ILMA 2017 Annual Meeting

Metalworking Fluids Committee

Hyatt Regency Grand Cypress

Orlando, Florida

3:00 – 4:30 PM (ET)
Chlorinated Paraffin Update

For ILMA Metalworking Fluids Committee Meeting

October 16, 2017
Topics

• Update on CP Substance on TSCA Inventory
• Canada DSL Plans
• Upcoming SNUR
• MCCP Environmental Fate Testing Program
• Future Risk Evaluation Projects
TSCA Status of CP Substances

• 11 new CP substances added to the TSCA inventory in June and July 2017 covering MCCP, LCCP and vLCCP range
  • Total of 14 new CP substance now on TSCA inventory
• All new CP substances under Consent Orders and/or Significant New Use Rule (SNUR)
  • New SNUR expected for the 11 recently added substances
• Metalworking fluid applications permitted for all new CP substances
### CP Substances on TSCA/DSL

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance Name</th>
<th>DSL Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medium-Chain (MCCP) (C14-17)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>198840-65-2</td>
<td>Tetradecane, chloro derivs.</td>
<td>Not listed</td>
</tr>
<tr>
<td>1372804-76-6</td>
<td>Alkanes, C14-16, chloro</td>
<td>Not listed</td>
</tr>
<tr>
<td>85535-85-9</td>
<td>Alkanes, C14-17, chloro</td>
<td>On DSL</td>
</tr>
<tr>
<td><strong>Long-Chain (LCCP) (C18+)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2097144-48-2</td>
<td>Octadecane, chloro derivs.</td>
<td>Not listed</td>
</tr>
<tr>
<td>106232-85-3</td>
<td>Alkanes, C18-20, chloro</td>
<td>On DSL</td>
</tr>
<tr>
<td>2097144-45-9</td>
<td>Alkanes, C20-24, Chloro</td>
<td>Not listed</td>
</tr>
<tr>
<td>2097144-43-7</td>
<td>Alkanes, C20-28, chloro</td>
<td>Not listed</td>
</tr>
<tr>
<td>2097144-44-8</td>
<td>Slackwax (petroleum), Chloro</td>
<td>Not listed</td>
</tr>
<tr>
<td><strong>Very Long-Chain (vLCCP) (C21+)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1417900-96-9</td>
<td>Alkanes, C21-34-branched and linear, chloro.</td>
<td>Not listed</td>
</tr>
<tr>
<td>1401947-24-0</td>
<td>Alkanes, C22-30-branched and linear, chloro.</td>
<td>Not listed</td>
</tr>
<tr>
<td>288260-42-4</td>
<td>Alkanes, C22-30, chloro</td>
<td>Not listed</td>
</tr>
<tr>
<td>1402738-52-6</td>
<td>Alkanes, C24-28, chloro</td>
<td>Not listed</td>
</tr>
<tr>
<td>2097144-46-0</td>
<td>Hexacosane, chloro derivs.</td>
<td>Not listed</td>
</tr>
<tr>
<td>2097144-47-1</td>
<td>Octacosane, chloro derivs.</td>
<td>Not listed</td>
</tr>
</tbody>
</table>
Export Notification

- Being regulated under a TSCA 5 action requires export notifications for these new CP substances.
- Suppliers of these new CP substances are required to notify customers of this requirement.
- ILMA has provide guidance and a template letter for these export notification letters.
Canadian DSL Plans

• Only 3 of the new CP substances on TSCA are already on the Canadian Domestic Substances List (DSL)
  • Plan is to get all of the new CP substances on the DSL
  • Chemicals not on the DSL will need to go through the New Substance Notification.

• Have been working with Environment and Climate Change Canada (ECCC) on a possible expedited NSN review.
  • Data is available to address endpoints.
  • CPIA has generate chemical assessments and ECCC is reviewing the draft LCCP/vLCCP assessment.
New CP SNUR

• SNUR makes the CO language law. Ensures that any new suppliers must meet the same requirements.

• Most current uses are permitted and will not require a SNUN, provided they are:
  “a flame retardant and plasticizer in PVC and polymers; a flame retardant, plasticizer and lubricant in adhesives, caulks, sealants, and coatings; an additive in lubricants including metalworking fluids; a flame retardant and plasticizer in rubber; a flame retardant and waterproofer to textiles.”

• MCCP environmental fate testing program is the main requirement for the SNUR.

• Expect to be published this year.
EPA MCCP Testing Program

• Technically a requirement of all recently approved CPs, regardless of chain-length.

• Biodegradation
  • OECD 308 sediment simulation studies on C14, 56% Cl (wt.) and C16, 56% Cl (wt.)

• Aquatic Toxicity
  • OECD 225 sediment-water Lumbriculus and OECD 211 chronic daphnia studies on C14, 30% Cl (wt.)
  • If adverse effects are observed in C14 studies above the triggers, run same tests with C16, 56% Cl (wt.)

• Bioaccumulation Testing
  • Only if adverse effects are seen in toxicity studies
  • OECD 315: Bioaccumulation in Sediment-dwelling Benthic Oligochaetes and OECD 305: Bioaccumulation in Fish in C16, 56% Cl (wt.)
Past CP PBT Testing

• Lots of data already existing, though not necessarily on these specific guidelines.

• Only one OECD 308 study conducted on C10-C13, 65% Cl
  • Very slow degradation because test material absorbed to organic matter in the testing system

• Numerous aquatic toxicity studies
  • Classified as toxic in EU based primarily on daphnia data

• Numerous bioaccumulation studies, including both field and laboratory studies.
Europe – MCCP Testing

• Based on preliminary substance evaluation, ECHA mandated additional persistence and bioaccumulation of select “components” of MCCP

• ECHA accepts that MCCP up to 50% Cl by wt. is readily biodegradable (therefore not a PBT).

• This testing focused on select carbon numbers (C14 and C15) in the 50-60% Cl by wt. range.
  • OECD 308 – sediment biodegradation studies
  • OECD 305 – fish bioaccumulation studies

• New techniques on chemical analysis have allowed for direct evaluation of individual congener groups (e.g. C14H26Cl6).

• Phase 1 being completed this year; Phase 2 to be completed by summer 2018.
Analyzing CP Biodegradation by Congeners

![Bar chart showing concentrations of various congeners over time](image-url)

- **Cl2**
- **Cl3**
- **Cl4**
- **Cl5**
- **Cl6**
- **Cl7**
- **Cl8**
- **Cl9**
- **Cl10**
- **Cl11**
- **Cl12**

*October 16, 2017*

CPIA Update to ILMA MWF Committee
Future Risk Evaluation Projects

- Applications with the potential for water contact, water releases are likely to be the focus of any future risk evaluation of CPs, including MWFs.
  - Risk assessment of MCCP underway in Europe.
  - Potential for future risk assessment in USA.
- There is an opportunity now to develop data that can support lower/no release estimates to improve the environmental risk assessments.
Thank You!

Andrew Jaques
Chlorinated Paraffins Industry Association
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Washington, DC 20036
Phone: +1.202.419.1504
Email: ajaques@regnet.com
REGULATORY UPDATE ON ISOTHIAZOLINONE BIOCIDES FOR USE IN MWF’s.
WE DISCUSSED THE PROPOSED RESTRICTION OF CIT/MIT BIOCIDE USE FOR MWF’S BY PMRA, HEALTH CANADA
Biocides

• AS AN OUTCOME OF OUR DISCUSSIONS, ILMA PROVIDED DETAILED INPUT TO PMRA, HEALTH CANADA ON THE ISSUES RAISED BY THEIR PROPOSAL TO LIMIT THE USE OF CIT/MIT TO INEFFECTIVE LEVELS IN MWF’s.
Biocides

• IN THE MEANTIME, HEALTH CANADA REQUIRED ALL REGISTRANTS TO SUBMIT LABEL REVISIONS REFLECTING THE PROPOSED REDUCTIONS.
• IMPLEMENTATION OF NEW LABELS DELAYED UNTIL DECEMBER 2018.
Biocides

• FURTHER CONTACT SINCE BETWEEN ACC IT TASKFORCE AND PMRA.

• CLEAR FEEDBACK TO TF THAT ILMA LETTER & MEMBER COMPANY LETTERS WERE WELL RECEIVED.
Biocides

• IN DISCUSSIONS, PMRA NOTED THAT USE OF CIT/MIT IN MWF APPLICATIONS DIFFERS FROM OTHER USES, SPECIFICALLY WITH RESPECT TO INDUSTRY WORKPLACE EXPOSURE CONTROLS INCLUDING PPE.

• CERTAINLY AN IMPLICATION THAT THEY MAY BE OPEN TO RECONSIDERING MWF USE LEVELS.
Biocides

• OTHER USER GROUPS ARE ENGAGED – CANADIAN PAINT & COATINGS ASSOCIATION MET WITH PMRA LATE SEPTEMBER TO EXPRESS THEIR CONCERNS.
• AK ATTENDED TO REPRESENT ACC IT TASKFORCE
Biocides

• PMRA STAFF INDICATED A LARGE RELIANCE ON EPA’S RISK ASSESSMENT.

• ADDITIONAL PMRA KEY CONCERN WAS SENSITIZATION.

• AK POINTED OUT THAT AS PART OF EPA’S REGISTRATION REVIEW PROCESS, DCI’S HAVE BEEN ISSUES ON THE IT’S.

• NONE OF THESE DCI’S INCLUDE A REQUEST FOR ADDITIONAL SENSITIZATION DATA.
CURRENT STATUS

• Registrants have now submitted new proposed labels, which include restoring original MWF use levels.
• Decision should be received in 60 – 180 days.
Biocides

GOING FORWARD, PMRA HAVE INDICATED:

• THEY WILL INCLUDE MORE PUBLIC PARTICIPATION IN FUTURE ACTIONS – DEVELOPING A PUBLIC ENGAGEMENT PORTAL ON THEIR WEB PAGE.

• WANT TO INCLUDE BOTH REGISTRANTS AND END-USERS IN THEIR PROCESS.
Biocides

• BOTTOM LINE IS THAT ILMA / ILMA MEMBERS INPUT HAS BEEN HEARD, AND WILL HOPEFULLY HAVE A POSITIVE OUTCOME.
Biocides - US EPA UPDATE

• NOTHING CURRENTLY HAPPENING AT EPA OTHER THAN COLLECTING DATA FROM REGISTRANTS.
UEIL Update

Dr. Stephan Baumgärtel
Annex VIII CIP: Poison Centers

Dr. Baumgärtel 23.10.17
CHEMICAL FREE ZONE
## Registration 28. August 2017

<table>
<thead>
<tr>
<th>Tonnage Band</th>
<th>Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 000 000 - 1 000 000 000 tonnes per annum</td>
<td>4</td>
</tr>
<tr>
<td>10 000 000 - 100 000 000 tonnes per annum</td>
<td>47</td>
</tr>
<tr>
<td>1 000 000 - 10 000 000 tonnes per annum</td>
<td>172</td>
</tr>
<tr>
<td>100 000 - 1 000 000 tonnes per annum</td>
<td>312</td>
</tr>
<tr>
<td>10 000 - 100 000 tonnes per annum</td>
<td>623</td>
</tr>
<tr>
<td>1 000 - 10 000 tonnes per annum</td>
<td>1220</td>
</tr>
<tr>
<td>100 - 1 000 tonnes per annum</td>
<td>1683</td>
</tr>
<tr>
<td>10 - 100 tonnes per annum</td>
<td>1097</td>
</tr>
<tr>
<td>0 - 10 tonnes per annum</td>
<td>1848</td>
</tr>
<tr>
<td>Intermediate Use Only</td>
<td>4400</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>11406</strong></td>
</tr>
</tbody>
</table>

(April 2016)
Article 45 CLP

- (...) Member States shall appoint a body (...) for receiving information (...) for formulating preventative and curative measures, in particular in the event of emergency health response, (...). This information shall include the chemical composition of mixtures placed on the market and classified as hazardous (...) including the chemical identity of substances in mixtures or which a request for use of an alternative chemical name has been accepted by the Agency, in accordance with Article 24.
Poison center notification

• Who:
  • Importer or Downstream User that places mixtures on the market

• What:
  • Mixtures classified as hazardous for human health or physical hazard.
  • Excluded: Mixtures classified for environmental hazards, gases under pressure or explosives.

• When:
  • Mixtures for consumer use: From January 1\textsuperscript{st} 2020
  • Mixtures for professional use: From January 1\textsuperscript{st} 2021
  • Mixtures for industrial use: From January 1\textsuperscript{st} 2024

• How:
  • Using an harmonise Poison Centre Notification (PCN) format.
Required information 1/3

• General information:
  • Product identifier
  • Identifiers (e.g. CAS, EC number...) of mixture components
  • Unique Formula Identifier (UFI)
  • Contact details of the submitter

• Hazards identification
  • Classification of the mixture and label elements
  • Toxicological information
Required information 2/3

- Information on mixture components
  - Components of the mixture and their concentration, even not classified as hazardous.

Concentration ranges applicable to hazardous components of major concern for emergency health response (substances or MIM)

<table>
<thead>
<tr>
<th>Concentration range of the hazardous component contained in the mixture (%)</th>
<th>Maximum width of the concentration range to be used in the submission (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥25 - &lt;100</td>
<td>5 % units</td>
</tr>
<tr>
<td>&gt;10 - &lt;25</td>
<td>3 % units</td>
</tr>
<tr>
<td>≥1 - &lt;10</td>
<td>1 % units</td>
</tr>
<tr>
<td>≥0.1 - &lt;1</td>
<td>0.3 % units</td>
</tr>
<tr>
<td>&gt;0 - &lt;0.1</td>
<td>0.1 % units</td>
</tr>
</tbody>
</table>
Concentration ranges applicable to other hazardous components and components not classified as hazardous (substances or MIM):

<table>
<thead>
<tr>
<th>Concentration range of the component contained in the mixture (%)</th>
<th>Maximum width of the concentration range to be used in the submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \geq 0.25 \text{-} &lt; 0.100 )</td>
<td>( 20 % \text{-units} )</td>
</tr>
<tr>
<td>( \geq 0.10 \text{-} &lt; 0.25 )</td>
<td>( 10 % \text{-units} )</td>
</tr>
<tr>
<td>( \geq 0.1 \text{-} &lt; 0.10 )</td>
<td>( 3 % \text{-units} )</td>
</tr>
<tr>
<td>( &gt; 0 \text{-} &lt; 1 )</td>
<td>( 1 % \text{-units} )</td>
</tr>
</tbody>
</table>
Required information 3/3

• Additional information

• Type(s) and size(s) of the packaging

• Colour (s), physical state and pH of the mixture

• Product category according to the EU Product Categorisation System
  (In preparation by ECHA)

• Use (consumer, professional, industrial)
Industrial Use

• For industrial mixtures it is possible to do a limited submission of information.

• Less information requirements than for consumer and professional mixtures.

• Companies should provide a telephone number with a 24/7 on call service and an email address for rapid access to additional information.
### Variations of the concentration of components requiring a submission update

<table>
<thead>
<tr>
<th>Exact concentration of the component contained in the mixture (%)</th>
<th>Variations (±) of the initial component concentration requiring a submission update (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;25% - ≤100%</td>
<td>5%</td>
</tr>
<tr>
<td>&gt;10% - ≤25%</td>
<td>10%</td>
</tr>
<tr>
<td>&gt;2.5% - ≤10%</td>
<td>20%</td>
</tr>
<tr>
<td>≤2.5%</td>
<td>30%</td>
</tr>
</tbody>
</table>

When the fragrances or perfumes in a group submission change, the list of mixtures and the fragrances or perfumes they contain as required in section 3.1. shall be updated.
UFI-Generator is available on ECHA Website

https://poisoncentres.echa.europa.eu/de/tools
SCAQMD Rule 1430 – Control of Toxic Emissions from Grinding Operations at Forging Facilities

Mike Pearce

W.S. Dodge Oil Co.
Issues with the International Agency for Research on Cancer

&

American Chemistry Council Initiative
IARC – ACC Efforts

• International Agency for the Research on Cancer (IARC) is a part of the World Health Organization.

• ACC concerned about scientific and process deficiencies of IARC and the resulting policy decisions predicated on its work (e.g., Prop 65 listings via “authoritative bodies provision).

• ACC launched “Campaign for Accuracy in Public Health Research” that seeks to “promote credible, unbiased and transparent science as the basis for public policy decisions.”

• ACC says that IARC’s approach is fatally flawed, in part, because it only considers a substance’s hazard and whether a chemical could cause cancer in humans at any level or under any circumstances rather than focusing on real-life risks and exposure levels.

• Over 1,000 substances reviewed, finding only one substance that was “probably not” likely to cause cancer in humans.

• http://campaignforaccuracyinpublichealthresearch.com
ACC Efforts

• ACC domestically seeks to improve government oversight
  • House Oversight and Appropriations – Few Congressional Inquires
  • Examine closely how U.S. dollars are being used

• U.S. is a large contributor to IARC through NIH

• Working with international counterparts to apply pressure to ensure IARC acknowledges issues and addresses them, increasing transparency

• Want to assemble industry trade association groups
  • Currently there are 6 associations “signed on”
  • ACC wants ILMA to participate as it seeks to officially “launch” multi-association effort later this month

• Question: Does MWF Committee support that?
  • No financial commitment currently
Hurricane Issues

All
New MWF Secretary Vote
New Business
China Update

Sourcing update 2017
Inspections Begin

- USA Industrial Revolution = 1760 – 1840 (80 years). China has seen similar growth in 15 years.
- 2013, China passed the “10 Measures for Environmental Protection” which outlined measures to improve China’s environment.
- Main point was shifting from GDP growth in regions only to GDP growth within environmental regulations.
- June 2017 - China announces crackdown on heavy polluters.
- 2017 - 5,600 inspectors began a strict one year inspection over air pollution prevention over in than two dozen cities.
- Some 5,600 environmental inspectors will be sent to Beijing, Tianjin, and 26 smaller cities in the Beijing-Tianjin-Hebei region and nearby areas to check on implementation of pollution control and emission standards.
- Latest report globally is nearly 14,000 companies, or 70 percent of the businesses they examined, failed to meet environmental standards for controlling pollutions. 4,700 were found to be in unauthorized locations.
- The latest announcement from a region stated that out of 467 enterprises inspected, 350, (75%), had “environmental problems” included lack of pollution control and sewage treatment facilities.
- Several enterprises, including a rubber plant under Sinopec Beijing Yanshan Company, were criticized for "inadequate pollution control efforts," while some governments, including those of Tangshan City and Yutian County, were slammed for inaction and neglect.
- The Ministry of Environmental Protection (MEP) also exposed enterprises with false information and local governments with inadequate pollution response plans.
Who’s Affected?

• No more Guanxi! —=
  • Guanxi = the system of social networks and influential relationships that facilitate business and other dealings.
• Little to No Warning of Audits – 7-10 days
• Unclear Regulations – government policies are opaque. And not even aware of what exactly they need to do to be compliant.
• Port Audits (Qindao Port failing Haz Class)
• China 19th Plenum (before and after shutdowns)
• Bad News is not released easily.
• Winter /Smog Season Reduces capacity
• Local Governments & Officials now being held accountable
DCHA

- DCHA went from many factories to only 4 that are currently producing.
- In 2015 and 2016 oversupply was occurring for DCHA and there was little to no profit for factories.
- Several CHA/DCHA plants completely converted their factories to something else. Ruida Chemical converted to Amino Acid plant production.
- Its made by reacting Aniline (heat+pressure) with a metal catalyst (Palladium or Platinum).
- Aniline is also raw material which has been tight in China. Aniline will continue to be tight but available. Pricing for Aniline has doubled since January of 2014.
- Today is made mostly as a co-product with CHA.
- Factories are able to manipulate % of co-products based on catalyst. Sometimes they can even get 98% and 2% ratios. Right now most factories favor CHA as larger %.
- Environmental regulation has seen a huge push in 2016 and 2017. So many DCHA factories have switched to CHA as main product which is used wastewater treatment as a Neutralizer Amine.
- Government is forcing factories to start regulating and treating wastewater. Creating a large demand for CHA in China.
- Each factory has had production issues in the past year. Weak catalyst performance, environmental audits, shutdown.
- Factories are stressed also. No factory was built to supply all of World. DCHA factories cannot win. When they have it they make no money. When it is tight everyone is mad at them!
- DCHA is difficult to make. So expanding capacity is not a turn of a switch.
DCHA Outlook

• Once all 4 factories are up and running DCHA situation should improve.
• It will remain tight but available.
• DCHA is still a relatively small enough global market to not attract any large scale producers.
• Shipments are being delayed/cancelled/pushed back as local contracts are being supplied first. North American is not local to anyone!
• Do not count any supply until it is literally on the water.
• Plan inventory accordingly, it might be 4-5 months before regular supply is re-established.