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## EXHIBIT 27

What is INCHEM – International Programme on Chemical Safety



TOS International Programme on Chemical Safety

TOS INTERNATIONAL SAFETY

## Chemical Safety Information from Intergovernmental Organizations

Search options:

**Full-text Search** 

Example: kidney <AND> DDT



**Chemica! Identity Search** 

CAS Number

Example: 108-88-3

OR

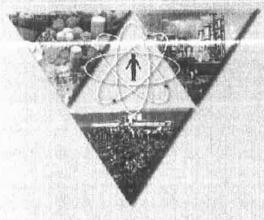
Chemical Name or Synonym

Example: Toluene



Advanced Search

- ► About IPCS INCHEM
- ▶ Help
- Disclaimer



Rapid access to internationally peer reviewed information on chemicals commonly used throughout the world, which may also occur as contaminants in the environment and food. It consolidates information from a number of intergovernmental organizations whose goal it is to assist in the sound management of chemicals.

#### Browse content using links below:

- Concise International Chemical Assessment Documents (CICADs)
- ▶ Environmental Health Criteria (EHC) Monographs
- ► Harmonization Project Publications
- ▶ Health and Safety Guides (HSGs)
- International Agency for Research on Cancer (IARC) -Summaries and Evaluations
- ▶ International Chemical Safety Cards (ICSCs)
- ▶ IPCS/CEC Evaluation of Antidotes Series
- Joint Expert Committee on Food Additives (JECFA) -Monographs and Evaluations
- ▶ Joint Meeting on Pesticide Residues (JMPR)
- Keml-Riskline
- ▶ Poisons Information Monographs Archive (PIMs, 1989-2002)
- Screening Information Data Set (SIDS) for High Production Volume Chemicals
- ▶ UK Poison Information Documents (UKPID)



## INCHEM

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# International Programme on Chemical Safety

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What does INCHEM mean? - Definition of INCHEM - INCHEM stands for International Programme on Chemical Safety. By AcronymsAndSlang.com

## Most popular questions people look for before coming to this page

- O: What does INCHEM stand for?
- A: INCHEM stands for "International Programme on Chemical Safety".
- Q: How to abbreviate "International Programme on Chemical Safety"?
- A: "International Programme on Chemical Safety" can be abbreviated as INCHEM.
- ` What is the meaning of INCHEM abbreviation?
- . The meaning of INCHEM abbreviation is "International Programme on Chemical Safety".
- O: What is INCHEM abbreviation?
- A: One of the definitions of INCHEM is "International Programme on Chemical Safety".
- O: What does INCHEM mean?
- A: INCHEM as abbreviation means "International Programme on Chemical Safety".
- Q: What is shorthand of International Programme on Chemical Safety?
- A: The most common shorthand of "International Programme on Chemical Safety" is INCHEM.
  - Page Link
  - Citation Styles
  - Suggest New

### Abbreviations or Slang with similar meaning

- HICCS Helsinki International Congress on Chemical Safety
- ICES International Committee on Electromagnetic Safety
- IFCS International Forum on Chemical Safety
- IPCS International Programme on Chemical Safety.
- PCS Programme on Chemical Safety
- ICCS International Conference on Chemical Safety
- ICHS International Conference on Hydrogen Safety
- ICOCS International Conference On Chemical Safety.
- IFOCS International Forum On Chemical Safety
- IPEC International Programme on Chemical
- IPOCS International Program On Chemical Safety
- IPOCS International Programme On Chemical Safety

Image HTML:

<img src='http://acronym

HTML with link:

<a href='http://acronyms

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## IPOS INOHEM

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#### **About IPCS INCHEM**

IPCS INCHEM is an invaluable tool for those concerned with chemical safety and the sound management of chemicals. Produced through cooperation between the International Programme on Chemical Safety (IPCS) and the Canadian Centre for Occupational Health and Safety (CCOHS); IPCS INCHEM directly responds to one of the Intergovernmental Forum on Chemical Safety (IFCS) priority actions to consolidate current, internationally peer-reviewed chemical safety-related publications and database records from international bodies, for public access.

IPCS INCHEM offers quick and easy electronic access to thousands of searchable full-text documents on chemical risks and the sound management of chemicals, helping countries fulfill their commitments under UNCED's Agenda 21, Chapter 10

#### IPCS INCHEM contains the following:

- Concise International Chemical Assessment Document (CICADS)
- Environmental Health Criteria (EHC) monographs
- Harmonization Project Publications
- Health and Safety Guides (HSGs)
- International Agency for Research on Cancer (IARC) -Summaries and Evaluations
- International Chemical Safety Cards (ICSCs)
- IPCS/CEC Evaluation of Antidotes Series
- Joint Expert Committee on Food Additives (JECFA) -Monographs and evaluations
- <u>Joint Meeting on Pesticide Residues (JMPR) Monographs</u> and evaluations
- KemI-Riskline
- Poisons Information Monographs (PIMs)
- Screening Information Data Set (SIDS) for High Production Volume Chemicals
- UK Poison Information Documents (UKPID)

# Concise International Chemical Assessment Docments (CICADS)

CICADs are concise documents that provide summaries of the relevant scientific information concerning the potential effects of chemicals upon human health and/or the environment. They are based on selected national or regional evaluation documents or on existing EHCs. Before acceptance for publication as

Concise International
Chemical Assessment
Documents (CICADS)

Environmental Health
Criteria (EHC)
Monographs

Harmonization Project Publications

Health and Safety
Guides (HSGs)

International Agency for Research on Cancer (IARC) - Summaries and Evaluations

International Chemical Safety Cards (ICSCs)

IPCS/CEC Evaluation of Antidotes Series

Joint Expert Committee
on Food Additives
(JECFA) - Monographs
and Evaluations

Joint Meeting on Pesticide Residues (JMPR)

KemI-Riskline

<u>Poisons Information</u> <u>Monographs (PIMs)</u>

Screening Information
Data Set (SIDS) for
High Production
Volume Chemicals

CICADs by IPCS, these documents have undergone extensive peer review by internationally selected experts to ensure their completeness, accuracy in the way in which the original data are represented, and the validity of the conclusions drawn.

The primary objective of CICADs is characterization of hazard and dose-response from exposure to a chemical. CICADs are not a summary of all available data on a particular chemical; rather, they include only that information considered critical for characterization of the risk posed by the chemical. The critical studies are, however, presented in sufficient detail to support the conclusions drawn. For additional information, the reader should consult the identified source documents upon which the CICAD has been based.

Risks to human health and the environment will vary considerably depending upon the type and extent of exposure. Responsible authorities are strongly encouraged to characterize risk on the basis of locally measured or predicted exposure scenarios. To assist the reader, examples of exposure estimation and risk characterization are provided in CICADs, whenever possible. These examples cannot be considered as representing all possible exposure situations, but are provided as guidance only. The reader is referred to EHC 170 for advice on the derivation of health-based guidance values.

While every effort is made to ensure that CICADs represent the current status of knowledge, new information is being developed constantly. Unless otherwise stated, CICADs are based on a search of the scientific literature to the date shown in the executive summary. In the event that a reader becomes aware of new information that would change the conclusions drawn in a CICAD, the reader is requested to contact the IPCS to inform it of the new information.

## Environmental Health Criteria (EHC) monographs

Comprehensive data from scientific sources for the establishment of safety standards and regulations

EHC publications are monographs designed for scientists and administrators responsible for the establishment of safety standards and regulations. This series issued by the International Programme on Chemical Safety (IPCS), provides basic scientific risk evaluation of a wide range of chemicals and groups of chemicals.

EHC monographs are based on a comprehensive search of available original publications, scientific literature and reviews and examine: the physical and chemical properties and analytical methods; sources of environmental and industrial exposure and environmental transport, chemobiokinetics and metabolism including absorption, distribution, transformation and elimination; short and long term effects on animals (carcinogenicity, mutagenicity, and teratogenicity); and finally,

an evaluation of risks for human health and the effects on the environment.

The Environmental Health Criteria series are published by the World Health Organization and hard copies can be obtained from <u>WHO Press</u>, World Health Organization, 1211 Geneva 27, Switzerland.

### Harmonization Project Publications

#### What is the Harmonization Project?

The World Health Organization (WHO)/IPCS Project on the Harmonization of Approaches to the Assessment of Risk from Exposure to Chemicals ("Harmonization Project"), aims to harmonize global approaches to risk assessment by:

- increasing understanding and agreement on basic risk assessment principles
- developing international guidance documents on specific issues

The Project enables risk assessments to be performed using internationally accepted methods and these assessments can then be shared to avoid duplication of effort. It translates advances in scientific knowledge into new harmonized methods, promotes transparency in risk assessment, and reduces unnecessary testing of chemicals. The project benefits all those involved in chemical hazard/risk assessment (chemical assessment authorities and other risk assessment bodies, professionals, and researchers).

#### Health and Safety Guides (HSG)

Provide concise information in non-technical language, for decision-makers on risks from exposure to chemicals, with practical advice on medical and administrative issues.

# International Agency for Research on Cancer (IARC) - Summaries and Evaluations

In 1969, the International Agency for Research on Cancer (IARC) initiated a programme on the evaluation of the carcinogenic risk of chemicals to humans involving the production of critically evaluated monographs on individual chemicals. In 1980 and 1986, the programme was expanded to include evaluations of carcinogenic risks associated with exposures to complex mixtures and other agents.

The objective of the programme is to elaborate and publish in the form of monographs critical reviews of data on carcinogenicity for agents to which humans are known to be exposed and on specific exposure situations; to evaluate these data in terms of human risk with the help of international working groups of experts in chemical carcinogenesis and

related fields; and to indicate where additional research efforts are needed.

### International Chemical Safety Cards (ICSC)

The International Chemical Safety Cards summarize essential health and safety information on chemical substances in a clear way, and are not only intended to be used at the "shop floor" level by workers, but also by other interested parties in factories, agriculture, construction and other places of work.

Draft versions of the card containing a summary of health and safety information are prepared by cooperating scientific institutions. These institutions have the task of collecting and validating the relevant information. The cards are then peer-reviewed by a committee consisting of internationally-recognized experts who take into account advice given by manufacturers, workers' representatives and poisons centres.

The International Chemical Safety Cards are published jointly by the World Health Organization and the International Labour Organization (www.ilo.org/icsc)

### IPCS/EC Evaluation of Antidotes Series

Provides definitive and authoritative guidance on the use of antidotes to treat poisoning. The International Programme on Chemical Safety (IPCS) and the Commission of the European Union (EC) jointly undertook a major project to evaluate antidotes used clinically in the treatment of poisoning. The aim of this project was to identify and evaluate for the first time in a scientific and rigorous way the efficacy and use of a wide range of antidotes. This series summarises and assesses, on an antidote-by-antidote basis, their clinical use, mode of action and efficacy. The aim is to provide an authoritative consensus statement which will greatly assist in the selection and administration of an appropriate antidote. This scientific assessment is complemented by detailed clinical information on routes of administration, contra-indications and precautions. The series collates a wealth of useful information which will be of immense practical use to clinical toxicologists and all those involved in the treatment and management of poisoning.

# JECFA (Joint Expert Committee on Food Additives) - Monographs and evaluations

Toxicological evaluations of food additives and contaminants and of residues of veterinary drugs in food, produced by the Joint WHO/FAO Expert Committee on Food Additives JECFA, are used by the Codex Alimentarius Commission and national governments to set international food standards and safe levels for protection of the consumer.

The monographs provide the toxicological information upon which the JECFA makes its evaluations. These monographs are prepared by scientific experts and peer reviewed at the JECFA meetings.

JMPR (Joint Meeting on Pesticide Residues) - monographs and evaluations.

Toxicological evaluations of pesticides, produced by the WHO/FAO Joint Meeting on Pesticide Residues JMPR, are used by the Codex Alimentarius Commission and national governments to set international food standards and safe levels for protection of the consumer.

The monographs provide the toxicological information upon which the JMPR makes its evaluations. These monographs are prepared by scientific experts and peer reviewed at the JMPR meetings.

#### KemI-Riskline.

These documents are produced by the Swedish Criteria Group (SCG) and the Nordic Expert Group (NEG).

The Swedish Criteria Group for Occupational Standards – consensus reports and criteria documents

The Swedish Criteria Group for Occupational Standards (SCG) consists of about 15 scientific experts representing different fields of science, such as toxicology, occupational hygiene and occupational medicine. The main task is to produce consensus reports and criteria documents to be used by the Swedish Work Environment Authority (SWEA) as the scientific basis for setting occupational exposure limits (OELs) for chemical substances in Sweden. The secretariat of the group is run by the SWEA and is located at Karolinska Institutet in Stockholm, Sweden.

In most cases, a document is produced on request to the group from the SWEA. Evaluations are made of all relevant published original papers for a substance found in searches in relevant databases. Consensus reports are concise documents that summarize and evaluate scientific data relevant for setting an occupational exposure limit. They do not give a summary of all available data on a particular chemical, but studies, important for establishing dose-effect/dose-response relationships and critical effect(s), are described in detail. A draft consensus report (or sometimes a more comprehensive criteria document) is written by the secretariat or by a scientist appointed by the secretariat. A qualified evaluation is made of the information in the references. After discussions in the Criteria Group, the draft is approved and accepted as a consensus report from the group. The Criteria Group does not propose a numerical occupational exposure limit value for a substance, but, as far as possible, give a dose-response/dose-effect relationship and the critical effect of occupational exposure. The documents are published in English, as well as in Swedish, by the University of Gothenburg in the scientific serial Arbete och Hälsa.

The Nordic Expert Group criteria documents The main task of the Nordic Expert Group for Criteria Documentation of Health Risks from Chemicals (NEG) is to produce criteria documents to be used by the regulatory authorities of the Nordic countries as the scientific basis for setting occupational exposure limits (OELs) for chemical substances. NEG consists of scientific experts from the Nordic countries (Denmark, Finland, Norway and Sweden) representing different fields of science, such as toxicology, epidemiology and occupational medicine.

The documents are risk evaluation reports, and constitute comprehensive reviews based on a thorough search of the scientific literature. The documents comprise data on physical and chemical properties, occurrence and use, analytical methods, occupational exposure, toxicokinetics, biological monitoring, and effects in animals and man. Finally, an evaluation of human health risks based on dose-effect/dose-response relationships and the identification of the critical effect(s) is made. No numerical values on OELs are given, as this is done at the national level, according to country-specific procedures. No information on environmental fate and effects is included.

The documents are published by the University of Gothenburg in the scientific serial Arbete och Hälsa. More information about NEG including all documents is available via the web site:www.nordicexpertgroup.org.

The scientific serial Arbete och Hälsa is also available in the <u>KemI-Riskline database</u>. Please note however that this database is no longer being updated.

### Poisons Information Monographs (PIMs)

A global database with evaluated information on substances (chemicals, pharmaceuticals, poisonous plants, and poisonous and venomous animals) commonly involved in cases of poisoning. A PIM is a concise, practical document designed to facilitate the work of poisons information specialists, clinicians, and analysts.

The PIM is more than a simple monograph and part of a database. It is a dynamic document which represents an international consensus on the diagnosis, management and prevention of poisonings. It may also constitute the basis for training, a source of scientific reference and a stimulus for international cooperation amongst poisons centres and clinical toxicology units around the world.

The PIMs are prepared by collaborating poisons information centres and other experts throughout the world and are subjected to individual and peer review. PIMs summarize the physico-chemical and toxicological properties of the substance, the medical features of the effects produced by various routes of exposure to the substance, the patient management and the supporting laboratory investigations.

### OECD Screening Information Data Sets (SIDS)

Processed by IRPTC summarize the literature on high production chemicals and provide an initial assessment for decision-