

MAKING THE GRADE

How Children's Car Seat Manufacturers Measure up on Chemical Policy and Transparency



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ECOLOGY CENTER

The Ecology Center is a Michigan-based nonprofit environmental organization that works for a safe and healthy environment where people live, work, and play. Healthy Stuff is a program of the Ecology Center that researches hazardous chemicals in everyday products.

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How Children's Car Seat Manufacturers Measure up on Chemical Policy and Transparency

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EXECUTIVE SUMMARY

The Healthy Stuff program is fundamentally about helping companies to change their product designs to produce healthier products that do not contain toxic chemicals. To create a healthier product, manufacturers use design to reduce or eliminate the impacts of hazardous chemicals throughout the lifecycle of a product. Companies can implement a chemical policy to help them achieve chemical safety in their supply chain and across the lifecycle of their products.

A chemical policy outlines what types of chemicals will be avoided by a manufacturer and how that will be enacted. The Ecology Center has created a model chemical policy and shared it with car seat manufacturers to use as a starting point. A chemical policy can include information on how or why certain chemicals are added to the company's Restricted Substances List (RSL). It also can include a company's RSL.

A good chemical policy is transparent (public), restricts chemicals of concern, and includes assessment strategies to find safer alternatives to harmful chemicals. In order to fully optimize a product, like a child's car seat, both the companies and the public need better data on chemical content and hazards. A chemical policy can outline the strategies a company uses to gather data and chemical content from its suppliers. A clear and transparent chemical policy will effectively convey this information to the public.

Consumers desire transparency and disclosure from companies. Disclosure helps educate consumers and ultimately changes the way products are designed.

In August 2018, we invited twelve children's car seat companies to complete our Children's Car Seat Corporate Chemical Policy Survey, the purpose of which was to evaluate their corporate chemical policies and practices. This report provides our assessments of their responses and scores to rank their responses. The results of this survey do not represent an endorsement or third-party certification from the Ecology Center or Healthy Stuff.

In the survey, companies were asked a total of 22 questions regarding transparency, internal chemical policies, assessment of products, chemical advances, public policy advocacy, and (for extra credit) other environmental practices. Six out of twelve companies responded. Scores varied in most categories. But in transparency, no company received a grade higher than a 'D' due to lack of public communication about chemicals and their use. None of the companies have a public Restricted Substances List. Most do not have a public chemicals policy. A few have a public statement on chemicals.

We celebrate the companies that are rethinking their designs on certain seats to avoid harmful chemicals. Some companies are utilizing wool or high-density polyester to create seats that are flame-resistant without added chemicals. Some are also avoiding stain-resistant chemical coatings on seats and making seat covers easily removable and washable. We urge these companies and all companies to expand their achievements to all of their marketed seats and clearly communicate with the public about that process.

The process of creating and implementing this survey has generated positive dialogue with car seat companies about chemical policy and practice. We are grateful to all of the companies and the people within those companies who took the time to complete the survey and have conversations with us.

Company	OVERALL GRADE	Total Points out of 100 + extra credit	Transpar- ency	Chemical Policies & RSLs	Assessment of Products	Chemical Advances	Public Policy		
UPPAbaby UPPAbaby	А	98	F	А	А	А	А		
	А	94	D	В	В	А	D		
britax	В	87	F	А	D	А	В		
Nuna	с	78	F	В	D	В	D		
PegPérego Peg Perego	с	78	F	А	D	В	D		
GRACO	D	63	F	В	F	D	с		
babytrend Baby Trend	F	0		Ν	o Response				
Chicco	F	0		Ν	o Response				
diono®	F	0		Ν	o Response				
Dorel (Cosco, Maxi-Cosi, Safety 1st)	F	0	No Response						
Evenflo.	F	0	No Response						
Joie Joie	F	0		Ν	o Response				

TABLE 1: OVERALL POINTS AND SCORING

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INTRODUCTION

The Ecology Center's Healthy Stuff program has been testing children's car seats for over ten years. Consumers and their advocates look to us for guidance on the least toxic options. But the universe of child car seats is vast, giving consumers dozens of options. We can't test them all and, ultimately, companies need to have a comprehensive chemical policy for all of their products. When faced with questions about seats we have not tested, we suggest that consumers consider the company as a whole to help make their purchasing decisions.

We invited twelve children's car seat companies to complete our Children's Car Seat Corporate Chemical Policy Survey in order to evaluate their corporate chemical policies and practices. The survey applied to all car seat brands within a company. Responses to the survey were collected over a two-month period in August and September 2018 and then again in April and June 2019. Companies were invited in April to update their responses or submit original responses. Our assessment of these responses is included here. Grades were given to each company for overall points and points within each of the five categories. The grading system for this report is A: 90-100%, B: 80-89%, C: 70-79%, D: 40-69%, F: 0-39%. The 'F' grade also applies to those companies who failed to respond and received zero points.

The results of this survey do not represent an endorsement or third-party certification from the Ecology Center or Healthy Stuff.

Six out of twelve companies responded. One company informed us that they didn't respond because their answers were likely to change in the near future. We acknowledge and thank the six companies that completed our inaugural survey. We appreciate their time and participation that made this report possible.

RESPONDING COMPANIES

- Britax Child Safety, Inc.
- Clek Inc.
- Graco Children's Products Inc. (subsidiary of Newell Brands Inc.)
- Nuna Baby Essentials Inc.
- Peg Perego
- Monahan Products LLC/UPPAbaby

COMPANIES SURVEYED THAT DID NOT RESPOND

- Baby Trend Inc.
- Chicco USA/ Artsana Group
- Diono, LLC
- Dorel Juvenile Group Inc. (parent company
- to Cosco Kids, Maxi-Cosi, Safety 1st)
- Evenflo Company, Inc. (subsidiary of Goodbaby International)
- Joie Children's Products Co., Limited

Through this survey, companies are ranked on:

- Transparency
- Chemical Policies & Restricted Substance Lists (RSLs)
- Company Assessment of Products
- Chemical Advances
- Public Policy

TRANSPARENCY

Manufacturers in most product sectors are not required by law to disclose ingredients or source materials for their products (with the exceptions of food and cosmetics companies). Yet chemicals can contaminate our environment during production, use, and disposal. Children and adults may be exposed to the chemicals in products through inhalation, ingestion, and/or dermal (skin) absorption. Flame retardant chemicals, in particular, have been shown to migrate out of products over time, where they can contaminate indoor air and dust. Per- and polyfluorinated alkyl substances (PFAS), sometimes called "forever chemicals" due to their persistence, are used for stain and water resistance. These chemicals primarily enter the body through ingestion and inhalation.



The Ecology Center and the Healthy Stuff program urge manufacturers to be transparent regarding the chemicals used in all manufactured products. We urge car seat manufacturers to have a public chemical statement, a public chemical policy, and a public restricted substances list (RSL). Most of the responding companies have public chemical statements. But only two, Britax Child Safety, Inc. (Britax) and Clek, Inc. (Clek), include language regarding specific chemicals in their public statement. Only one of the responding companies, Clek, has a public chemical policy that includes language regarding eliminating chemicals of concern. None of the responding companies have a public RSL.

PUBLIC CHEMICAL STATEMENTS

A public chemical statement is a brief declaration of a company's stance regarding chemical use. A public chemical statement may be as short as one or two sentences. Three responding companies, Britax, Clek, and Nuna Baby Essentials Inc (Nuna), have public statements regarding chemicals of concern or toxic chemicals that are easily accessible on their websites.

Nuna is "Striving to eliminate the use of toxins while complying with standards at the same time."

Clek has "developed a chemical management and environmental sustainability policy to help drive Clek's continuous commitment to offer products that are free of chemicals of concern and where the impact on the environment has been considered." Clek points to specific chemicals by also stating that they eliminated brominated and chlorinated flame retardants.

Britax also has a strong statement, publicly requiring "all of its suppliers to eliminate certain flame retardants containing bromine, chlorine, or other halogens from all components used in

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its car seats and all other products — while still ensuring their ability to pass federal government standards for flammability."

Graco Children's Products Inc. (Graco) has a statement regarding "environmental performance" on their parent company website (Newell Brands) that states they "...strive to design, manufacture, market and distribute products using environmentally-sustainable...business practices." Newell Brands does not provide a definition for "environmentally-sustainable". Monahan Products LLC/UPPAbaby (UPPAbaby) offers information on chemicals of concern to consumers on an individual basis through their customer experience team. Neither of these are easily accessible to the broader public.

We encourage companies to follow the lead of Britax and Clek and develop a more detailed public statement on chemical safety. And we encourage all companies to make their public statement easily accessible on the brand's website, as Britax, Clek, and Nuna have done. We encourage Britax and Clek to expand their statement to include and specify all chemicals of concern that they restrict or avoid.

PUBLIC CHEMICAL POLICIES

All responding companies have a chemical policy. Clek is the leader as the only car seat company that has a public chemical policy regarding chemicals of concern in their products. Clek's public Chemical & Sustainability Policy states that every component used in a Clek product must adhere to a standard list of quality assurance requirements and specifications, which outline chemicals to be restricted from their products. In this policy, Clek states they have eliminated brominated and chlorinated flame retardants and they are committed to offering products free of chemicals of concern. We applaud Clek for creating and publishing a public chemical management and environmental sustainability policy and encourage them to expand their policy to specify all chemicals of concern that they restrict or avoid.



Graco reports having a public chemical policy available on Newell Brands' Corporate Social Responsibility webpage. Graco's parent company states they are increasing their use of greener materials, performing life cycle analysis, and calculating the environmental impact of every product. Newell Brands is working toward eliminating PVC from packaging. We encourage Newell Brands to expand this policy to include language regarding specific chemicals of concern in products, provide more detail regarding life cycle and environmental impact analyses, and to develop a chemical policy specific to Graco Children's Products.

PUBLIC RESTRICTED SUBSTANCE LISTS (RSLs)

An RSL is the specific list of chemicals the company restricts or prohibits in their products. An RSL includes, but need not be limited to, chemicals that are banned or restricted by governmental agencies. All six responding companies report having RSLs that go beyond regulatory compliance. None of the six responding companies have made their RSLs public.

Britax publicly states that they include over 100 chemicals or chemical families in their RSL. But halogens are the only chemical family they publicly identify. In their public chemical management policy, Clek states they have eliminated brominated and chlorinated flame retardants (halogenated chemicals) from their car seats. We applaud these public announcements of the elimination of halogens. We encourage all companies to make their RSLs public and let the public know which chemicals they have banned or restricted from their products.



Company	Points (out of 15)	Percentage	Transparency Grade
Clek	8	53%	D
Britax	4	27%	F
Graco	4	27%	F
Nuna	3	20%	F
Peg Perego	1	7%	F
UPPAbaby	1	7%	F

TABLE 2: COMPANY TRANSPARENCY

CHEMICAL POLICIES & RESTRICTED SUBSTANCE LISTS (RSLs)

INTERNAL CHEMICAL POLICIES

All six responding companies report having chemical policies that apply to all child restraint systems, as well as to the supply chain. All six responding companies require their suppliers to provide them with chemical information.

REDUCTION OF CHEMICALS OF CONCERN

All six responding companies report setting goals for reducing halogenated flame retardants and other chemicals of concern in their products. Britax, Clek, and UPPAbaby report setting and achieving goals for eliminating halogenated flame retardants in their car seats and

bringing models to market that don't have any flame retardant (FR) chemicals. Britax expanded their RSL to include Washington State's list of Chemicals of High Concern for Children (CHCC). Peg Perego reports making design changes to lower the flammability of its children's car seats without the use of chemicals. Graco reports using the minimum amount of flame retardant chemicals necessary to meet the flammability requirement and restricting certain halogenated chemicals from use. Nuna reports eliminating chemical flame retardants from certain models of car seats and working on expanding FR-free offerings.



WRITTEN POLICIES THAT AVOID 8 CATEGORIES OF CHEMICALS OF CONCERN

We asked companies if they have a written chemicals policy that aims to avoid 8 types of chemicals of concern. Chemical categories we inquired about:

- Halogenated flame retardants
- Phosphorus-based flame retardants
- Heavy metals
- Perfluorinated chemicals (PFAS)
- PVC (vinyl) plastic
- Ortho-phthalates
- Antibacterial chemicals of concern, such as triclosan and triclocarban
- Alkylphenols and alkylphenol ethoxylates (such as nonylphenol)

The eight types of chemicals we inquired about are broad categories. It is quite possible that a company may have a policy restricting the use of one class of chemicals in the category, but not another. For example, polybrominated diphenyl ethers (PBDEs) are a class of halogenated flame retardants that have been phased out of consumer goods in the U.S. It is likely that a company has a policy restricting PBDEs, but not other halogenated flame retardants still commonly used (and therefore may have checked the box indicating they aim to avoid halogenated flame



retardants). As well, Perfluorooctanoic acid (PFOA) is a perfluorinated chemical that is no longer produced in the U.S. (although PFOA is still produced in other countries and can be used in imported products). A company could have a policy restricting the use of PFOA, but not other per or polyfluorinated substances of which there are thousands still commonly produced and used in the United States. We encourage companies to restrict or eliminate all classes of chemicals in the broad categories of chemicals of concern.

An asterisk in Table 3 indicates a difference between the survey response and our 2018 testing results. In some instances, companies indicated they have a policy that aims to avoid a chemical category (or chemicals within that category), but testing showed the presence of one or more chemicals from that category in their product.

Britax, Graco, Peg Perego, and UPPAbaby report having a written chemicals policy regarding all 8 chemical categories. Nuna reports having a written chemical policy for 7 of the 8 chemical families; all except antibacterials. Nuna states antibacterials are not applicable for this industry. Clek reports having a written chemicals policy regarding 5 out of 8: halogenated flame retardants, heavy metals, perfluorinated chemicals, PVC, and ortho-phthalates. Clek produces some child car seats with antibacterials and some without.

Chemical	Britax	Clek	Graco	Nuna	Peg Perego****	UPPAbaby
Halogenated flame retardants	YES	YES	YES*	YES*	YES	YES
Heavy metals	YES	YES	YES	YES	YES	YES
Perfluorinated chemicals (PFAS)	YES**	YES**	YES**	YES**	YES	YES
PVC plastic	YES	YES	YES	YES	YES	YES
Ortho-phthalates	YES	YES	YES	YES	YES	YES
Phosphorus-based flame retardants	YES***	NO	YES***	YES***	YES	YES***
Antibacterial chemicals of concern, such as triclosan and triclocarban	YES	NO	YES	NO	YES	YES
Alkylphenols and alkylphenol ethoxylates (such as nonylphenol)	YES	NO	YES	YES	YES	YES

TABLE 3: CHEMICAL POLICY TO RESTRICT 8 CATEGORIES OF CHEMICALS OF CONCERN

Companies report having a written chemical policy that aims to avoid these categories of chemicals of concern

*2018 Independent testing found halogenated flame retardants in seats manufactured by Graco and Nuna.

**2018 Independent testing found per or polyfluorinated (PFAS) chemicals in seats manufactured by Britax, Clek, Graco, and Nuna. Clek has announced moving to PFAS-free chemistry for their 2019 product line.

***2018 Independent testing found phosphorus-based flame retardants in seats manufactured by Britax, Graco, Nuna, and UPPAbaby.

*****Note: Seats by Peg Perego were not included in Healthy Stuff's 2018 testing cohort.

Company	Points (out of 40)	Percentage	Company Chemical Policy & RSLs Grade
Britax	40	100%	А
Peg Perego	40	100%	А
UPPAbaby	40	100%	А
Clek	35	88%	В
Graco	35	88%	В
Nuna	34	85%	В

TABLE 4: COMPANY CHEMICAL POLICIES & RSLs

COMPANY ASSESSMENT OF PRODUCTS

IMPLEMENTATION OF A COMPANY'S CHEMICAL POLICY

All six responding companies report using third party labs to confirm compliance with their RSLs and/ or chemical policies. Britax, Graco, and UPPAbaby additionally report maintaining consistent communication with suppliers about their RSLs and performing regular audits to ensure compliance. Britax, for example, provides supplier education through a Supplier Chemical Training Conference for their suppliers and has dedicated compliance personnel, who ensure implementation and compliance to their chemicals policy.



We asked car seat manufacturers if they have a written chemicals policy that aims to avoid eight categories of chemicals of concern. Companies report having a written chemical policy for most categories of chemicals. Yet independent testing, as reported in Healthy Stuff's 2018 report, *Hidden Hazards: Flame Retardants & PFAS in Children's Car Seats*, found some of these chemicals in their products (see Table 3). This highlights the importance of being precise about what chemicals are being restricted and having clear communication with suppliers.

Britax reports having a written chemicals policy that aims to avoid perfluorinated chemicals (PFAS) and phosphorus-based flame retardants. Yet independent testing, as reported in 2018 in *Hidden Hazards: Flame Retardants & PFAS in Children's Car Seats* reveals two Britax seats (Advocate

ClickTight ARB convertible seat in Circa and the discontinued Roundabout G4.1 convertible seat in Luna) analyzed in 2018 by Healthy Stuff contained phosphorus-based flame retardants. One discontinued Britax seat, the Roundabout G4.1 in Luna, was made with fabric likely treated with perfluorinated chemicals.

Clek reports having a written chemicals policy that aims to avoid perfluorinated chemicals (PFAS). Independent testing, as reported in 2018 in *Hidden Hazards: Flame Retardants & PFAS in Children's Car Seats* reveals one Clek seat (Foonf convertible seat in Thunder) was made with fabric treated with perfluorinated chemicals. Clek has announced moving to PFAS-free chemistry for their 2019 product line. We applaud this development.

In their survey response, Graco states that their RSL restricts "specific" phosphorus-based flame retardants, "specific" halogenated flame retardants, and PFOA (a specific perfluorinated

chemical). Yet independent testing, as reported in 2018 in *Hidden Hazards: Flame Retardants & PFAS in Children's Car Seats* reveals two Graco seats (Snugride 30 infant seat in Kyte and Contender 65 convertible seat in Piedmont) analyzed in 2018 by Healthy Stuff contained phosphorus-based flame retardants and bromine, which indicates halogenated flame retardants. One Graco seat, the Snugride 30 in Kyte, was made with fabric likely treated with perfluorinated chemicals (PFAS).

Nuna reports having eliminated halogenated flame retardants. But independent testing, as reported in 2018 in *Hidden Hazards: Flame Retardants & PFAS in Children's Car Seats* reveals one Nuna seat (Nuna Pipa infant seat in Graphite) analyzed in 2018 by Healthy Stuff was found to have six components with bromine, suggesting the presence of halogenated flame retardants.

Peg Perego reports having a written chemicals policy that aims to avoid 8 categories of chemicals of concern. Ecology Center's Healthy Stuff project did not test a Peg Perego seat in 2018. Peg Perego was last included in a Healthy Stuff car seat testing cohort in 2015.



UPPAbaby reports having a written chemicals policy that aims to avoid phosphorus-based flame retardants. Yet independent testing, as reported in 2018 in *Hidden Hazards: Flame Retardants & PFAS in Children's Car Seats*, reveals one UPPAbaby seat (MESA Taylor infant seat) analyzed in 2018 by Healthy Stuff contained two phosphorus-based flame retardants.

THIRD PARTY TESTING/ CERTIFICATIONS

Four companies, Britax, Clek, Nuna, and Peg Perego, report achieving third-party certifications, such as Oeko-Tex, bluesign system, GOTS (Global Organic Textile Standard), or GreenGuard for some or most products. Peg Perego and UPPAbaby report having products that achieve the European REACH Directive standards. Four companies, Clek, Nuna, Peg Perego, and UPPAbaby indicate a willingness to evaluate their chemical footprints through the Chemical Footprint Project Survey.

Oeko-Tex certification can apply to components (such as fabrics, buttons, zippers, labels) or finished products. This certification takes into account harmful substances, such as banned azo colorants, formaldehyde, pentachlorophenol, cadmium, nickel, and numerous harmful chemicals, even if they are not yet legally regulated.

Bluesign system applies to textiles and leather and does not allow the use of about 900 chemical substances. Bluesign system is a tool for chemical suppliers and manufacturers to reduce or even eliminate harmful chemicals in consumer goods and to minimize emissions to the environment.

GOTS certification indicates that a textile product, such as cotton or wool fabric, contains at least 70% organic fibers.

GreenGuard standard pertains to VOCs and states that the product contains low chemical and particle emissions.

The Chemical Footprint Project Survey is a tool for manufacturers, brands, and retailers that are working to reduce their use of chemicals of high concern and select safer alternatives. After completing a 19-question survey, companies receive an evaluation of their chemical management policies and practices. This tool helps companies as they eliminate harmful chemicals from their supply chain to measure their progress to safer chemicals adoption and effective policies and practices.

Company	Points (out of 20)	Percentage	Company Assessment of Products Grade
UPPAbaby	18	90%	А
Clek	16	80%	В
Peg Perego	12	60%	D
Nuna	11	55%	D
Britax	9	45%	D
Graco	5	25%	F

TABLE 5: COMPANY ASSESSMENT OF PRODUCTS

CHEMICAL ADVANCES

ADVANCES IN THE PAST FIVE YEARS

Britax, Clek, and UPPAbaby are the leaders in chemical advances, with Nuna and Peg Perego close behind. Britax, Clek, UPPAbaby, and Nuna market at least one children's car seat in North America that is free of chemical flame retardants.

Britax reports reducing halogenated flame retardants and some phosphate-based flame retardants, heavy metals, phthalates (beyond the federally regulated list), formaldehyde and bisphenol A (BPA). They now sell three car seat models that are flame retardant (FR)-free; one in every stage of growth. (SafeWash™ fabric in Otto fashion available on Endeavours infant seat, Advocate ClickTight convertible, Pinnacle ClickTight booster).



Clek reports eliminating brominated flame retardants and chlorinated flame retardants (which are halogenated flame retardants) and moving to fluorine-free stain resistant technology. The company has marketed a FRfree wool line (Mammoth fabric) available on several models: an infant seat (Liing), convertible seats (Fllo and Foonf), and a booster seat (Oobr).

Graco reports only using flame retardant chemicals for products where flame resistance is required by law or regulation; and not on any other upholstered materials. The company does not currently sell an FR-free seat.

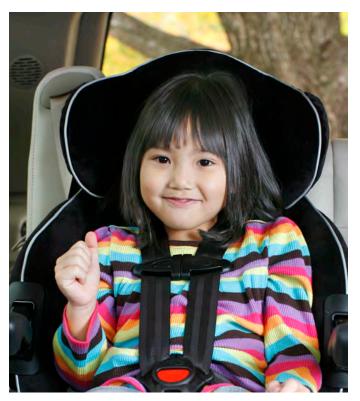
Nuna reports eliminating PVC and BPA and halogenated flame retardants (although Healthy Stuff testing found halogenated chemicals on the Nuna Pipa in Graphite in 2018). This past year, Nuna released two FR-free seats: Pipa Lite and Lite LX.

Peg Perego reports eliminating chlorine and bromine (halogens), as well as barium and all heavy metals accounted in RoHS European directive. Peg Perego reports marketing chemicalfree car seats in Europe, where flammability standards are less strict.

UPPAbaby reports eliminating halogenated flame retardants and some phosphate-based flame retardants. UPPAbaby has eliminated flame retardants on two fashions of their car seats (MESA Henry and MESA Jordan infant seats). They also report prohibiting phthalates listed under California Prop 65 and CPSIA 2008.

UPDATES TO RSLs

All companies report taking action to ensure their RSLs are up-to-date and implemented effectively. Britax, Clek, and UPPAbaby are the most proactive in this area. Britax states, "Cross functional teams are tasked with communicating and reviewing the chemical policy and expectations with all of Britax's suppliers on a regular basis." Britax also actively monitors developments of chemicals of concern and works to get ahead of said developments by expanding their RSL when warranted. Clek has a dedicated engineer working with external experts and advocates regarding chemicals of concern. UPPAbaby states they "constantly monitor current and future regulations to ensure that we stay ahead of proposed chemical legislation, through industry meetings, webinars and newsletters."



Company	Points (out of 15)	Percentage	Company Chemical Advances Grade
Britax	14	93%	А
Clek	14	93%	А
UPPAbaby	14	93%	А
Nuna	12	80%	В
Peg Perego	12	80%	В
Graco	7	47%	D

TABLE 6: COMPANY CHEMICAL ADVANCES

PUBLIC POLICY

All six responding companies report working with the Juvenile Products Manufacturers Association (JPMA) or other industry groups on public policy. UPPAbaby additionally participates in public forums to advocate for chemical controls and to share their best practices in order to help other manufacturers. Britax states they support advancing safer chemicals in children's products through (unspecified) state green chemistry and right to know forums. All six report advocating for the elimination of flammability standards in children's car seats on the federal level.

It should be noted that JPMA has often not supported chemical policy reform. JPMA has actively opposed most state legislation that would restrict flame retardants in car seats. JPMA, however, has recently worked to support changing flammability standards for car seats to allow seats to comply with a standard more appropriate for children's products. This would make it easier to manufacture affordable childrens car seat without flame retardants.



Manufacturers of child safety products are influential and important advocates for child safety and, as such, should be supporting state and federal policies which reduce the use of these chemical hazards in all products.

Company	Points (out of 10)	Percentage	Company Public Policy Grade
UPPAbaby	9	90%	А
Britax	8	80%	В
Graco	7	70%	C
Clek	6	60%	D
Nuna	6	60%	D
Peg Perego	6	60%	D

TABLE 7: COMPANY PUBLIC POLICY

EXTRA CREDIT

For extra credit, companies reported the following.

UPPAbaby reports establishing specific manufacturing processing lines to eliminate the potential for cross contamination. The company reports sourcing leather from manufacturers who have committed to eliminating chromium contamination. UPPAbaby also reports implementing packaging waste reduction, recycling at their headquarters, recycling stroller parts, installing solar panels, using filtered water, and developing a zero plastic policy. UPPAbaby has worked collaboratively with the Ecology Center's Healthy Stuff team to make public statements about chemical safety.

Clek reports having a car seat recycling program for over 6 years, and expects they were the first child seat company to offer this, and may still be the only. Clek has worked collaboratively with the Ecology Center's Healthy Stuff team to make public statements about chemical safety.

Britax reports maintaining an approved material database across their supply chain to help identify materials that meet their standards and help new suppliers find safer alternatives. Britax has also worked collaboratively with the Ecology Center's Healthy Stuff team to make public statements about chemical safety.

Nuna reports using solar powered energy, exhaust treatment water recycling, and a plastic waste and packaging recycling program. They also work to make sure they get the most up-todate information regarding toxicity concerns of potential new chemicals of concern. They then add those chemicals into their supply chain review and control plans.

Peg Perego has introduces a new fabric made from 100% recycled post-consumer plastic bottles. The company reports the process to make this polyester yarn has low environmental impact in terms of energy consumption, water and CO₂ emissions. Peg Perego also manufactures their products in Italy and USA, assuring relatively high labor and environmental standards and reducing their environmental footprint.

Graco reports their production TABLE 8: EXTRA CREDIT factories use the Supplier Ethical Data Exchange (SEDEX) program for ethical and social auditing. SEDEX is a global membership organization "dedicated to driving improvements in ethical and responsible business practices in global supply chains."

Company	Points (out of 20)	Percentage		
UPPAbaby	17	85%		
Clek	15	75%		
Britax	12	60%		
Nuna	12	60%		
Peg Peregp	7	35%		
Graco	5	25%		

APPENDIX

COMPANY SUMMARIES

BRITAX | OVERALL GRADE: B

britax	OVERALL GRADE	Transparency	Chemical Policies & RSLs	Assessment of Products	Chemical Advances	Public Policy
\sim	В	F	А	D	А	В

BRITAX HIGHLIGHT SUMMARY CHECKLIST

- Public chemical statement: Yes, but can be expanded.
- _ Public chemical policy
- _ Public RSL
- Written chemical policy that includes specific chemical categories of concern.
- Ensure supplier compliance with company chemical policy
- Third-party certifications
- Willingness to utilize Chemical Footprint Project
- Chemical Advances: Britax markets 3 FR-free car seats. Expand FR-free design to all seats.
- Update RSL to stay ahead of regulation
- Working to advance public policy to support the use of safer chemicals in car seats
- \mathbb{Z} Extra credit: Maintains an approved material database across their supply chain to help identify materials that meet their standards and help new suppliers find safer alternatives.

TRANSPARENCY: F

Britax has a strong public chemical statement specifically targeting halogenated flame retardants and specifying their elimination from all product components. The company publicly states they include over 100 chemicals or chemical families in their RSL. But halogens are the only chemical family they publicly identify. We encourage Britax to expand their public statements to include other specific chemicals of concern. Additionally we urge Britax to make their chemical policy and their restricted substances list (RSL) public.

CHEMICAL POLICIES & RSL: A

Britax reports they aim to avoid all of the chemicals of concern about which we inquired, including phosphorus-based flame retardants and PFAS. But, a Britax car seat tested positive for phosphorus-based flame retardants and PFAS through independent testing by Healthy Stuff in 2018. We applaud Britax's elimination of halogenated flame retardants and encourage the company to eliminate all chemical flame retardants and PFAS.

ASSESSMENT OF PRODUCTS & PRACTICES: D

Britax did not indicate they were willing to utilize the Chemical Footprint Project Survey tool. Healthy Stuff encourages all car seat manufacturers to use an assessment tool to evaluate their progress in reducing chemicals of concern used in their products and to identify areas of improvement in their chemical management policies and practices.

CHEMICAL ADVANCES: A

Britax developed and markets three car seat models that are FR-free. We celebrate these developments and encourage Britax to expand their FR-free design to all of their models and consider offering an affordable FR-free seat.

PUBLIC POLICY: B

Britax states they support advancing safer chemicals in children's products through state green chemistry/ right to know forums. We applaud these efforts to advance safer chemicals public policy on various levels of government. We encourage Britax to continue and expand these efforts and share them with the public.

CLEK | OVERALL GRADE: A

dek	OVERALL GRADE	Transparency	Chemical Policies & RSLs	Assessment of Products		
	Α	D	В	В	А	D

CLEK SUMMARY CHECKLIST

- ✓ Public chemical statement: Yes, but can be expanded.
- ✓ Public chemical policy: Yes, but can be expanded.
- _ Public RSL
- ✓ Written chemical policy that includes specific chemical categories of concern.
- Ensure supplier compliance with company chemical policy
- Third-party certifications
- ✓ Willingness to utilize Chemical Footprint Project
- Chemical Advances: Clek markets 4 FR-free car seats. Expand FR-free design to all seats.
- ✓ Update RSL to stay ahead of regulation
- _ Working to advance public policy to support the use of safer chemicals in car seats
- Extra credit: Clek reports having a car seat recycling program for over 6 years. Clek works with Ecology Center and Healthy Stuff to make public statements about chemical safety

TRANSPARENCY: D

Clek received the highest score for transparency since they have both a public chemical statement and policy. Clek's public policy announces the elimination of brominated and chlorinated chemicals from their products. We encourage Clek to also include other chemicals of concern in their policy. We encourage Clek to include more detail in their public chemical statement. We encourage Clek to make their RSL public.

CHEMICAL POLICIES & RSLS: B

We congratulate Clek for setting and achieving goals for eliminating halogenated flame retardants. Clek reports having a written chemicals policy regarding 5 out of 8 chemical

categories about which we inquired, not including phosphorus-based flame retardants or antibacterials. Clek produces some child car seats with antibacterials and some without. We encourage Clek to eliminate antibacterial chemicals of concern (such as triclosan and triclocarban), phosphorus-based flame retardants, and nonylphenol and other alkylphenols.

ASSESSMENT OF PRODUCTS & PRACTICES: B

Clek indicates a willingness to evaluate their chemical footprint through the Chemical Footprint Project Survey. We applaud this willingness and encourage Clek to familiarize themselves with the survey tool and use it when it is next available in 2020.

CHEMICAL ADVANCES: A

In addition to eliminating brominated flame retardants and chlorinated flame retardants, Clek has moved to fluorine-free stain resistant technology. The company has marketed a FR-free wool line available on several models. We celebrate these developments and encourage Clek to expand their FR-free design to all of their models and consider offering an affordable FR-free seat.

PUBLIC POLICY: D

Clek reports working with the Juvenile Products Manufacturers Association (JPMA) on public policy. We encourage all car seat companies to work within industry groups and beyond to advance safer chemicals public policy on all levels of government.

GRACO | OVERALL GRADE: D

GRACO	OVERALL GRADE	Transparency	Chemical Policies & RSLs	Assessment of Products	Chemical Advances	Public Policy
	D	F	В	F	D	С

GRACO SUMMARY CHECKLIST

- Public chemical statement: Develop a chemical statement that is specific to the Graco brand and specifies chemicals of concern. Make it easily accessible on Graco's website.
- Public chemical policy: Develop a chemical policy that is specific to the Graco brand and specifies chemicals of concern. Make it easily accessible on Graco's website.
 Public RSL
- ✓ Written chemical policy that includes specific chemical categories of concern.
- Ensure supplier compliance with company chemical policy
- _ Third-party certifications: Achieve 3rd party certifications that have public standards.
- _ Willingness to utilize Chemical Footprint Project
- _ Chemical Advances
- ✓ Update RSL to stay ahead of regulation
- ✓ Working to advance public policy to support the use of safer chemicals in car seats
- Extra credit: Production factories use the Supplier Ethical Data Exchange (SEDEX) program for ethical and social auditing.

TRANSPARENCY: F

Graco points to multiple documents from their parent company, Newell Brands (parent company of more than 50 brands), for their chemical statements. The statements primarily call for suppliers to follow environmental protection laws and are not easily accessible. The statements are found within the Vendor Code of Conduct and other manuals on Newell Brands' website. Their public chemical policy is vague, using the term "environmentallysustainable" without clearly defining the term. We encourage Graco to publish a public chemical statement and public chemical policy to include halogenated flame retardants and other chemicals of concern. We encourage Graco to make these and their RSL easily accessible on the brand's website.

CHEMICAL POLICIES & RSL: B

Graco reports using the minimum amount of flame retardant chemicals necessary to meet the flammability requirement and restricting certain halogenated chemicals from use. Graco reports they aim to avoid all of the categories of chemicals of concern about which we inquired. However, Graco products independently tested by Healthy Stuff tested positive for halogenated flame retardants, phosphorus-based flame retardants, and PFAS. We encourage Graco to eliminate all chemical flame retardants and PFAS.

ASSESSMENT OF PRODUCTS & PRACTICES: F

Graco did not indicate they were willing to utilize the Chemical Footprint Project Survey tool. Healthy Stuff encourages all car seat manufacturers to use an assessment tool to evaluate the chemicals used in their products and find the least toxic possible.

CHEMICAL ADVANCES: D

Graco reports only using flame retardant chemicals for products where flame resistance is required by law or regulation; and not on any other upholstered materials. We encourage Graco to develop and market an FR-free seat. Currently, all of the FR-free car seats are made by high end car seat companies. There is not an FR-free infant or convertible child car seat on the market selling for less than \$200. We call on Graco to be the first to develop an affordable FR-free child car seat.

PUBLIC POLICY: C

Graco reports working with the Juvenile Products Manufacturers Association (JPMA) on public policy regarding NHTSA and auto flammability standards. We encourage all car seat companies to work within industry groups and beyond to advance safer chemicals public policy on all levels of government.

NUNA | OVERALL GRADE: C

OVERALL GRADE	Transparency	Chemical Policies & RSLs	Assessment of Products	Chemical Advances	Public Policy
С	F	В	D	В	D

NUNA SUMMARY CHECKLIST

- Public chemical statement: Yes, but statement is vague
- Public chemical policy
- _ Public RSL
- Written chemical policy that includes specific chemical categories of concern. (Can add antibacterial chemicals of concern to be comprehensive).
- Ensure supplier compliance with company chemical policy
- Third-party certifications
- ✓ Willingness to utilize Chemical Footprint Project
- Chemical Advances: Nuna markets 2 FR-free car seats. Expand FR-free design to all seats.
- ✓ Update RSL to stay ahead of regulation
- _ Working to advance public policy to support the use of safer chemicals in car seats
- Extra credit: Solar powered energy, exhaust treatment water recycling, and a plastic waste and packaging recycling program.

TRANSPARENCY: F

Nuna has a public statement on chemical safety, but it is broad and vague. The company is "Striving to eliminate the use of toxins while complying with standards at the same time." We encourage Nuna to develop a more detailed public statement on chemical safety. Additionally we urge Nuna to make their chemical policy and their RSL public.

CHEMICAL POLICIES & RSL: B

Nuna reports they aim to avoid all of the chemicals of concern about which we inquired, except antibacterials which Nuna says are not applicable to the industry. However, a Nuna car seat independently tested by Healthy Stuff tested positive for halogenated flame retardants, phosphorus-based flame retardants, and PFAS. We encourage Nuna to eliminate all chemical flame retardants and PFAS and to include antibacterials in their RSL to be comprehensive.

ASSESSMENT OF PRODUCTS & PRACTICES: D

Nuna reports achieving third-party certifications. Nuna reports ensuring implementation of their chemical policy, but did not provide much detail. Nuna indicated they may be willing to evaluate their chemical footprint through the Chemical Footprint Project Survey. We applaud this potential willingness and encourage Nuna to familiarize themselves with the survey tool and use it when it is next available in 2020.

CHEMICAL ADVANCES: B

Nuna reports eliminating PVC and BPA and halogenated flame retardants (although Healthy Stuff testing found halogenated FRs on one Nuna seat in 2018). This past year, Nuna released two FR-free seats.

PUBLIC POLICY: D

Nuna reports working with industry groups on public policy. We encourage all car seat companies to work within industry groups and beyond to advance safer chemicals public policy on all levels of government.

PEG PEREGO | OVERALL GRADE: C

Reg Pérego	OVERALL GRADE	Transparency	Chemical Policies & RSLs	Assessment of Products	Chemical Advances	Public Policy
	C	F	А	D	В	D

PEG PEREGO SUMMARY CHECKLIST

- _ Public chemical statement
- _ Public chemical policy
- _ Public RSL
- ✓ Written chemical policy that includes specific chemical categories of concern.
- Ensure supplier compliance with company chemical policy
- Third-party certifications
- Willingness to utilize Chemical Footprint Project
- _ Chemical Advances
- ✓ Update RSL to stay ahead of regulation
- _ Working to advance public policy to support the use of safer chemicals in car seats
- Extra credit: Fabric from post-consumer recycled plastic. Products manufactured in Italy & USA.

TRANSPARENCY: F

Peg Perego does not have a public chemical statement, public chemical policy, or public RSL. We encourage Peg Perego to develop a detailed public statement and public policy on chemical safety and chemicals of concern. We encourage Peg Perego to make their public statement, policy, and RSL easily accessible on their website,

CHEMICAL POLICIES & RSL: A

Peg Perego reports making design changes to lower the flammability of its children's car seats without the use of chemicals. Peg Perego reports having a written chemicals policy regarding all 8 categories of chemicals of concern about which we inquired. A Peg Perego seat was last included in a Healthy Stuff car seat testing cohort in 2015.

ASSESSMENT OF PRODUCTS & PRACTICES: D

Peg Perego reports testing materials to Oeko-Tex Standard 100 and maintaining compliance with European Directive REACH. Peg Perego reports ensuring implementation of their chemical policy, but did not provide much detail. Peg Perego indicates they may be willing to evaluate their chemical footprint through the Chemical Footprint Project Survey. We applaud this potential willingness and encourage Peg Perego to familiarize themselves with the survey tool and use it when it is next available in 2020.

CHEMICAL ADVANCES: B

Peg Perego reports eliminating chlorine and bromine, as well as barium and all heavy metals accounted in RoHS European directive. Peg Perego states their car seats sold in Europe are chemical free. We encourage Peg Perego to develop and market an FR-free seat for North American families.

PUBLIC POLICY: D

Peg Perego reports working with the Juvenile Products Manufacturers Association (JPMA) on public policy. We encourage all car seat companies to work within industry groups and beyond to advance safer chemicals public policy on all levels of government.

UPPABABY | OVERALL GRADE: A

SCUPPAbaby [.]	OVERALL GRADE	Transparency	Chemical Policies & RSLs	Assessment of Products	Chemical Advances	Public Policy
	Α	F	А	A	А	А

UPPABABY SUMMARY CHECKLIST

- _ Public chemical statement
- _ Public chemical policy
- _ Public RSL
- ✓ Written chemical policy that includes specific chemical categories of concern.
- Ensure supplier compliance with company chemical policy
- Third-party certifications
- ✓ Willingness to utilize Chemical Footprint Project
- Chemical Advances. UPPAbaby markets 2 FR-free car seats. Expand FR-free design to all seats.
- ✓ Update RSL to stay ahead of regulation
- ✓ Working to advance public policy to support the use of safer chemicals in car seats
- Extra credit: UPPAbaby addresses chromium contamination in leather, implemented packaging waste reduction, recycles stroller parts, and installed solar panels.

TRANSPARENCY: F

UPPAbaby does not have a public chemical statement, public chemical policy, or public RSL. We encourage UPPAbaby to develop a detailed public statement and public policy on chemical safety and chemicals of concern. We encourage UPPAbaby to make their public statement, policy, and RSL easily accessible on their website,

CHEMICAL POLICIES & RSL: A

UPPAbaby reports they aim to avoid all of the chemicals of concern about which we inquired, including phosphorus-based flame retardants. But, an UPPAbaby car seat tested positive for phosphorus-based flame retardants through independent testing by Healthy Stuff. We applaud UPPAbaby's elimination of halogenated flame retardants and encourage the company to eliminate all chemical flame retardants.

ASSESSMENT OF PRODUCTS & PRACTICES: A

UPPAbaby reports maintaining consistent communication with suppliers about their RSLs and performing regular audits to ensure compliance. UPPAbaby reports having products that achieve the European REACH Directive standards. UPPAbaby indicates a willingness to evaluate their chemical footprint through the Chemical Footprint Project Survey. We applaud this willingness and encourage UPPAbaby to familiarize themselves with the survey tool and use it when it is next available in 2020.

CHEMICAL ADVANCES: A

UPPAbaby reports eliminating halogenated flame retardants and some phosphate-based flame retardants. UPPAbaby has eliminated flame retardants on two fashions of their car seats. We encourage UPPAbaby to expand this FR-free design to all of their models and consider offering an affordable FR-free seat. UPPAbaby also reports prohibiting phthalates listed under California Prop 65 and CPSIA 2008.

PUBLIC POLICY: A

UPPAbaby reports working with the Juvenile Products Manufacturers Association (JPMA) to petition NHTSA to change the flammability requirements in children's car seats. Also UPPAbaby reports working with health and environmental advocates, such as Ecology Center, MadeSafe, Cradle to Cradle Certification, and the International Consumer Product Health and Safety Organization, to advance the industry towards the production of safer products. UPPAbaby has participated in panel discussions to advocate for chemical controls, share best practices, and assist other manufacturers. UPPAbaby has assisted government agencies as well. We applaud these efforts to advance safer chemicals public policy. We encourage UPPAbaby to continue and expand these efforts and share them with the public.

SURVEY QUESTIONS AND SCORING

Survey Questions	Britax	Clek	Graco	Nuna	Peg Perego	UPPAbaby
Transparency (15 pts)						
1. Does your company have any public statement on chemical safety? 5 pts	4	4	2	3	1	1
2. Does your company have a public chemical policy? 5 pts	0	4	2	0	0	0
3. Does your company have a public Restricted Substances List (RSL)? 5 pts	0	0	0	0	0	0
Transparency Total	4	8	4	3	1	1
Chemical Policies & RSLs (40 pts)						
4. Does your company have a chemicals policy that applies to all goods sold or distributed? 6 pts	6	6	6	6	6	6
5. Does your company have a chemicals policy that applies to your supply chain? 6 pts	6	6	6	6	6	6
6. Do you require suppliers to provide you with chemical information? If so, what information do you collect? 7 pts	7	7	7	7	7	7
7.Has your company set goals for reducing halogenated flame retardants and other chemicals of concern in the products you manufacture? Do you measure progress toward these goals? Provide examples. 7 pts	7	5	2	2	7	7
8. Does your company have a written chemicals policy that aims to avoid chemicals of concern? 8 pts	8	5	8	7	8	8
9. Does your RSL include chemicals not restricted by U.S. regulations (Does your RSL go beyond regulatory compliance)? 6 pts	6	6	6	6	6	6
Chemical Policies & RSLs Total	40	35	35	34	40	40
Assessment of products and practices (20 pts)						
10. Does your company ensure implementation of your chemicals policy? If yes, by what means? 5 pts	5	3	5	3	3	5
11. Do any of your products have 3rd party certification from Oeko-Tex or bluesign system? Other? 5 pts	4	3	0	3	4	3
12. Is your company willing to evaluate its chemical footprint through CFP, the Chemical Footprint Project? 10 pts	0	10	0	5	5	10
Assessment Total	9	16	5	11	12	18

Survey Questions	Britax	Clek	Graco	Nuna	Peg Perego	UPPAbaby
Chemical Advances (15 pts)						
13. What specific chemicals of concern has your company eliminated over the past 5 years? 5 pts	5	5	3	3	5	5
14. Does your company take actions to ensure that its list of restricted substances is regularly updated and implemented effectively? Describe. 5 pts	4	4	4	4	4	4
15. Does your company market at least one children's car seat that is free of chemical flame retardants? If yes, please identify. 5 pts	5	5	0	5	3	5
Chemical Advances Total	14	14	7	12	12	14
Public Policy (10 pts)						
16. Does your company advocate externally in support of state or federal policies, rules, regulations, or standards which support the use of safer chemicals in your products? If yes, how? 5 pts	3	2	2	2	2	4
17. Does your company advocate for the elimination of flammability standards in children's car seats on the federal level? If yes, please describe how. 5 pts	5	4	5	4	4	5
Public Policy Total	8	6	7	6	6	9
Extra Credit (20 pts)						
19. Are there other chemical management practices you would like to highlight? 5 pts	2	0	0	2	2	2
20. Are there other environmentally friendly or socially-responsible practices or offerings you would like us know about, such as zero waste manufacturing plant, recycled material in products, or fair labor standards? 5 pts	0	5	5	5	5	5
21. Do you collaborate or make joint public statements with Ecology Center, Healthy Stuff, or the Car Seat Detox campaign? 5 pts	5	5	0	0	0	5
22. Extra credit will be applied if your company has had a moderate, high, or highest recommendation score through Healthy Stuff testing in 2016 or 2018. 5 pts	5	5	0	5	0	5
Extra Credit Total	12	15	5	12	7	17
OVERALL TOTAL	87	94	63	78	78	99