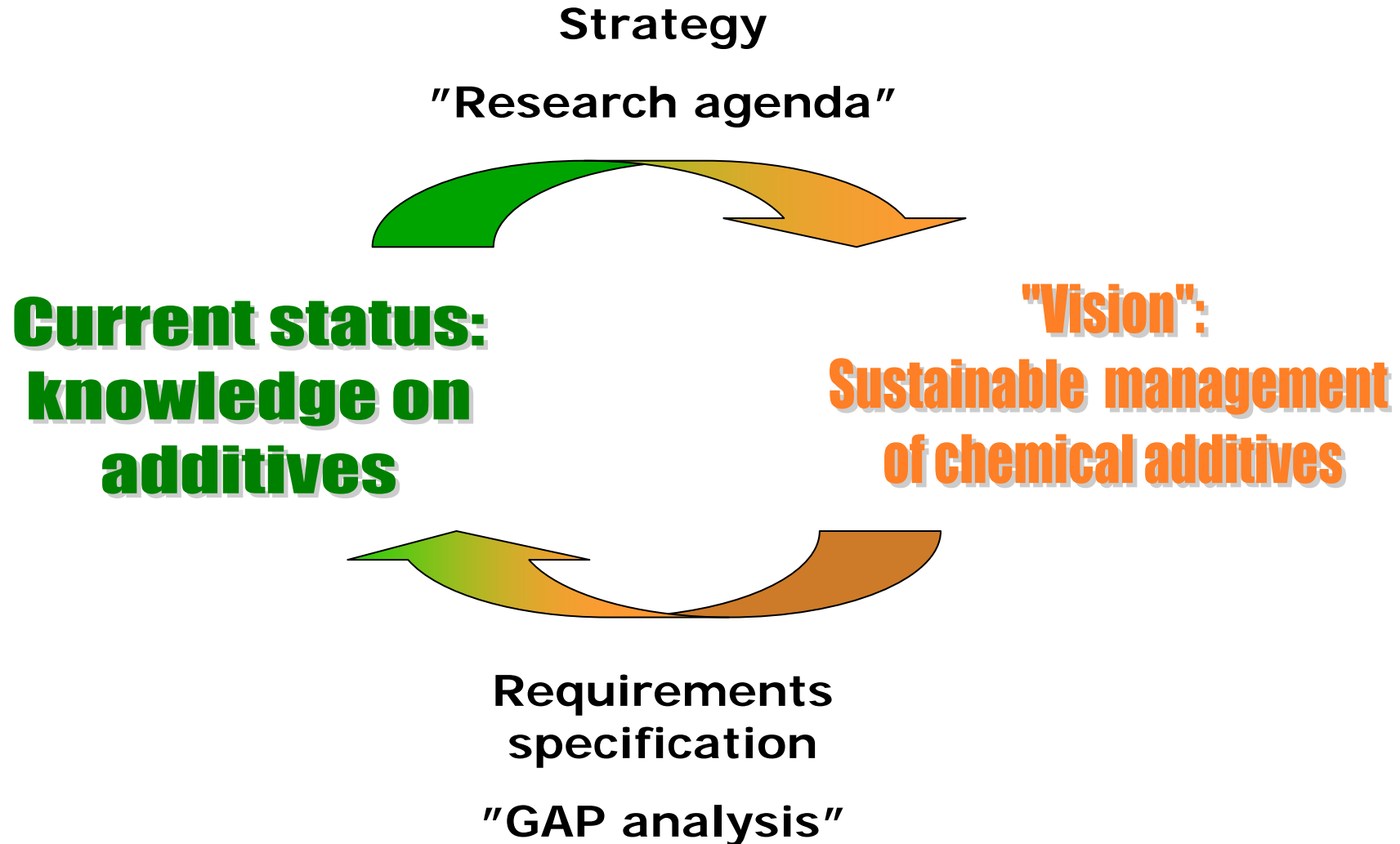
Tomas Rydberg

IVL

WP6: Life Cycle Assessment of Additives



Overall challenge(s) for Riskcycle



WP6 – General objectives

- 1. To summarize the state-of-the-art knowledge on LCA studies, LCA inventory data and impact assessment data regarding additives and their applications
- 2. To outline a framework to conduct LCA studies of additives in relation to the three relevant layers of (1) the additives themselves, (2) the materials they are applied in, and (3) the end-products containing the materials
- 3. To collect existing data and knowledge on a limited number of additives to test and illustrate the LCA framework, and identify data gaps and bottlenecks with regard to the LCI and LCIA

WP6 – Core staff

- CML:
 - Ester van der Voet
 - Jeroen Guinée

- Other contributors:
 - DTU
 - Henrik Fred Larsen
 - IVL
 - Tomas Rydberg

WP6 - Resources

Institute	Months
-----------	--------

CML	6
-----	---

DTU	4
-----	---

IVL	2
-----	---

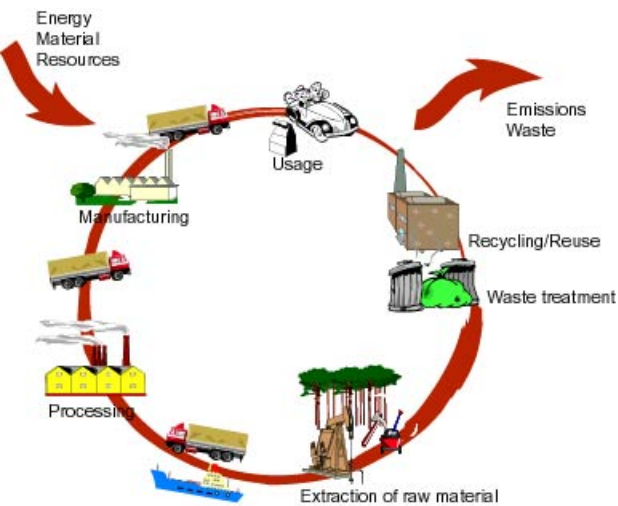
Starting date: September 2009 (month 1)

Running time: February 2010 – May 2012 (month 6 - month 33)

Milestones - status

- M6.1 Selection of additives – Month 6 (i.e. Feb-10; still a bit “fuzzy”)
- M6.2 LCA state-of-the-art and first outline of LCA framework presented – Month 9 (i.e. May-10; however – revised plan until China WS, Nov-10)
- M6.3 draft LCIA characterisation factors presented – Month 15 (Nov-10)
- M6.4 draft results of case studies presented – Month 22 (June-11, partly in Hanoi)
- M6.5 LCA framework presented – Month 26 (Oct-11)
- M6.6 Input for WP8 Global strategy of risk-based management of additives – Month 18, 24, 32/33 (Feb-11, Aug-11, Apr/May-12)

Task 1: Report on state of affairs LCA /additives:



- because of the somewhat muddled discussions that arose in Vietnam, we will add a chapter to this report on how LCA works
- what the added value is compared to RA
- what differences AND similarities are between LCA and RA
- how it can be supportive for a riskbased management

Lead partner: CML

Task 2:

Perform case studies to show three-layered approach, identify data gaps and test approaches to fill in datagaps

- selection of case studies: we decide on paper and plastics.
- attention for recycling processes
- collect LCI data
- Production process data – materials and additives
- Losses during use (if applicable)
- Waste management process data – materials and additives

Lead partner: CML/plastics, DTU/paper

According to our notes,
selected additives are:

- nonylphenol,
- bisphenol-A,
- biocides(?),
- PFO's/PFOA's (?),
- NPAA (nonylphenol acetic acid),
- PBDE (polybrominated diphenols) (?),
- HBCDD,
- PFC (?),
- Triclosan,
- phthalates (?) (DEHP),
- Pb,

- organotins (?) (TBT, TPT, DMT),
- TPP

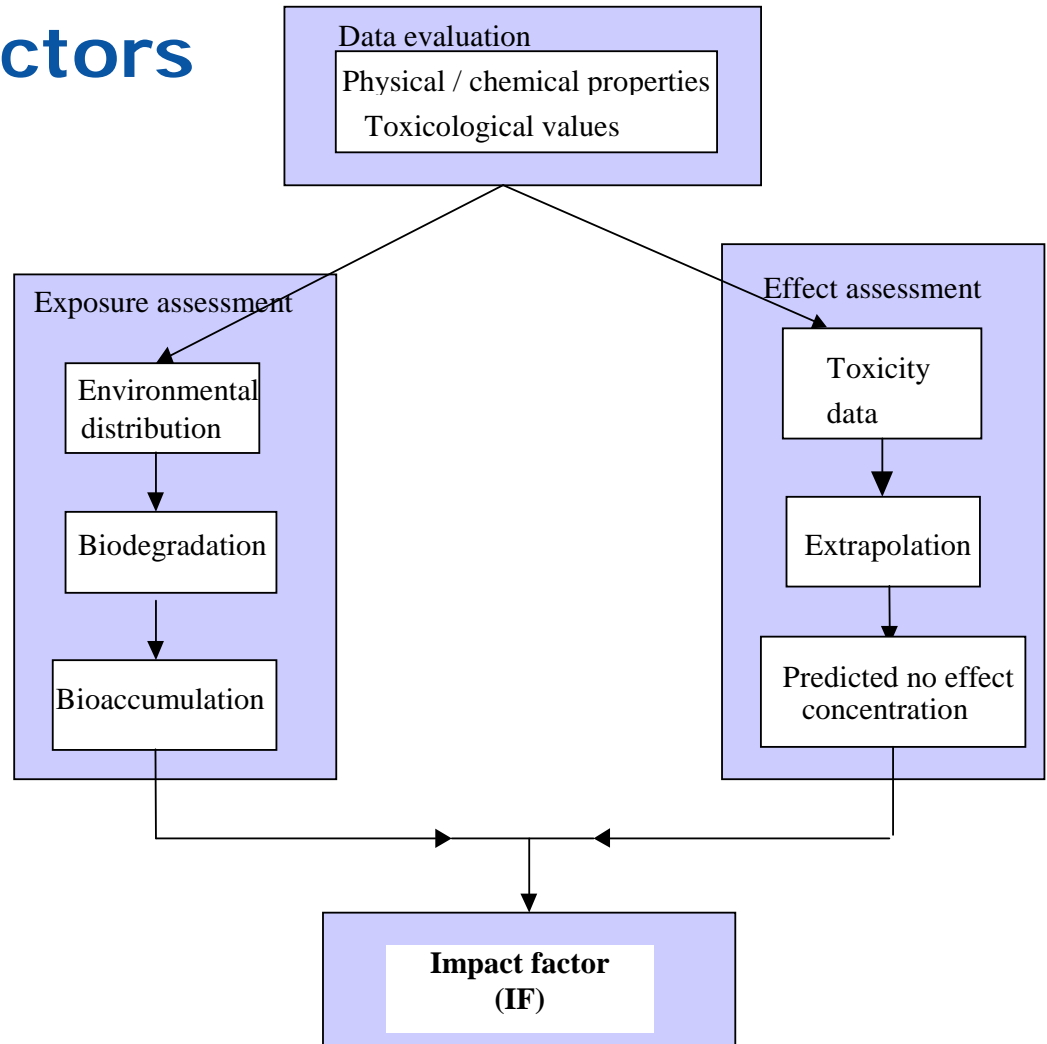
Task 3: Derive LCIA factors

- of selected additives, for which no LCIA data yet exist (not necessarily limited to the ones of the case studies)
- based on risk related data as collected in other WPs?
- some loose ends, which need resolving marked by (?)

need data from the other workpackages, on substance properties, PNECs, PTDIs etc

Lead partner: DTU & IVL

Task 3: Derive LCIA factors



Task 4: Database/book (?)

- put on hold until later

WP6 - Deliverables

- D6.1 State-of-the art knowledge on LCA studies with relevance for additives (report)
- D6.2 Comprehensive LCA framework for additives and their applications (report)
- D6.3 Database containing LCA (LCI and LCIA) data with regard to selected additives
- D6.4 Results of the illustrative LCA case studies (report)

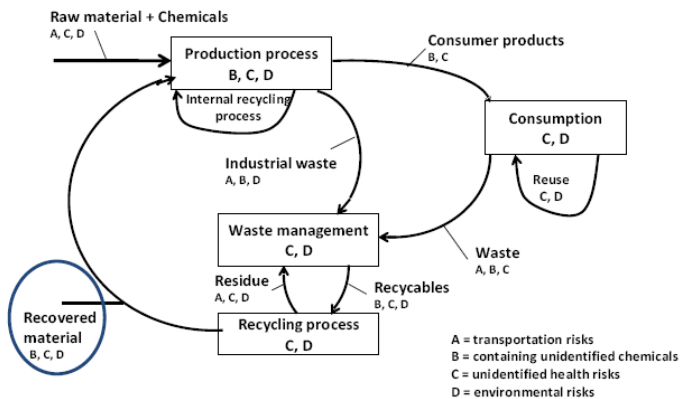
RiskCycle

– WP leader meeting Milano, July 23 , 2010

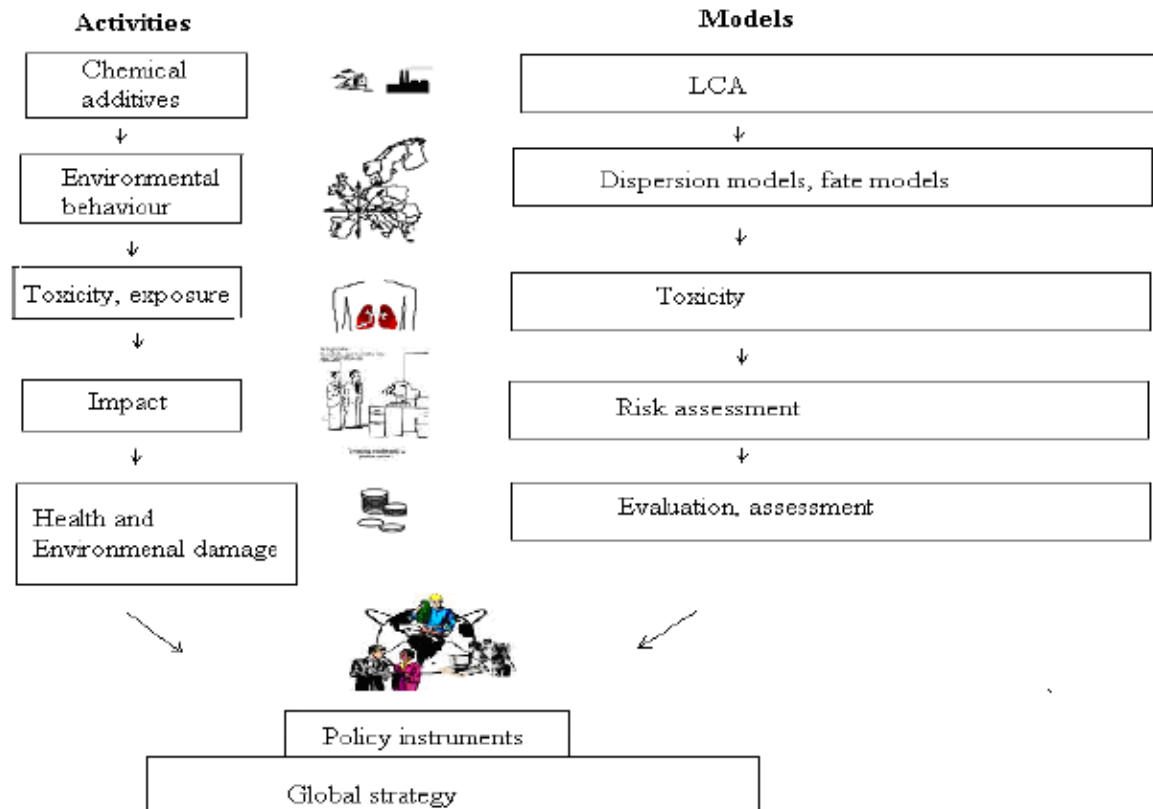
Tomas Rydberg

IVL

WP7: Socio-economic aspects



The product, material and chemical emission - fate – exposure – impact chain



Deliverables WP 7

Resources:

IVL 5 mm

UPC 1 mm

HAW 4 mm

- D7.1. Meta analysis on damage costs related to health, the built environment and the ecosystem (Month 12)
 - under way(?)

- D7.2. Database on relation between risk and loss of profitability (Month 18)

- D7.3. Literature review and analysis of the socioeconomic effect of chemical at the global level as well as the policy instruments to mitigate the impacts of risks (Month 24)

- D7.4. Participation in case studies to study relation between risk and perceived risk related to chemicals (Month 31)
 - Case study on electronics waste...
 - other case studies

Key challenges (draft)

- The "environm/health damage cost" needs input on product flows, material flows, chemical content, emissions, exposure, effects...
- monetary valuation of effects
- Other positive and negative socio-economic aspects (in the spirit of socio-economic assessments in REACH)
 - employment
 - increased productivity
 - and so on



Thank you for your attention!

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WP6 - Description of work

Objective 1:

- Assessing generally available literature as well as information from ongoing projects in EU FP6 and FP7, JRC, UNEP-SETAC Life Cycle Initiative, and other international LCA platforms

Objective 2:

- Collecting and deriving of LCIA factors from RA data from literature and WP5, with approaches as outlined in ReCiPe, OMNIITOX and USETox
- Establishing a coherent LCA framework tailored to additives and their applications, keeping in mind the three layers

Objective 3:

- Outlining cradle-to-grave and cradle-to-cradle chains of selected additives, including the use of energy and raw materials and the emissions of all life-cycle stages: mining/refinery, production and manufacturing, use and waste treatment, including also the influence of additives on EOL options and on the life span of the materials and products they are applied in
- Collecting data on specific selected additives and their applications from existing databases, from WP3 and from industry
- Applying the LCA framework to the selected additives and their applications
- If necessary: adjusting the LCA framework

Urgent issues

- Selection of additives
 - Selection criterion for WP6: (LCA) data availability (limited time available for case studies)

- Selection of 3 case studies
 - each case comprising of 3 (partial) LCA's on a specific additive; material (in which the additive is applied); product (in which the material is applied)

D6.1 State-of-the art knowledge on LCA studies with relevance for additives

- Objective:
 - assessing generally available literature & information from ongoing projects in EU FP6 and FP7, JRC, UNEP-SETAC Life Cycle Initiative, and other international LCA platform
- Planning:
 - work will start in month 6 (Feb-10), deliver a draft in month 9 (May-10) and a final report in month 12 (Aug-10)
- Preliminary proposal for division of tasks:
 - CML: ??
 - DTU: ??
 - IVL: ??

D6.2 Comprehensive LCA framework for additives and their applications

- Objectives:
 - Establishing coherent LCA framework tailored to additives and their applications, keeping in mind the three layers
 - If necessary: adjusting the LCA framework (based on 6.4 results)
- Planning:
 - work will start in month 8 (Apr-10), deliver a first outline in month 9 (May-10), draft report in month 26 (and a final report in month 30 (Feb-12)
- Preliminary proposal for division of tasks:
 - CML: ??
 - DTU: ??
 - IVL: ??

D6.3 Database containing LCI and LCIA data with regard to selected additives

- Objectives:
 - Collecting and deriving of LCIA factors from RA data from literature and WP5, with approaches as outlined in ReCiPe, OMNIITOX and USETox
 - Outlining cradle-to-grave and cradle-to-cradle chains of selected additives, including the use of energy and raw materials and the emissions of all life-cycle stages: mining/refinery, production and manufacturing, use and waste treatment, including also the influence of additives on EOL options and on the life span of the materials and products they are applied in
 - Collecting data on specific selected additives and their applications from existing databases, from WP3 and from industry
- Planning:
 - work will start in month 8 (Apr-10), deliver draft LCIA CFs in month 15 (Nov-10) and a final report in month 24 (Aug-11)
- Preliminary proposal for division of tasks:
 - CML: ??
 - DTU: ??
 - IVL: ??

D6.4 Results of the illustrative LCA case studies

- Objectives:
 - Applying the LCA framework to the selected additives and their applications
- Planning:
 - work will start in month 16 (Dec-10), deliver draft results in month 22 (Jun-11) and a final report in month 36 (Aug-12)
- Preliminary proposal for division of tasks:
 - CML: ??
 - DTU: ??
 - IVL: ??

WP6 Overall workplan

Month (2009 - 2010)	Activity	Who
month 6 (Feb-10)	<ul style="list-style-type: none"> •selection of additives 	all
month 9 (May-10)	<ul style="list-style-type: none"> •Draft D 6.1 •outline of LCA framework presented at Vietnam workshop (D 6.2) 	??
month 12 (Aug-10)	<ul style="list-style-type: none"> •D 6.1 finished 	??
month 15 (Nov-10)	<ul style="list-style-type: none"> •Draft LCIA characterization factors presented at Brazil workshop (D 6.3) 	???
month 18 (Feb-11)	<ul style="list-style-type: none"> •Input for WP8 Global strategy of risk-based management of additives 	???
month 22 (Jun-11)	<ul style="list-style-type: none"> •Draft results of case studies presented at China workshop (D 6.4) 	???
month 24 (Aug-11)	<ul style="list-style-type: none"> •D 6.3 finished •Input for WP8 Global strategy of risk-based management of additives 	???
month 26 (Oct-11)	<ul style="list-style-type: none"> •LCA framework presented at India workshop (D 6.2) 	???
month 30 (Feb-12)	<ul style="list-style-type: none"> •D 6.2 finished 	
month 32/33 (Apr/May-12)	<ul style="list-style-type: none"> •Input for WP8 Global strategy of risk-based management of additives 	???
month 36 (Aug-12)	<ul style="list-style-type: none"> •D6.4 finished 	