Kicking Toxic Chemicals Out of The Office

An Easy Guide To Going Flame Retardant-Free

CEH
center for environmental health

Manufacturers Selling Flame Retardant-Free Office Furniture

CEH partnered with HDR Architecture, North America's second largest architecture firm, on a survey to identify office furniture suppliers that offer some or all of their products made without fl ame retardant chemicals.

Buyers should be aware that:

1. Some fabrics contain flame retardant chemicals, so it is important to specify only flame retardant-free fabrics.

2. It is challenging for some manufacturers to determine whether their plastic parts contain flame retardant chemicals, especially if recycled plastic is used. Manufacturers are beginning to explore this supply chain issue more deeply. To promote this investigation and ensure the accuracy of the providers' claims, purchasers should request veri cation about the presence or absence of flame retardants in plastic parts.

3. This survey does not apply to upholstered office furniture products that need to meet Technical Bulletin 133, a flammability standard for use in special occupancy spaces. TB 133 furniture typically contains flame retardant chemicals in one or more of the components.

Companies listed with an asterisk (*) are labeling their products sold nationwide for flame retardant content, not just for California as regulated by law.

The following companies have removed toxic flame retardants from ALL of their products:

Allermuir Senator Group
thesenatorgroup.com

Andreu World
andreuworldamerica.com

*Arcadia Contract
arcadiacontract.com

*DARRAN
darran.com

Fresh Coast
freshcoastfurniture.com

*Humanscale
humanscale.com

Irwin Seating
irwinseating.com

*Izzy+
izzyplus.com

Keilhauer
keilhauer.com

Leland International
lelandinternational.com

*Martin Brattrud
martinbrattrud.com

*Neutral Posture
neutralposture.com

*SitOnIt Seating
sitonit.net

*Teknion
teknion.com

Wieland (Healthcare)
wielandhealthcare.com

*9 to 5 Seating
9to5seating.com

The following companies have removed toxic flame retardant chemicals from SOME of their products. You'll want to ask them to point you to products that are flame retardant-free.

*Allseating
allseating.com

Allsteel
allsteeloffice.com

*American Seating Company
americanseating.com

David Edward Company
davidedward.com

*Global/GLOBALcare
usa.thinkglobalcare.com

*Gunlocke
gunlocke.com

*Haworth
haworth.com

*Herman Miller
hermanmiller.com

K1
k1.com

*OFS Brands
ofsbrands.com

Steelcase
steelcase.com

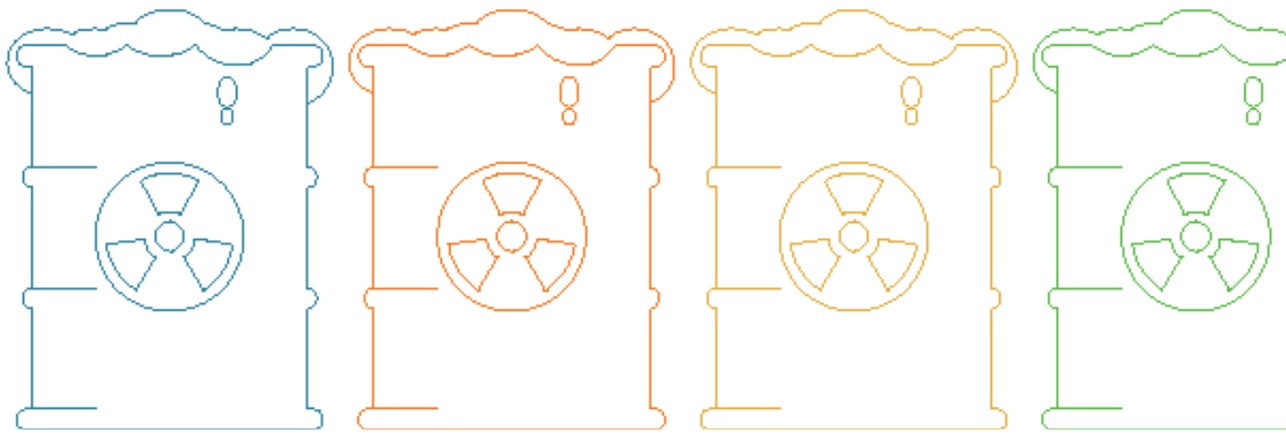
So,

How Did Flame Retardant Chemicals Get Into Furniture In The First Place?

Oddly enough, this story begins with big tobacco.

In the 1970's, the tobacco industry faced pressures from California regulators who were pressing them to make fire-safe (self-extinguishing) cigarettes in order to reduce the threat of house fires caused by smokers.[1] To avoid regulation, big tobacco joined with the makers of flame retardant chemicals to distort the science and convince government officials that we should douse our furniture with chemicals instead of making safer cigarettes. The gambit worked.[2]

California passed Technical Bulletin 117 (TB 117) – a de facto government mandated market for flame retardant chemicals used in furniture. Because California was such a big market, these rules were followed across the entire nation. The chemical companies made billions of dollars.[3] Forty years on, disease-causing flame retardants are still widespread.



But Aren't Flame Retardants a Good Thing?

In recent tests, 85% of couches tested contained toxic or untested flame retardants.[5] Flame retardants are chemical compounds added to a wide range of consumer products, including furniture, nap mats, baby products and dozens of other everyday items to delay the spread of fire. However, studies by the U.S. Consumer Product Safety Commission have concluded that flame retardants as used in furniture provide, "…no meaningful protection from deadly fires."[6]

We Ingest Them. They Make Us Sick.

These chemicals migrate out of products and into dust where you ingest or inhale them.[7] Many flame retardants are linked with serious health problems including cancer, reduced IQ, developmental delays, obesity, and reproductive difficulties.[8] Flame retardant chemicals have been found in 97% of all Americans tested[9] and 100% of infants tested. That's right, it's in our blood, urine, breast milk and even infant cord blood.

Americans spend 90% of their time indoors.[4] Therefore, the quality of their indoor environments is integral to their well-being.

- Flame Retardant production represents a $5+ billion industry[10]
- Nearly all Americans have toxic flame retardant chemicals in their bodies[11]
- Flame retardants have a long history of health and environmental problems[12]
- There are dozens of toxic flame retardants currently in use[13]
- Most flame retardants are untested[14]

Effects of Flame Retardants

Flame Retardant Chemicals Don't Stop Fires in Furniture

While the chemical industry insists that flame retardant chemicals reduce the impact of fires, independent research tells a completely different story. In one government study, two chairs, one with flame retardant chemicals in the foam and one without, burned at exactly the same rate while giving off the same amount of smoke.[14]

Today, most of the furniture on the market is covered with fabrics that resist smoldering cigarettes, which federal statistics show are the number one cause of furniture fires. Therefore, even if flame retardant chemicals did slow fires down, they would be largely unnecessary.

They Can Even Make Fires Less Survivable

When the furniture containing some flame retardant chemicals catches fire, it emits higher levels of carbon monoxide, soot, and smoke than untreated foam. The higher the concentration of these toxic gases, the faster it can cause unconsciousness and subsequent death. The largest cause of fire deaths is the inhalation of these toxics gases, not the fire itself.[15]

Flame retardant chemicals are also known to be major hazards to firefighters.[16] More than half of all line-of-duty deaths in firefighting are now caused by cancer, and many firefighters believe that these chemicals are the primary cause.[17]

> "We did not find flame retardants in foam to provide any significant protection."

Dale Ray, Consumer Product Safety Commission

> "There are other ways that are more effective and avoid the potential risks of those (flame retardant) chemicals."

Tom Fabian, Underwriters Laboratories fire hazards research

How To Reduce Your Risk At The Office

As a result of recent efforts by the Center for Environmental Health (CEH) and others, a new California law went into effect in January, 2014 (Technical Bulletin 117-2013) removing the requirements that led furniture and baby product manufacturers to include flame retardants in their products. It's clear that the market for safer products made without these toxic chemicals has arrived.

1. Minimize Contact with Dust

Wash your hands often, especially before eating. If possible, open your window frequently for good ventilation. Wipe down your desk and other surfaces regularly with a wet sponge or towel.

2. Buy Flame Retardant-Free Products

The single best way to protect yourself and your employees from harmful flame retardant chemicals is not to let them into your office in the first place. Many forward-thinking companies like Kaiser Permanente, Autodesk, Facebook, and Genentech have committed to doing just that by signing the CEH Purchaser's Pledge. These companies collectively spend more than $520 million annually on furniture. When major companies make demands like this from their suppliers, the entire marketplace shifts to safer products without flame retardant chemicals. We invite your company to join them.

3. Look For The Labels

The new furniture flammability standard, TB 117-2013, can be met without flame retardant chemicals but the standard does not prohibit their use. To ensure that your product is free of flame retardants, you must look for the check box on the TB 117-2013 label which indicates whether a product does or does not contain flame retardant chemicals. The label is typically located on the bottom of the chair or under the cushion of a couch. Please note:

- The flame retardant labeling is required only in California, but most manufacturers are labeling their products with this wording nationwide.
- The requirement for labeling products for flame retardant chemicals only applies to furniture products made after January 1, 2015, so products manufactured prior to this date are likely to contain flame retardant chemicals and should be avoided.
- Many manufacturers will allow you to special order furniture free of flame retardant chemicals – so feel free to ask them.


NOTICE

THIS ARTICLE MEETS THE FLAMMABILITY REQUIREMENTS OF CALIFORNIA BUREAU OF ELECTRONIC AND APPLIANCE REPAIR, HOME FURNISHINGS AND THERMAL INSULATION TECHNICAL BULLETIN 117-2013. CARE SHOULD BE EXERCISED WHEN OPEN FLAME OR WITH BURNING CIGARETTES.

The upholstery materials in this product:
___contain added flame retardant chemicals
_X_contain NO added flame retardant chemicals

The State of California has updated the flammability standard and determined the fire safety requirements for this product can be met without adding flame retardant chemicals. The State has identified many flame retardant chemicals as being known to, or strongly suspected of, adversely impacting human health or development.

Making The Business Case

So you're bought in and ready to make the case at your company. Great. The leaders of your organization will want to see solid business reasons why getting rid of flame retardant chemicals is a good idea. The following will help you justify the allocation of time, attention, and resources and make this a priority for your company.

1. Flame Retardant-free Furniture is Cost Neutral Or May Even Be Less Expensive And Provides Adequate Fire Safety

Furniture free of flame retardant chemicals is the same price as furniture containing these harmful chemicals. In some cases it's cheaper. For buildings such as hospitals, prisons, auditoriums and child care centers that are fire sprinklered, the new law allows these companies to meet safety regulations without the use of flame retardant chemicals. This can save these approximately $30-$100 per chair and $200-$300 per sofa - dollars that can be re-directed to other strategic priorities.

2. Flame Retardant Chemicals Are Associated With Serious Health Effects

Flame retardant chemicals migrate out of furniture into the indoor environment and find their way into human bodies through hand to mouth contact and inhalation. Many flame retardants have been associated with a variety of serious health effects, including decreased fertility, hormone disruption, reduced IQ, diabetes, obesity, and cancer.

3. Flame Retardants Offer No Measurable Fire Safety Benefits

Studies have shown that not only do the flame retardant chemicals in furniture foam fail to stop fires, but many can also make those fires less survivable due to the increased toxic gases emitted when the flame retarded furniture burns.

> "Where there is credible evidence that a material might result in harm to the environment or public health, we work to replace it with safer alternatives. Flame retardant chemicals are the perfect example of toxicants we just don't need."

Kathy Gerwig, Vice President of Employee Safety, Health and Wellness, and Kaiser Permanente's Environmental Stewardship Officer

4. Flame Retardant-free Furniture Is More Durable And Comfortable

Furniture and foam manufacturers have indicated that furniture without flame retardants is more durable, and may have a more comfortable “sit” than flame-retarded furniture. Industry experts report that flame retardants degrade the foam more quickly and make the foam harder.

5. It’s Consistent With Your Company’s Mission

Going flame retardant free may be consistent with your company’s commitment to safety, health or sustainability.

6. It’s A Clear HR Win

Going flame retardant free is a tangible demonstration that the company cares about the health and well-being of its employees.

7. The Company Would Be In Good Company

Going flame retardant free demonstrates leadership in the area of health and sustainability and puts you in the same league of forward thinking companies as Facebook, Genentech, Kaiser Permanente, Staples and many others who have made the same pledge.

8. The Only Question Left: Why Wouldn’t Your Company Do It?

Top 6 Reasons to Buy Flame Retardant-Free Office Furniture

1. Flame retardants are harmful and unnecessary
2. May save money
3. More durable and comfortable places to sit
4. Improved employee health and well being
5. Demonstrates leadership in the area of sustainability
6. Shows employees you care about their health

Making It Easy For Purchasing

Purchasing departments are often a high volume, high output part of your company's operation. Therefore, when making a change in the way that your company buys things, you will want to help make this change as easy for them as possible. Below we've provided some language for them to use in their requests to vendors and probing questions that they can ask to ensure that the products they're bringing into the office are flame retardant free.

Flame Retardant Free Language For RFP's

Product Scope: Upholstered Furniture Seating Products that must comply with TB 133/ ASTM E 1537.

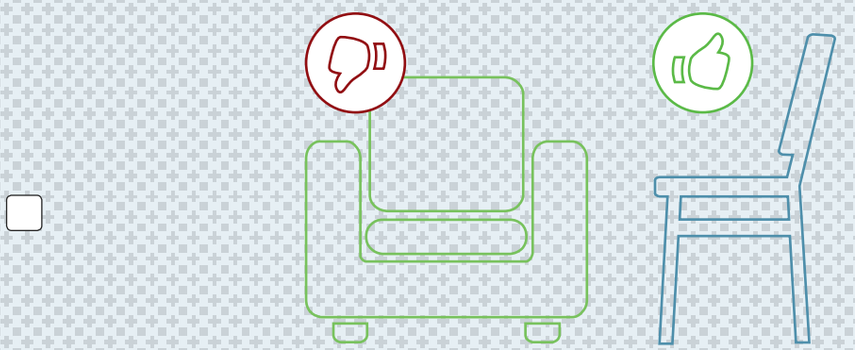
Technical Specifications (For Invitations to Bid and Requests for Proposals)

All seating supplied under the resulting Price Agreement shall be free of added flame retardant chemicals; this applies to both standard and optional seating components, excluding electrical components. Electrical components shall be free of halogenated flame retardants. Verification of compliance shall be provided to [entity] prior to contract award.

Evaluative Criteria (For Requests for Proposals)

1. Describe how each of the proposed product lines, including optional seating components, meets the applicable flammability standard. Include details on the specific materials and strategies used in lieu of flame retardant chemicals.
2. Does your company verify that the products are free of added flame retardant chemicals? Yes ☐ No ☐

   If yes, describe your verification process:
3. Submit any available Health Product Declarations (HPD) for the proposed product lines.



Definitions

"Added flame retardant chemicals" means flame retardant chemicals that are present at levels above 1,000 parts per million.

"Component" means the separate constituent parts of upholstered furniture, including, but not limited to, cover fabrics, barrier materials, resilient filling materials, decking materials, and plastic parts.

"Flame retardant chemical" means any chemical or chemical compound for which a functional use is to resist or inhibit the spread of fire. Flame retardant chemicals include, but are not limited to, halogenated, phosphorous-based, nitrogen-based, and nanoscale flame retardants, and any chemical or chemical compound for which "flame retardant" appears on the substance Safety Data Sheet (SDS) pursuant to Section 1910.1200(g) of Title 29 of the Code of Federal Regulations.

"Halogenated flame retardant chemical" (also known as organohalogen flame retardant) means any chemical or chemical compound containing chlorine or bromine bonded to carbon for which a functional use is to resist or inhibit the spread of fire. This includes any chemical or chemical compound containing chlorine or bromine bonded to carbon for which "flame retardant" appears on the substance Safety Data Sheet (SDS) pursuant to Section 1910.1200(g) of Title 29 of the Code of Federal Regulations.

Six Other Things You Can Do

Our continued and prolonged exposure to toxic chemicals such as flame retardants is harming our health and the health of our children. Our government isn't protecting us. So it's up to all of us to change the system using our voices, votes, community, and dollars.

1. Contact Us For Help

Contact CEH if you need ANY assistance in implementing or promoting this in your organization. We have helped many organizations with this process and can help expedite the transition. Contact Judy@ceh.org for more info.

2. Sign The CEH Pledge

Join other forward thinking companies like Facebook, Genentech Staples, and Kaiser Permanente and sign the CEH Purchaser Pledge promising to prefer flame-retardant free in the workplace.

3. Tell The Consumer Product Safety Commission What You Think

The federal Consumer Product Safety Commission is poised to take us back to the dark ages of toxic exposure from our furniture. Right now, it is considering a standard that would undo California's rule and promote the use of harmful flame retardants in furniture. Sign the petition and let them know you disapprove.

4. Apply Political Pressure

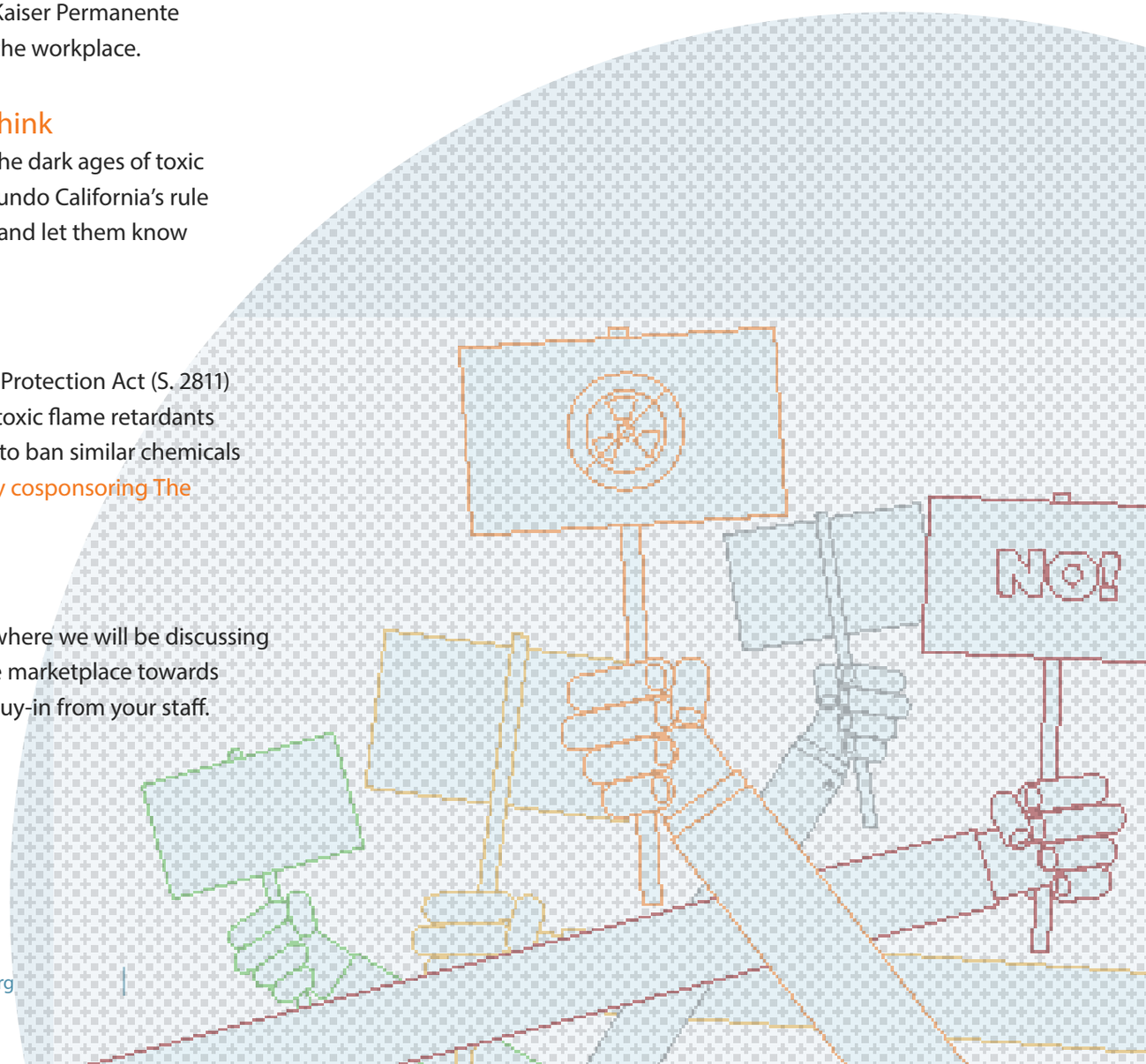
Protect your family and community by supporting The Children and Firefighter Protection Act (S. 2811) sponsored by Senator Chuck Schumer (NY). This federal bill bans the ten worst toxic flame retardants from use in upholstered furniture and children's products, and allows the CPSC to ban similar chemicals shown to be hazardous. Urge your U.S. senator to protect our families' health by cosponsoring The Children's and Firefighters Protection Act (S. 2811).

5. Attend a Webinar

Email judy@ceh.org to find out about our upcoming flame retardant webinars where we will be discussing the issues and dangers of flame retardants and helping companies navigate the marketplace towards flame retardant free office products. The webinars can be an easy way to gain buy-in from your staff.

6. Spread The Word

Forward this guide to your colleagues, partners, vendors and friends.



Sources

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[3] Environmental Health News: http://www.environmentalhealthnews.org/ehs/news/2011/money-to-burn

[4] Environmental Protection Agency: http://cfpub.epa.gov/eroe/index.cfm?fuseaction=list.listBySubTopic&ch=46&s=343

[5] Environmental Science & Technology: http://pubs.acs.org/doi/abs/10.1021/es303471d

[6] The Chicago Tribune: http://www.chicagotribune.com/news/ct-met-flames-science-20120509-story.html#page=1

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[12] Discovery News: http://news.discovery.com/human/health/flame-retardants-peanut-butter-120531.htm

[13] The Silent Spring Institute: http://www.silentspring.org/resource/fact-sheet-house-dust-contains-carcinogens-and-untested-chemicals-used-flame-retardants

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[17] CBS Local News (Minnesota): http://minnesota.cbslocal.com/2015/03/03/bill-seeks-to-protect-firefighters-from-chemicals-linked-to-cancer

Resources

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2. Chicago Tribune, Playing with Fire 6 part series: http://media.apps.chicagotribune.com/flames/index.html

3. Kaiser Permanente No Longer Purchasing Furniture with Flame Retardant Chemicals: http://share.kaiserpermanente.org/article/kaiser-permanente-commits-to-purchasing-furniture-free-from-toxic-flame-retardant-chemicals

4. Flame Retardants in Furniture Foam: Benefits and Risks: Babrauskas, Blum Daley and Birnbaum: http://bit.ly/1wCW7me

5. Toxic Hot Seat: http://www.toxichotseatmovie.com

6. Flame retardants in consumer products are linked to health and cognitive problems By Liza Gross, Washington Post: http://wapo.st/17hebcr

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About The Center For Environmental Health

Founded in 1996, CEH is a national non-profit organization of people dedicated to eliminating the dangers of toxic and disease-causing chemicals in our everyday environment. Learn more at ceh.org.

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