



**Asia-Pacific
Economic Cooperation**

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Agenda item: 3(b)(v)

Status Report on VWG on GHS Data Exchange

Purpose: Information
Submitted by: Russia



**13th Chemical Dialogue
Beijing, China
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STATUS REPORT ON VWG on GHS DATA EXCHANGE

Background

1. In the 2012 APEC Ministerial Statement Ministers encouraged “further collaboration of APEC with other international fora such as the OECD and the UN Sub-Committee of Experts on the Globally Harmonized System of Classification and Labeling of Chemicals.” Ministers supported actions to: “work towards the facilitation of chemicals trade by examining behind the border issues and by promoting implementation of the Globally Harmonized System (GHS) across APEC economies”.
2. In July 2012, the Russian Federation led an APEC project - an APEC-sponsored Workshop named “Concept of Data Exchange on Chemical Products and Chemical Substances Hazardous Properties.” As one of the outcomes of that workshop, it was found that economies were implementing different GHS classifications based upon (a) different data utilized and (b) different expert judgment. The workshop led to the establishment of the APEC CD VWG on GHS Data Exchange.
3. The VWG on Data Exchange has been established to contribute to the APEC agenda for Regulatory Cooperation through expanding cooperation and mutual recognition among chemical regulators, including other international fora, to facilitate trade.
4. In the 2013 APEC Ministerial Statement Ministers welcomed participation in the establishment of the global non mandatory list of chemicals classified according to the Global Harmonized System of classification and labeling of chemicals lead by UN Sub-Committee of Experts on GHS.
5. The proposed scope of work of the VWG on GHS Data Exchange was to provide for participation of the APEC CD in the establishment of the global non mandatory list of chemicals classified according to GHS (led by UN SCE GHS) - APEC CD Pilot on GHS classification of chemicals.
6. Several economies at the Chemical Dialogue Steering Group Meeting in Ningbo have expressed support to take this work forward.
7. APEC CD has agreed that any activities that it would be decided to perform with the aim to contribute to the establishment of the global list of chemicals classified according to the GHS by the VWG on Data Exchange of the APEC CD should be complementary, and not duplicative, of the main work being led by the UNSCEGHS and OECD Cooperative Chemicals Assessment Meeting (“CoCAM”), taking into account that that principles for the development of a classification list agreed by the UNSCEGHS would be respected.

UN SCE GHS work on the global list of chemicals classified according to GHS

8. UN SCE GHS has compiled a list of guiding principles on the establishment of the global list of chemicals according to GHS.
9. UN SCE GHS identified 2 work streams: 1st) the pilot exercise on the pilot classification of chemicals according to the GHS, 2nd) the activity on the comparison of exiting GHS list of chemicals. The work now is focused more on the pilot classification work stream (aim – to access the resources needed to create a global list and to reflect on the guiding principles)
10. A draft short list of pilot chemical nominations was created by the UN SCE GHS.
11. UN SCE GHS has agreed that the party (country, international, governmental or non-governmental organization, referred to hereafter as the “sponsor”) that had nominated the chemical for the classification project would be responsible for the preparation of the draft data assessment and classification proposal. The draft assessment and classification would then be posted on a password-protected OECD website and opened for comment. The sponsor would revise the assessment and classification in response to comments, and an OECD working group would consider the revised draft assessment and classification. Outstanding issues could be discussed in a teleconference or face-to-face meeting. The results of the exercise, including the

agreed classification, if reached, would be reported to the Sub-Committee, which may wish to adopt it or to return it with comments. Resources used would be tracked.

CDSG outcomes

12. Ways to provide input of the APEC Chemical Dialogue to the establishment of the global non-mandatory list of chemicals classified according to the GHS were discussed at the CDSG Meeting this February in Ningbo, China.
13. One of the possible suggestions to proceed was an option to work on the substances from the short list of chemicals compiled by the Sub-Committee with the addition of one or two additional substances selected by the APEC economies. The VWG could then compile the results, discuss them within the Chemical Dialogue, and provide them as a regional contribution to CoCAM or the UN SCE GHS respecting the procedures that would be agreed by the Sub-Committee.
14. In addition, one of the possible options being discussed was arranging an APEC sponsored project – a Workshop to discuss the classification results within the APEC region, which outcomes could be communicated to the Sub-Committee or CoCAM.
15. At the Ningbo CDSG it was agreed that economies provide comments to regarding further steps of the VWG on GHS Data Exchange. The Russian Federation is to incorporate these comments into a revised proposal to be circulated to the CD.

Progress to date

16. Several Members of the VWG have participated in the number of international cooperation activities related to the establishment of the global non mandatory list of chemicals classified according to the GHS:
 - Teleconference of the UNSCEGHS Classification List Correspondence Group (29 April 2014)
 - OECD Task Force on Hazard Assessment meeting (10-11 June 2014)
 - 27th session UN SCE GHS (2-4 July 2014)Such participation provides for harmonization of VWG activities with the work ongoing in the other international organizations, such as OECD and UN SCE GHS.
17. Comments were received from Australia, API and Japan Chemical Industry Association incorporated into the revised proposed steps.

The proposed steps

18. Interested Members of the VWG on GHS Data Exchange and APEC CD to propose candidate substances for classification project.
19. Interested Members of the VWG on GHS Data Exchange and APEC CD to vote on the candidate substances for classification project from Lists A and B (see Attachment 1). While taking decisions on the choosing the substances several considerations should be considered: production volumes, availability of the recent data (including data assessment reports).
20. Interested Members of the VWG on GHS Data Exchange and APEC CD to express interest to be the lead for classification pilot for substances both from Lists A and B.
21. Interested Members of the VWG on GHS Data Exchange and APEC CD to take part in the **APEC CD pilot on GHS classification of several (2-4) substances** (chosen from the UN SCE GHS short list of chemicals (List A) and 1-2 extra substances chosen from the substances suggested by the APEC CD members interested in this activity (List B) – *intersessionally*).
22. VWG Member and/or economy that has nominated the substance / or is willing to take the lead performs data assessment and GHS classification proposal.
23. VWG on GHS Data Exchange to compile the results of the **APEC CD pilot on GHS classification**. It distributes them to the interested Members of the VWG on GHS Data Exchange and APEC CD for comments and input.

24. An APEC Project in 2015 - Workshop on discussion of the results of the **APEC CD pilot on GHS classification**, including discussions of the approaches used for classification. OECD CoCAM representative may be invited.
25. VWG on GHS Data Exchange to document the results of the Workshop as a report and to forward it to the APEC CD for consideration.
26. APEC CD to endorse the report and forward it to the CTI for approval. Upon its approval to forward the report to the UN SCE GHS or OECD CoCAM (if CoCAM will be designated as a focal point for cooperation with its stakeholders).
27. Proposed scope of work as well as possible practical outcomes of work is to be discussed among the VWG members.
28. Work would involve active interaction with the UN Subcommittee on GHS efforts to proceed with the project on the global list of classified substances. This project, thus, provides for a collaborative interface between the APEC CD and the UN Subcommittee on GHS.

Recommendations

That the CD asks VWG Members and interested economies to:

- 1) Propose candidate substances for classification project for List B
 - 2) Vote on the candidate substances for classification project from Lists A and B
 - 3) Express interest to be the lead for classification pilot for substances both from Lists A and B.
- Results of voting and lead nominations will be communicated to the UN SCE GHS.

ATTACHMENT 1

**Short List for the Pilot Classification Exercise
UNSEGHS—Classification Work Group
June 19, 2014**

Chemical	UN No.	CAS No.	Nominator	TDG Classification		CLP Classification	Volume Consumed Worldwide (1000s metric tons)	Other information (U.S. EPA)
				TDG	GHS Analog			
Acrylamide	2074, 3426	79-06-1	Australia	Hazard Class 6.1 PG III	Acute Tox 3	Acute Tox 3*(ingestion)	496 (2006)	HPV
						Acute Tox 4*(skin)		IRIS assessment
						Acute Tox 4*(inhalation)		TRI data available
						Skin Irr 2		
						Eye Irr 2		
						Skin Sens 1		
						Carc 1B		
						Mut 1B		
						Repr 2		
						STOT RE 1		
Methyl methacrylate	1247	80-62-6	Australia	Hazard Class 3 PG II	Flam Liq 2	Flam Liq 2	2,739 (2008)	IRIS assessment
						Skin Irr 1		TRI data available
						Skin Sens 2		
						STOT SE 3		
Amines, tallow alkyl	61790-33-8	EC	Hazard Class 8 Hazard Class 9		Acute Tox 4 (oral)	14.4 (US only)		
					Skin Cor 1B			
					STOT RE 2 (gastro intestinal tract, liver, immune system)			

						Asp Tox 1		
						Aq Acute 1		
						Aq Chronic 1		
2,4,4-trimethylpentene	2050	25167-70-8	EC	Hazard Class 3 PG II	Flam Liq 2	Flam Liq 2 STOT SE 3	45-113 (US only)	
						Asp Tox 1		
Tris(nonylphenyl) phosphite		26523-78-4	EC	Hazard Class 9 PG III		Skin Sens 1 Aq Acute 1 Aq Chronic 1	16.3 (US only)	HPV
Ethanolamine	2491	141-43-5	US	Hazard Class 8 PG III	Corr. 1C	Skin Corr 1B Acute Tox 4* (highest minimum classification)	1,475 (2007)	HPV
Pthalates (Di-n-butyl phthalate (DNBP))	3082	84-74-2	US	Hazard Class 9 PG III		Reproductive toxicity (Cat 1B)	5,055 (2008) (all phthalates)	HPV IRIS

Legend: HPVIS = High Production Volume Information System – U. S. EPA
 IRIS = Integrated Risk Information System – U. S. EPA
 TRI = Toxics Release Information – U. S. EPA
 TSCA = Toxics Substance Control Act – U. S. EPA

Worldwide Consumption figures from the Chemical Economics Handbook. Where that source had no information, US consumption figures from US EPA are given.

Global List Chemical Nomination Form
U.N. Sub-Committee of Experts on the GHS
Global List Working Group

Chemical Name	2,4,4-trimethylpentene
Identifier	
UN	
CAS	25167-70-8
Impurities	
HPV (Y/N)	
Pesticide (Y/N)	N
Data availability: Data Rich/Data Poor	
Is this chemical already on a list (Y/N)	Y
List 1 (list name and date of classification)	EU CLP Regulation, Annex VI 5th ATP 3/10/2013 Opinion of Risk Assessment Committee, ECHA: http://echa.europa.eu/documents/10162/52d2a591-4d1c-4ee8-9647-c403dcf812f5
Is the data and rationale for each classification available (Y/N)	Y
	Classification(s)
List 1 Physical Hazards	Flam. Liq. 2
List 1 Health Hazards	Asp. Tox. 1 STOT SE 3; H336
List 1 Environ. Hazards	
List 2 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	

	Classification(s)
List 2 Physical Hazards	
List 2 Health Hazards	
List 2 Environ. Hazards	
List 3 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	Classification(s)
List 3 Physical Hazards	
List 3 Health Hazards	
List 3 Environ. Hazards	
Reason for selecting chemical	There is data available (a recent opinion of the Risk Assessment Committee, ECHA) for this non-CMR substance.

Global List Chemical Nomination Form
U.N. Sub-Committee of Experts on the GHS
Global List Working Group

Chemical Name	amines, tallow alkyl
Identifier	
UN	
CAS	61790-33-8
Impurities	
HPV (Y/N)	
Pesticide (Y/N)	N
Data availability: Data Rich/Data Poor	
Is this chemical already on a list (Y/N)	Y
List 1 (list name and date of classification)	EU CLP Annex VI 5th ATP 3/10/2013 Opinion of Risk Assessment Committee, ECHA: http://echa.europa.eu/documents/10162/0606d258-edc8-41d8-87ae-47fc03815e61
Is the data and rationale for each classification available (Y/N)	Y
	Classification(s)
List 1 Physical Hazards	
List 1 Health Hazards	Acute Tox. 4 Asp. Tox. 1 STOT RE 2; H373 (gastro-intestinal tract, liver, immune system) Skin Corr. 1B
List 1 Environ. Hazards	Aquatic Acute 1 Aquatic Chronic 1 M=10

List 2 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	Classification(s)
List 2 Physical Hazards	
List 2 Health Hazards	
List 2 Environ. Hazards	
List 3 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	Classification(s)
List 3 Physical Hazards	
List 3 Health Hazards	
List 3 Environ. Hazards	

Global List Chemical Nomination Form
U.N. Sub-Committee of Experts on the GHS
Global List Working Group

Chemical Name	amines, coco alkyl
Identifier	
UN	
CAS	61788-46-3
Impurities	
HPV (Y/N)	
Pesticide (Y/N)	N
Data availability: Data Rich/Data Poor	
Is this chemical already on a list (Y/N)	Y
List 1 (list name and date of classification)	EU CLP Annex VI 5th ATP 3/10/2013 Opinion of Risk Assessment Committee, ECHA: http://echa.europa.eu/documents/10162/1be59a90-7341-4c4b-9a61-9b379379d781
Is the data and rationale for each classification available (Y/N)	Y
	Classification(s)
List 1 Physical Hazards	
List 1 Health Hazards	Acute Tox. 4 Asp. Tox. 1 STOT SE 3; H335 STOT RE 2; H373 (gastro-intestinal tract, liver, immune system) Skin Corr. 1B
List 1 Environ. Hazards	Aquatic Acute 1 Aquatic Chronic 1 M=10
List 2 (list name and date of	

classification)	
Is the data and rationale for each classification available (Y/N)	
	Classification(s)
List 2 Physical Hazards	
List 2 Health Hazards	
List 2 Environ. Hazards	
List 3 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	Classification(s)
List 3 Physical Hazards	
List 3 Health Hazards	
List 3 Environ. Hazards	
Reason for selecting chemical	There is data available (a recent opinion of the Risk Assessment Committee, ECHA) for this non-CMR substance.

Global List Chemical Nomination Form
U.N. Sub-Committee of Experts on the GHS
Global List Working Group

Chemical Name	tris(nonylphenyl) phosphite
Identifier	
UN	
CAS	26523-78-4
Impurities	
HPV (Y/N)	
Pesticide (Y/N)	N
Data availability: Data Rich/Data Poor	
Is this chemical already on a list (Y/N)	Y
List 1 (list name and date of classification)	EU CLP Annex VI 3rd ATP 11/07/2012 Opinion of Risk Assessment Committee, ECHA: http://echa.europa.eu/documents/10162/73eb5208-662c-48d0-b878-62ee714d1dc0
Is the data and rationale for each classification available (Y/N)	Y
	Classification(s)
List 1 Physical Hazards	
List 1 Health Hazards	Skin Sens. 1
List 1 Environ. Hazards	Aquatic Acute 1 Aquatic Chronic 1
List 2 (list name and date of classification)	
Is the data and rationale for each classification available	

(Y/N)	
	Classification(s)
List 2 Physical Hazards	
List 2 Health Hazards	
List 2 Environ. Hazards	
List 3 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	Classification(s)
List 3 Physical Hazards	
List 3 Health Hazards	
List 3 Environ. Hazards	
Reason for selecting chemical	There is data available (a recent opinion of the Risk Assessment Committee, ECHA) for this non-CMR substance.

Global list chemical nomination form
 Sub-Committee of Experts on the GHS
 Global list informal working group

Chemical name	Ethanolamine
Identifier	5KV86114PT (this is the unique ingredient identifier)
UN	2491
CAS	141-43-5
Impurities	
HPV (Y/N)	Yes
Pesticide (Y/N)	Contained in pesticide products
Data availability: Data Rich/Data Poor	Animal and physical data readily available, limited epidemiological data, Human ADME information available
Is this chemical already on a list (Y/N)	Yes
List 1 (list name and date of classification)	OSHA Air Contaminants List (1989) EPA – FIFRA, TSCA California Occupational Safety and Health Administration – Air Contaminants List FDA – restricted use and concentrations for personal care uses (limited to rinse off applications and formulations (no stay on application)) FDA – GRAS as food additive (2008)
Is the data and rationale for each classification available (Y/N)	Yes
	List 1 classification(s)
List 1 Physical hazards	Decomp to CO, oxidizing agent, corrosive
List 1 Health hazards	Suspected Respiratory Toxicant, Neurotoxicant, Sensory Irritant
List 1 Environ. hazards	Not available
List 2 (list name and date of classification)	Canada - Ingredient Disclosure List Canada – Domestic Ingredients List
Is the data and rationale for each classification available (Y/N)	Not found

	List 2 classification(s)
List 2 Physical hazards	
List 2 Health hazards	
List 2 Environ. hazards	
List 3 (list name and date of classification)	EC – European Chemicals Agency IUCLID Dataset (2000), ECHA (2011)
Is the data and rationale for each classification available (Y/N)	Yes
	List 3 classification(s)
List 3 Physical hazards	Corrosive, oxidizing agent, combustible
List 3 Health hazards	Hazard to workers via inhalation and dermal Hazard to general population via inhalation, dermal, and oral route
List 3 Environ. Hazards	Hazard to aquatic organisms, hazard to terrestrial organisms
Reason for selecting chemical	This chemical is used in a wide variety of commercial applications from pharmaceuticals to personal care and household products. It is used as feedstock in the production of detergents, emulsifiers, polishes, pharmaceuticals, corrosion inhibitors, chemical intermediates. Information on chemical properties, as well as health and safety data is readily available in public databases.

Global list chemical nomination form
 Sub-Committee of Experts on the GHS
 Global list informal working group

Chemical name	Phthalates (Di-n-butyl phthalate (DBP))
Identifier	RTECS Number - TI0875000 , EC Number – 201-557-4, EC #: 607-318-00-4 EINECS #: 201-577-4
UN	3082
CAS	84-74-2
Impurities	
HPV (Y/N)	Yes
Pesticide (Y/N)	Yes, Agricultural Chemical and Pesticide;
Data availability: Data Rich/Data Poor	Data rich
Is this chemical already on a list (Y/N)	Yes,
List 1 (list name and date of classification)	OSHA ACGIH 1992 NIOSH EPA TSCA EPA Sara 311/312/313
Is the data and rationale for each classification available (Y/N)	List 1 classification(s) Yes
List 1 Physical hazards	Combustible Avoid exposure – obtain special instructions before use. Decomposes to - May also produce 1-butene, butanol and phthalic anhydride. Carbon monoxide, carbon dioxide, acrid smoke and fumes.
List 1 Health hazards	Reproductive Toxicity: Women working where phthalates are used had higher incidence of miscarriages, menstrual disorders, and reduced gestation periods. WARNING! HARMFUL IF SWALLOWED. CAUSES SEVERE EYE IRRITATION.

	<p>CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF INHALED.</p> <p>Tumorigen; Mutagen; Reproductive Effector; Human Data</p> <p>EPA: Human health assessment information on a chemical substance is included in the IRIS database only after a comprehensive review of toxicity data, as outlined in the IRIS assessment development process. Sections I (Health Hazard Assessments for Noncarcinogenic Effects) and II (Carcinogenicity Assessment for Lifetime Exposure) present the conclusions that were reached during the assessment development process. Supporting information and explanations of the methods used to derive the values given in IRIS are provided in the guidance documents located on the IRIS website.</p> <p>STATUS OF DATA FOR Dibutyl phthalate File First On-Line 01/31/1987</p> <p>OSHA: TLV (as TWA): ppm; 5 mg/m³ (ACGIH 1992-1993) OSHA PEL: TWA 5 mg/m³ NIOSH REL: TWA 5 mg/m³ NIOSH IDLH: 4000 mg/m³</p> <p>THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.</p>
List 1 Environ. hazards	Dangerous to the environment. Very toxic to aquatic organisms.
List 2 (list name and date of classification)	ECHA Netherlands through ECHA Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)
Is the data and rationale for each classification available (Y/N)	List 2 classification(s) Yes

<p>List 2 Physical hazards</p>	<p>Explosives conclusive but not sufficient for classification</p> <p>Flammable gases conclusive but not sufficient for classification</p> <p>Flammable aerosols conclusive but not sufficient for classification</p> <p>Oxidizing gases conclusive but not sufficient for classification</p> <p>Gases under pressure conclusive but not sufficient for classification</p> <p>Flammable liquids conclusive but not sufficient for classification</p> <p>Flammable solids conclusive but not sufficient for classification</p> <p>Self-reactive substances and mixtures conclusive but not sufficient for classification</p> <p>Pyrophoric liquids conclusive but not sufficient for classification</p> <p>Pyrophoric solids conclusive but not sufficient for classification</p> <p>Self-heating substances and mixtures conclusive but not sufficient for classification</p> <p>Substances and mixtures which in contact with water emits flammable gases conclusive but not sufficient for classification</p> <p>Oxidising liquids conclusive but not sufficient for classification</p> <p>Oxidising solids conclusive but not sufficient for classification</p> <p>Organic peroxides conclusive but not sufficient for classification</p> <p>Corrosive to metals conclusive but not sufficient for classification</p>
<p>List 2 Health hazards</p>	<p>Repro 1B</p> <p>Reproductive toxicity Repr. 1B H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.</p>

	Effects via lactation conclusive but not sufficient for classification
List 2 Environ. hazards	<p>Aquatic Acute 1</p> <p>Hazardous to the aquatic environment (acute/short-term) Aquatic Acute 1 H400: Very toxic to aquatic life.</p> <p>Hazardous to the aquatic environment (long-term) data lacking</p> <p>hazardous to the ozone layer data lacking</p> <p>Acutely toxic to aquatic organisms,</p> <p>Labelling</p> <p>Signal word Danger</p>
List 3 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	List 3 classification(s)
List 3 Physical hazards	
List 3 Health hazards	
List 3 Environ. Hazards	
Reason for selecting chemical	

Candidate substances. List B (APEC nominations)

Chemical name	Urea
Identifier	RTECS No. YR6250000, EC #: 200-315-5 ECHA Index #: -
UN	3364 UREA HYDROGEN PEROXIDE 1344 UREA NITRATE, dry or wetted with less than 20% water, by mass 0208 UREA NITRATE, WETTED with not less than 10% water, by mass 0219 UREA NITRATE, WETTED with not less than 20% water, by mass
CAS	57-13-6
Impurities	
HPV (Y/N)	Yes
Pesticide (Y/N)	No
Data availability: Data Rich/Data Poor	
Is this chemical already on a list (Y/N)	Yes
List 1 (list name and date of classification)	HSNO CCID – New Zealand
Is the data and rationale for each classification available (Y/N)	Yes
	List 1 classification(s)
List 1 Physical hazards	-
List 1 Health hazards	Acutely toxic SPECIES: Cattle ENDPOINT: LD50 VALUE: 510 mg/kg bw REFERENCE SOURCE: BASF AG Ludwigshafen, FDA, PB-288 673, Evaluation of the Health Aspects of Urea as a Food Ingredient, (1978). [IUCLID]

	<p>Mildly irritating to the skin SPECIES: Human RESULT: Irritating REFERENCE SOURCE: BASF AG Ludwigshafen. Frosch, P.J. and Kligman, A.M.: in Drill, V.A. and Laza, P.(eds): Cutaneous Toxicity, Academic Press Inc. New York 127-153 (1977), cited in: Summary of Responses to the OECD Request for Available Data on HPV Chemicals (1993) [IUCLID]</p> <p>Irritating to the eye SPECIES: Rabbit RESULT: Irritating REFERENCE SOURCE: Grant, W.M. Toxicology of the Eye. 3rd ed. Springfield, IL: Charles C. Thomas Publisher, 1986. 965 [HSDB]</p>
List 1 Environ. hazards	<p>Harmful to terrestrial vertebrates SPECIES: Cattle ENDPOINT: LC50 VALUE: 510 mg/kg bw REFERENCE SOURCE: BASF AG Ludwigshafen, FDA, PB-288 673, Evaluation of the Health Aspects of Urea as a Food Ingredient, (1978). [IUCLID]</p>
List 2 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	List 2 classification(s)
List 2 Physical hazards	
List 2 Health hazards	
List 2 Environ. hazards	
List 3 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	List 3 classification(s)
List 3 Physical hazards	

List 3 Health hazards	
List 3 Environ. Hazards	
Reason for selecting chemical	

Chemical name	3a,4,7,7a-tetrahydro-4,7-methanoindene (Dicyclopentadiene)
Identifier	RTECS #: PC1050000 EC #: 201-052-9 Annex 1 Index: 601-044-00-9
UN	2048
CAS	77-73-6
Impurities	
HPV (Y/N)	Yes
Pesticide (Y/N)	No, but used in the process of manufacture of Pesticide;
Data availability: Data Rich/Data Poor	Data rich
Is this chemical already on a list (Y/N)	Yes,
List 1 (list name and date of classification)	Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)
Is the data and rationale for each classification available (Y/N)	List 1 classification(s) Yes
List 1 Physical hazards	Flam. Liquid 2 H225: Highly flammable liquid and vapour.
List 1 Health hazards	Acute Tox. 4 H302: Harmful if swallowed. Acute Tox. 4 H330: Harmful if inhaled. Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2: H319 Causes serious eye irritation STOT SE 3: H335 May cause respiratory irritation
List 1 Environ. hazards	Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

List 2 (list name and date of classification)	Japan NITE Classification result
Is the data and rationale for each classification available (Y/N)	List 2 classification(s) Yes
List 2 Physical hazards	<p>Flammable liquids - Category 3 (industrial products) - Flammable liquid and vapour</p> <p>Flammable solids - Category 1. - Flammable solid</p> <p>Rational for the classification: Flash point: 32degC</p>
List 2 Health hazards	<p>Acute toxicity (oral) Category 4 - Harmful if swallowed</p> <p>Rational for the classification: The statistical calculation of 5 data (ECETOC JACC 19 (1991)) distributed from 346.5 to 590 mg/kg as rat oral LD50 was done and the mean value of 373.6mg/kg was obtained. So it was set as Category 4.</p> <p>Acute toxicity (dermal) Category 5 - May be harmful in contact with skin</p> <p>Rational for the classification: Although three data (ECETOC JACC 19 (1991)) distributed 4380 - 6600 mg/kg was found out as rabbit dermal LD50, it was set as "Category 5" from the lowest data of 4380mg/kg.</p> <p>Acute toxicity (inhalation: vapour) Category 2 - Fatal if inhaled</p> <p>Rational for the classification: Since the mean of 422ppm (2.28mg/L) was obtained with the statistical work of the four data for rat inhalation LC50 distributed 372 - 660ppm (ECETOC JACC 19 (1991)), it was classified as Category 2.</p> <p>Skin irritation Category 2 - Causes skin irritation</p> <p>Rational for the classification: It was classified as "Category 2" since it was Moderate in the application test on rabbit skin (ECETOC JACC 19 (1991)).</p> <p>Eye irritation Category 2B - Causes eye irritation</p> <p>Rational for the classification: The result of the dose experiment to the eyes of a rabbit was mild (ECETOC JACC 19 (1991)). But R36 is applied in EU. Since SIDS (1998) was also set to irritant to eyes, it was set as "Category 2B."</p>

	<p>Specific target organs/systemic toxicity following single exposure - Category 1 (respiratory, liver, kidneys); Category 3 (narcotic effects) - Cause damage to organs (respiratory, liver, kidneys); May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects).</p> <p>Rational for the classification: There are the effects on the respiratory systems, kidney, liver and paralysis of the extremities are reported by rat inhalation exposure equivalent to the guidance value of Category 1. And anesthesia conditions is regarded by oral treatment to mink (DFGOT vol.6 (1993)). So it is classified into "Category 1 (the respiratory system, liver, kidney), Category 3 (anesthetic actions)".</p> <p>Specific target organs/systemic toxicity following repeated exposure - Category 1 (kidneys); Category 2 (circulatory system, liver, lung) - Causes damage to organs (kidneys) through prolonged or repeated exposure; May cause damage to organs (circulatory system, liver, lung) through prolonged or repeated exposure</p> <p>Rational for the classification: In rat inhalation exposure test, the influence on the kidney within the guidance value of Category 1 is reported (ECETOC JACC 19 (1991)), and the influence on lungs is further reported within the guidance value of Category 2 (ACGIH (2001)). Moreover, in the rat oral administration within the guidance value of Category 2, since the influence to the circulatory organ and liver (Ministry of Health and Welfare reports (2006)) was observed, it was classified into "Category 1 (kidney), Category 2 (cardiovascular, liver, lung)."</p> <p>Aspiration hazard Category 1 - May be fatal if swallowed and enters airways</p> <p>Rational for the classification: Although it is a polycyclic hydrocarbon corresponded by dynamic viscosity, the industrial products contain monocyclic substance (cyclopentadiene) a lot. We classified it as "Category 1."</p>
List 2 Environ. hazards	<p>Hazardous to the aquatic environment (acute) Category 2 - Toxic to aquatic life</p> <p>Rational for the classification: It was classified into Category 2 from 96-hour LC50=4.3mg/L of fishes (<i>Oryzias latipes</i>) (SIDS, 2002).</p> <p>Hazardous to the aquatic environment (chronic) Category 2 - Toxic to aquatic life with long lasting effects</p> <p>Rational for the classification: Classified into Category 2, since acute toxicity was Category 2 and not rapidly degrading (BOD: 0% (existing chemical safety inspections data)), though less bio-accumulative (BCF=384 (existing chemical</p>

	safety inspections data)).
List 3 (list name and date of classification)	HSNO CCID – New Zealand
Is the data and rationale for each classification available (Y/N)	List 3 classification(s)
List 3 Physical hazards	Flammable Liquids: medium hazard: 3.1C Flashpoint Value :32 °C Test Method :Open Cup Boiling Point :170 °C
List 3 Health hazards	Acutely toxic (oral): 6.1C SPECIES: Mouse ENDPOINT: LD50 VALUE: 190 mg/kg REFERENCE SOURCE:Proceedings of the International Congress on Toxicology, Toxicology as a Predictive Science, 1st, Toronto, 1977, Plaa, G.L., and W.A. Duncan, eds., New York, Academic Press, Inc., 1978 (-,448,1978). [RTECS] Acutely toxic (inhalation): 6.1C Inhalation Form:dust/mist SPECIES: Mouse ENDPOINT: LC50 VALUE: 145 ppm 4hr (= 0.78 mg/l) INHALATION FORM: REFERENCE SOURCE: Dow Benelux N. V. Terneuzen (13) Kinkead, E.R. et al. (1971): Toxicol. Appl. Pharmacol. 20, 552-561.(IUCLID 2000) REMARK: 145 ppm = 145/1000 x 132.22/24.45 = 0.78 mg/L Acutely toxic (dermal) 6.1E SPECIES: Rabbit ENDPOINT: LD50 VALUE: 4380 mg/kg REFERENCE SOURCE: Dow Benelux N. V. Terneuzen (25) Smyth et al. (1962):Am. Ind. Hyg. Ass. J., 23, 95-107. (IUCLID 2000) Irritating to the skin 6.3A

	<p>SPECIES: Rabbit</p> <p>RESULT: Moderately irritating</p> <p>REFERENCE SOURCE: Dow Benelux N. V. Terneuzen</p> <p>Test substance: 75 %iges DCPD (28) Jones, J.R. (1989): Dow Europe Report 1228. (IUCLID 2000)</p> <p>R-PHRASE: R 36/37/38 Irritating to eyes, respiratory system and skin. [IUCLID 2000]</p> <p>Irritating to the eye 6.4A</p> <p>SPECIES: Rabbit</p> <p>RESULT: Irritating</p> <p>REFERENCE SOURCE: Dicyclopentadien : Anonymous : TA:Toxikologische Bewertung. Heidelberg, Berufsgenossenschaft der chemischen Industrie PG:31 p YR:1994 IP: VI:84</p> <p>[TOXLINE]</p> <p>Harmful to human target organs or systems (oral) 6.9B</p> <p>EndPoint:</p> <p>Primary Organ: Hepatotoxicity (liver)</p> <p>Signs of toxicity observed include ataxia, reduced movement, exhaustion, tremors and spasms. Repeated administration of 64 mg dicyclopentadiene/kg body weight/day in the diet for 14 days is tolerated by dogs without overt signs of toxicity. In weasels, 754 mg/kg body weight/day administered in the diet for 21 days caused changes to haematological parameters and a marked loss in body fat. On administration of 40 or 200 mg dicyclopentadiene/kg body weight/day to rats by gavage for 28 days, body weight gain was inhibited and changes in liver, kidney, adrenal gland and thymus weights were seen, as well as histological effects on the liver and adrenal glands. The no observed effect level was given as 8 mg/kg body weight/day. These findings are contrary to the results of subchronic feeding studies in rats and mice, in which no effects occurred at doses of up to 198 and 88 mg/kg body weight, respectively. Inhalation of dicyclopentadiene vapour 10 times (7 hours/day) can be lethal in rats at concentrations of 250 ppm (equivalent to 1350 mg/m³) and above and in mice at 72 ppm (equivalent to 389 mg/m³) and above. Bleeding in the lungs, gut and thymus have been observed macroscopically in rats.</p> <p>No effects were detected after administration of dicyclopentadiene in the diet for 90 days up to the highest tested doses of 198 mg/kg body weight/day in rats and 88 mg/kg body weight/day in mice. Inhalation of dicyclopentadiene vapour for 13 weeks caused histological effects on the kidneys (alpha₂-globulin nephropathy) in male rats at a concentration of 5.1 ppm (equivalent to 27.5 mg/m³) and above. The alpha-globulin nephropathy is specific to male rats and is not relevant to risk assessment in man. In dogs, no histopathological effects have been established up to concentrations of 32.4 ppm (equivalent to 175 mg/m³), although minor changes in clinical chemistry parameters were evident. No effect levels of 1 ppm for the rat and between 8.9 and 23.5 ppm for the dog were given.</p> <p>Dicyclopentadien : Anonymous : TA:Toxikologische Bewertung. Heidelberg, Berufsgenossenschaft der chemischen Industrie PG:31 p YR:1994 IP: VI:84</p> <p>[TOXLINE]</p>

	<p>Harmful to human target organs or systems (inhalation) 6.9B</p> <p>EndPoint:</p> <p>Primary Organ:</p> <p>Inhalation of dicyclopentadiene vapour 10 times (7 hours/day) can be lethal in rats at concentrations of 250 ppm (equivalent to 1350 mg/m³) and above and in mice at 72 ppm (equivalent to 389 mg/m³) and above. Bleeding in the lungs, gut and thymus have been observed macroscopically in rats.</p> <p>No effects were detected after administration of dicyclopentadiene in the diet for 90 days up to the highest tested doses of 198 mg/kg body weight/day in rats and 88 mg/kg body weight/day in mice. Inhalation of dicyclopentadiene vapour for 13 weeks caused histological effects on the kidneys (alpha₂-globulin nephropathy) in male rats at a concentration of 5.1 ppm (equivalent to 27.5 mg/m³) and above. The alpha-globulin nephropathy is specific to male rats and is not relevant to risk assessment in man. In dogs, no histopathological effects have been established up to concentrations of 32.4 ppm (equivalent to 175 mg/m³), although minor changes in clinical chemistry parameters were evident. No effect levels of 1 ppm for the rat and between 8.9 and 23.5 ppm for the dog were given.</p> <p>Dicyclopentadien : Anonymous : TA:Toxikologische Bewertung. Heidelberg, Berufsgenossenschaft der chemischen Industrie PG:31 p YR:1994 IP: VI:84 [TOXLINE]</p>
<p>List 3 Environ. Hazards</p>	<p>Very ecotoxic in the aquatic environment 9.1B (crustacean)</p> <p>SPECIES: Daphnia pulex, Water flea</p> <p>TYPE OF EXPOSURE:</p> <p>DURATION: 2 days (48 hr)</p> <p>ENDPOINT: EC50</p> <p>VALUE: 4.200mg/L</p> <p>REFERENCE SOURCE: Ref No: 18461. Passino-Reader,D.R., J.P.Hickey, and L.M.Ogilvie (1997) Toxicity to Daphnia pulex and QSAR Predictions for Polycyclic Hydrocarbons Representative for Great Lakes Contaminants. Bull. Environ. Contam. Toxicol. 59(5):834-840. [ECOTOX]</p> <p>Biocumulative: No</p> <p>Lepomis macrochirus, Bluegill ACC conc = 980ug/L BCF = 53</p> <p>Freshwater, Test duration = 14 D, Flowthrough,</p> <p>Reference Number: 5965</p> <p>Author(s): Bentley, R.E., G.A. LeBlanc, T.A. Hollister, and B.H. Sleight lii</p> <p>Publication Year: 1976</p> <p>Title: Acute Toxicity of Diisopropylmethyl Phosphonate and Dicyclopentadiene to Aquatic Organisms</p> <p>Reference Source: Contract No.DAMD-17-75-C-5073 Final Report, U.S.Army Medical Res.Develop.Command, Washington, D.C. :98 [ECOTOX] -</p>

	<p>Rapidly Degradable: No</p> <p>The results of biodegradation studies suggest dicyclopentadiene is poorly degraded in soil and water, with estimated half-lives of 1-2 years and 4-7 years respectively. The rate of photolysis in water is slow. In the event of release into top soil or water, concentrations will decrease largely as a result of volatilisation into the atmosphere; the rate of degradation of dicyclopentadiene in air is rapid, the estimated half-life being one day.</p> <p>Dicyclopentadiene : ECETOC working group : TA:ECETOC Joint Assessment of Commodity Chemicals PG:47 p YR:1991 IP: VI:19 [TOXLINE]</p> <p>Harmful in the aquatic environment (fish) 9.1C</p> <p>SPECIES: Anabaena flos-aquae (blue-green algae)</p> <p>TYPE OF EXPOSURE:</p> <p>DURATION: 96 hr</p> <p>ENDPOINT: LC50</p> <p>VALUE: 22 mg/l</p> <p>REFERENCE SOURCE: ECETOC working group: TA:ECETOC Joint Assessment of Commodity Chemicals PG:47 p YR:1991 IP: VI:19 [TOXLINE]</p> <p>Biocumulative: No</p> <p>Lepomis macrochirus, Bluegill ACC conc = 980ug/L BCF = 53</p> <p>Freshwater, Test duration = 14 D, Flowthrough,</p> <p>Reference Number: 5965</p> <p>Author(s): Bentley, R.E., G.A. LeBlanc, T.A. Hollister, and B.H. Sleight Iii</p> <p>Publication Year: 1976</p> <p>Title: Acute Toxicity of Diisopropylmethyl Phosphonate and Dicyclopentadiene to Aquatic Organisms</p> <p>Reference Source: Contract No.DAMD-17-75-C-5073 Final Report, U.S.Army Medical Res.Develop.Command, Washington, D.C. :98 [ECOTOX] -</p> <p>Rapidly Degradable: No</p> <p>The results of biodegradation studies suggest dicyclopentadiene is poorly degraded in soil and water, with estimated half-lives of 1-2 years and 4-7 years respectively. The rate of photolysis in water is slow. In the event of release into top soil or water, concentrations will decrease largely as a result of volatilisation into the atmosphere; the rate of degradation of dicyclopentadiene in air is rapid, the estimated half-life being one day.</p> <p>Dicyclopentadiene : ECETOC working group : TA:ECETOC Joint Assessment of Commodity Chemicals PG:47 p YR:1991 IP: VI:19 [TOXLINE]</p> <p>Ecotoxic to terrestrial vertebrates 9.3B</p> <p>SPECIES: Mouse</p>

	<p>ENDPOINT: LD50</p> <p>VALUE: 190 mg/kg</p> <p>REFERENCE SOURCE: Proceedings of the International Congress on Toxicology, Toxicology as a Predictive Science, 1st, Toronto, 1977, Plaa, G.L., and W.A. Duncan, eds., New York, Academic Press, Inc., 1978 (-,448,1978). [RTECS]</p>
Reason for selecting chemical	<p>There is data available</p> <p>Interest of industry</p>

VWG on GHS Data Exchange

Status Update

Orlov Alexander

Beijing, 2014

The 25th APEC MINISTERS MEETING Bali, Indonesia October 5, 2013



The 25th APEC MINISTERS MEETING

Bali, Indonesia
October 5, 2013

Joint Ministerial Statement

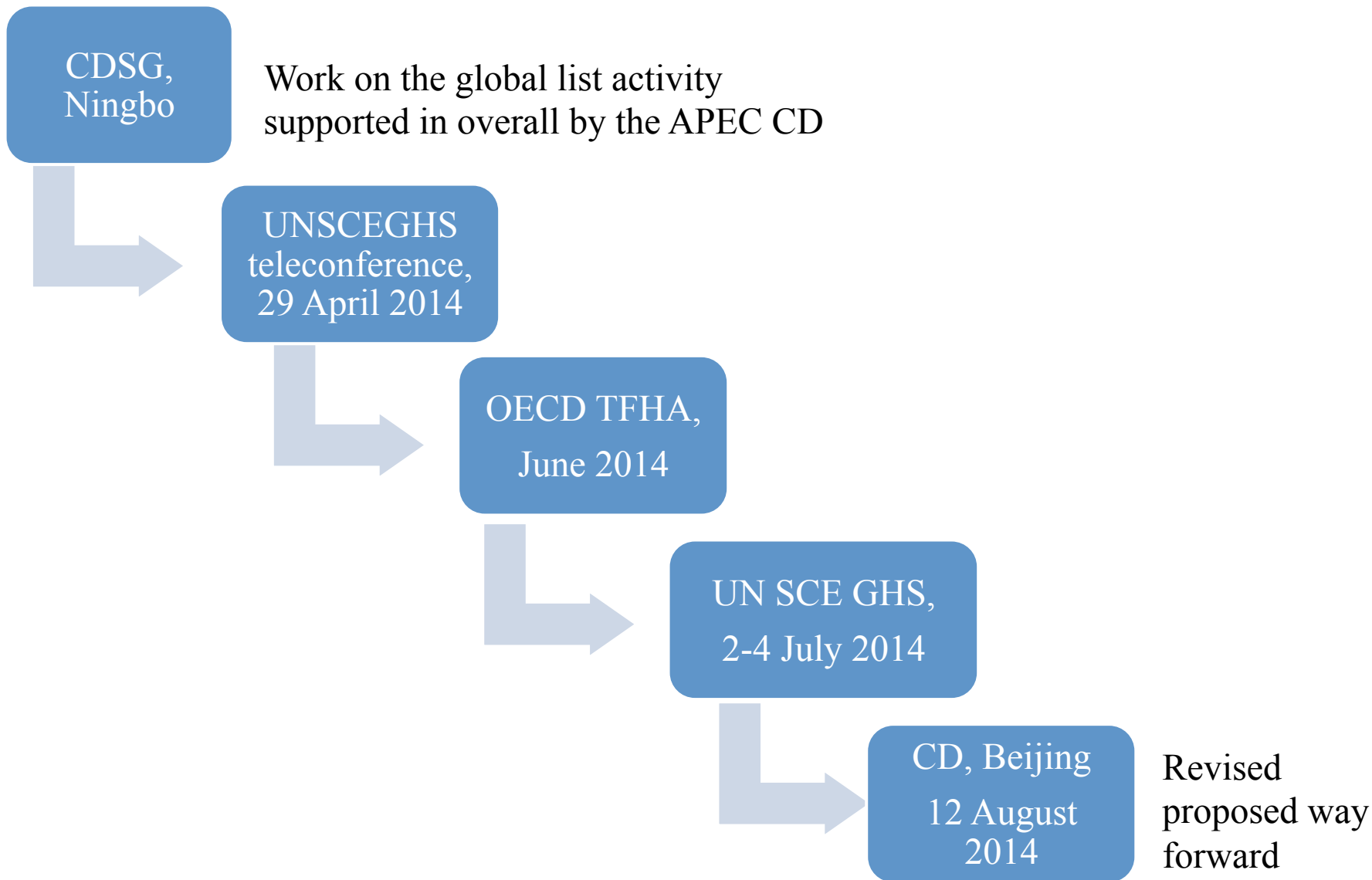
1. We, the Asia-Pacific Economic Cooperation (APEC) Ministers, met on 4-5 October 2013, in Bali, Indonesia. The meeting was co-chaired by H.E. R.M. Marty M. Natalegawa, Minister for Foreign Affairs of Indonesia and H.E. Gita Wirjawan, Minister for Trade of Indonesia.
2. We welcomed the participation in the meeting of Director General of the WTO, Chair of the APEC Business Advisory Council (ABAC), Secretary General of ASEAN, co-chairs of the Pacific Economic Cooperation Council (PECC), representative of the Pacific Islands Forum (PIF), and representative of the Melanesian Spearhead Group (MSG).
3. We assembled today to reiterate our shared commitment towards a seamless regional economy and to continue our course to integrate to grow and to innovate to prosper. We reviewed the current state of affairs in the Asia-Pacific region, assessed the progress made this year, and discussed the way forward for APEC to ensure the Asia-Pacific region remains resilient and to fulfil our role as the engine of the global growth. Under the APEC 2013 theme of "Resilient Asia Pacific, Engine of Global Growth," we are committed to deepen our efforts towards attaining the Bogor Goals, promoting connectivity, and achieving sustainable growth with equity.

State of the Region

4. Our economies have taken a number of important policy actions that have helped to contain key tail risks, improve financial market conditions and sustain the recovery. Nevertheless, global growth is too weak, risks remain tilted to the downside, and the economic outlook suggests growth is likely to be slower and less balanced than desired. We recognized the importance of a comprehensive series of structural reforms so to increase productivity, labor force participation and high quality job creation. We will work to achieve stronger and sustainable recovery by, among others, ensuring fiscal sustainability, building human capacity through education and training, boosting domestic sources of growth, increasing domestic savings, providing sources of trade financing and enhancing competitiveness.
5. We are committed to strengthening transparency and sharing information on macroeconomic policies, and to working together to promote common development in Asia-Pacific region.
6. We are determined to strengthen our cooperation to realize a strong and resilient region with the ability to recover swiftly from economic turbulence, so

30. We also welcomed ... participation in the establishment of the global non mandatory list of chemicals classified according to the Global Harmonized System of classification and labeling of chemicals (GHS) lead by UN Sub-Committee of Experts on GHS

Activities since CDSG, Ningbo



Outcomes of the update at the UN SE GHS

Update on the activities of the APEC CD VWG on GHS Data Exchange

69. The Sub-Committee welcomed the work being done by APEC Chemical Dialogue as well as any possibility to strengthen cooperation between the two bodies

United Nations
Secretariat


ST/SG/AC.10/C.4/54
Date: General
18 July 2014
Original: English

Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals
Sub-Committee of Experts on the Globally Harmonized
System of Classification and Labelling of Chemicals

Report of the Sub-Committee of Experts on the Globally
Harmonized System of Classification and Labelling of
Chemicals on its twenty-seventh session
held in Geneva from 2 to 4 July 2014

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GE. Please recycle 

UN SCE GHS:

- Guiding principles established
- 2 work streams identified
 - pilot classification of chemicals
 - GHS lists comparison
- Compiled short list of chemicals to choose from for the pilot
- Agreed that the party which nominated the chemical will make data assessment and classification proposal for that chemical

Group of experts at the OECD is willing to review and comment on the proposals, organize electronic access to stakeholders to comment as well

Proposed Steps

2014-2015

2015



Pilot classification of 4 substances by the leads

- From the UN SCE GHS Short-list and
- Chosen by CD APEC
- Classified by the economy nominated or willing



VWG

Commenting results



APEC project. Discussions of the classification results. OECD COCAM representative may be invited



VWG

Document outcomes



Handling the materials to UN SCE GHS/ COCAM

1st Proposed Step – choosing substances

List A. UN SCE GHS shortlist of chemicals for the pilot classification

- Acrylamide
- Methyl methacrylate
- Amines, tallow alkyl
- 2,4,4-trimethylpentene
- Tris(nonylphenyl) phosphite
- Ethanolamine
- Phthalates (Di-n-butyl phthalate (DNBP))

Voting:

1-2 substances from the list

List B. APEC CD candidate substances

- Urea
- Dicyclopentadiene
- ...

Extra nominations are welcome!

Voting:

1-2 substances from the list

Russia is willing to lead the work for 1 substance chosen by economies (List A) and nominated by its industry (List B)

2-4 substances for classification of the pilot in total

Next steps in brief

VWG Member and/or economy that has nominated the substance / or is willing to take the lead performs data assessment and GHS classification proposal



VWG will compile the results from all the leads for all chemicals and send all to the interested APEC economies for comment



Interested VWG Members / economies to comment on the results, including suggestions to consider additional data or arriving at different classification results



Face – to – face discussions of the classification results (potentially APEC project - seminar)

Request to VWG and CD members to:

- 1) Propose candidate substances for classification project for List B
- 2) Vote on the candidate substances for classification project from Lists A and B
- 3) Express interest to be the lead for classification pilot for substances both from Lists A and B

Results of voting and lead nominations will be communicated to the UN SCE GHS

Target: to end by the 15 Sept. (UNSCEGHS Global list working group teleconference)

Questions

Comments

Suggestions

C. Cooperation with other bodies or international organizations

Asia-Pacific Economic Cooperation (APEC) Chemical Dialogue

66. The expert from the Russian Federation updated the Sub-Committee on the on-going activities of the APEC Chemical Dialogue.

67. The Sub-Committee noted that at the 2013 APEC Ministerial Meeting, Ministers had welcomed work on regulatory cooperation and convergence and “participation in the establishment of the global non mandatory list of chemicals classified according to the Global Harmonized System of classification and labelling of chemicals (GHS) lead by UN Sub-Committee of Experts on GHS”³.

68. It was also noted that the APEC Chemical Dialogue had agreed that any activities undertaken by its Virtual Working Group on GHS Data Exchange for the development of a list of chemicals classified in accordance with the GHS should be complementary and non-duplicative of the work being done by the Sub-Committee on the same issue and that the agreed principles for the development of the list should be respected. At its next meeting in Beijing in August 2014, the APEC Chemical Dialogue will discuss the next steps for the establishment of a procedure enabling the APEC Chemical Dialogue to provide input to the Sub-Committee on the development of the list.

69. The Sub-Committee welcomed the work being done by APEC Chemical Dialogue as well as any possibility to strengthen cooperation between the two bodies.

Appendix B. Nomination form (UN SCE GHS)

Chemical name	
Identifier	
UN	
CAS	
Impurities	
HPV (Y/N)	
Pesticide (Y/N)	
Data availability: Data Rich/Data Poor	
Is this chemical already on a list (Y/N)	
List 1 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	List 1 classification(s)
List 1 Physical hazards	
List 1 Health hazards	
List 1 Environ. hazards	
List 2 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	
	List 2 classification(s)
List 2 Physical hazards	
List 2 Health hazards	
List 2 Environ. hazards	
List 3 (list name and date of classification)	
Is the data and rationale for each classification available (Y/N)	