# Comments of the American Chemistry Council on the Proposed Significant New Use Rule for Nonylphenols and Nonylphenol Ethoxylates

## Docket No. EPA-HQ-OPPT-2007-0490

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## EXECUTIVE SUMMARY

The American Chemistry Council (ACC) welcomes the opportunity to provide comments on the proposed significant new use rule (SNUR) for certain nonylphenols (NPs) and nonylphenol ethoxylates (NPEs), 79 Fed. Reg. 59186 (Oct. 1, 2014).[1]

ACC represents the leading companies engaged in the business of chemistry.[2] Many of its members manufacture, import, process, use, export, and/or distribute NPs and NPEs. Thus, ACC members would be affected if the SNUR were finalized as proposed.

These comments make the following points:

- EPA should exercise greater diligence to support its consideration of whether the NPs and NPEs listed in the proposed SNUR are, in fact, in commerce. Both customers and suppliers of these products have indicated to ACC that some or all of the listed chemicals are in commerce. Information reported under the Chemical Data Reporting rule (CDR) is not reliable with respect to the four polymeric NPEs listed for the reasons set forth below.

- EPA's position that the NPs and NPEs listed in Table 1 are not in commerce is based on a nomenclature convention which is not generally understood or followed. The convention states that alkyl chains, such as those in NPs and NPEs, will be "assumed" (presumably by EPA) to be linear unless expressly designated as branched. Currently, this convention is communicated only in a 1995 nomenclature guidance document on which EPA did not accept comments and to which EPA has not referred in discussing NPs and NPEs. EPA should make this convention available for public comment. In doing so, it should explain clearly the implications of this convention for NPs and NPEs. Only after consideration of public comments should EPA decide whether to adopt this convention as a matter of policy and apply it to NPs and NPEs.

- EPA has no authority to issue SNURs for uses which are ongoing. Where commenters indicate that they are manufacturing or processing NPs or NPEs listed in the proposed SNUR, EPA should exclude those chemical substances from the scope of any final SNUR. Even if the commenters are actually manufacturing or processing branched NPs

[1] The due date for comments was extended until January 15, 2015. 79 Fed. Reg. 70823 (Nov. 28, 2014).

[2] ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is an $812 billion enterprise and a key element of the nation's economy. It is the nation's largest exporter, accounting for twelve percent of all U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

or NPEs, the global industry practice is to use CAS names for such NPs and NPEs which do not include a "branched" designation. Thus, the impact of a SNUR for the CAS numbers included in Table 1 of the proposed SNUR, all of which may be assumed from EPA's perspective to be linear (because "branched" is not part of the names), would be to regulate ongoing uses of these NPs and NPEs which have actually been manufactured, albeit under a less than fully descriptive name, in some cases for decades. Such a SNUR would be beyond EPA's statutory authority.

- As EPA recognizes, this poorly-understood nomenclature convention may have resulted in many NPs, NPEs, and NP derivatives being manufactured but "incorrectly" listed on the TSCA Inventory (according to the nomenclature convention) in a way that could indicate linear rather than branched alkyl chains. Accordingly, rather than proceed with the proposed SNUR, EPA should remove currently produced but incorrectly-identified NPs and NPEs from the SNUR. After having publicized and established this nomenclature convention as a policy matter applicable to NPs and NPEs, EPA should encourage the submission of correction applications for these Inventory entries rather than require the submission of PMNs.

- ACC members report that they are currently manufacturing or processing several of the NPs and NPEs in Table 2 of the proposed SNUR for particular uses. EPA should exclude those uses from the final SNUR.

- EPA should clarify the exception for the NPs listed in Table 2 of the proposed SNUR to indicate that the exception applies to use as a reactant.

## DISCUSSION

### 1. EPA Should Exercise Greater Diligence When Considering Whether the Listed Chemicals Are in Commerce

The preamble indicates that EPA relied on the 2012 Chemical Data Reporting (CDR) data, the Household Products Database (HPD), and the Consumer Products Information Database (CPID) as the basis for determining that 13 of the listed NPs and NPEs are "not in production." It has proposed an "any use" SNUR for each. There is no indication that EPA did other internet searches, e.g., using the CAS number to search for commercial availability information, MSDSs, or other information which might indicate continued commercial availability.

The preamble explains that EPA relied on the absence of reports under the CDR of NPs and NPEs listed in Table 1 of the proposed SNUR:

> To ascertain whether these chemicals are currently in commerce, EPA . . . reviewed the most recent data from EPA's Chemical Data Reporting (CDR) database (Ref. 1). Twelve of the 13 linear NPs and NPEs in Table 1 of this unit are not reported on CDR. One NPE chemical, known as poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy- (CASRN 9016-45-9), also listed in Table 1 of this unit, was reported to the 2012 CDR. EPA believes, however, that the manufacturer incorrectly identified the chemical in its CDR

report, and that, in fact, poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy- (CASRN 9016-45-9) is not currently manufactured for any use.[3]

The CDR excludes polymers from reporting.[4] Four of the 13 NPs or NPEs listed in Table 1 are polymers,[5] including CAS No. 9016-45-9. None of these polymeric NPEs should have been reported for the CDR due to that exclusion, but the exclusion means that EPA cannot rely on the CDR for confirmation that those four NPEs are not in active commerce.

While EPA might have a basis to conclude that production in excess of the CDR trigger for 2012 (25,000 lbs. per site) is known not to have occurred in the 2010 and 2011 CDR reporting years for the non-polymeric NPs and NPEs listed in the proposed SNUR, it is unclear why EPA concludes the chemicals are no longer in commerce. There is no discussion in the proposed SNUR of the inherent limitations in the 2012 CDR data. For example, the 2012 CDR contained a site-specific volume trigger with no reporting required if the trigger is not met; CDR reporting was limited to two years only; and no reporting was required by processors or users, which is especially significant given that the proposed SNUR would apply to "any use."

An internet search of nonylphenol itself (CAS No. 104-40-5, phenol, 4-nonyl-) showed a number of hits including on the chemicalbook.com web site, which reports 70 global producers with 15 in the U.S.[6] A similar search of the chemical identified as CAS No. 7311-27-5 (ethanol, 2-[2-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]ethoxy]-) identified only one global supplier (from China) on the chemicalbook.com site. The chemical identified as CAS No. 9016-45-9 (poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy-, also known as ethoxylated nonylphenol), identifies MSDSs from several U.S. chemical producers. Simple internet searches of the other chemicals subject to the proposed SNUR could very well indicate current commercialization.

EPA did not conduct what could reasonably be considered "due diligence" to support its conclusion that the listed NPs and NPEs are not in commerce and should do so to before promulgating a final SNUR.

## 2. EPA Should Do More to Publicize and Establish a Policy Applicable to NPs and NPEs Through Its Nomenclature Guidance on Linear and Branched Alkyl Chains

The proposed SNUR is based on the idea that the NPs and NPEs listed in Table 1 are linear and not branched, and accordingly, that ongoing uses for branched NPs and NPEs would not be covered by the SNUR except to the extent listed in Table 2. Yet the proposal does not explain the underlying nomenclature convention. EPA should do more to publicize and explain its nomenclature guidance on this critical issue as policy as it applies to NPs and NPEs.

In 1995, without taking public comments, EPA issued informal nomenclature guidance for

[3] 78 Fed. Reg. at 59187.
[4] 40 C.F.R. § 711.4(a)(1).
[5] See CAS NO. 9016-45-9, poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy-; CAS No. 26027-38-3, poly(oxy-1,2-ethanediyl), α-(4-nonylphenyl)-ω-hydroxy-; CAS No. 37205-87-1, poly(oxy-1,2-ethanediyl), α-(isononylphenyl)-ω-hydroxy-; CAS No. 51938-25-1, poly(oxy-1,2-ethanediyl), α-(2-nonylphenyl)-ω-hydroxy-. All four are designated as "XU" in the TSCA Inventory, indicating that they are exempt from reporting for the CDR.
[6] See http://www.chemicalbook.com/ChemicalProductProperty_EN.aspx?CBNumber=CB8719252.

several topics with regard to how EPA will interpret whether or not a chemical is on the TSCA Inventory. One of the guidance documents addressed "certain chemical substances containing varying carbon chain lengths (alkyl ranges using the CX-Y notation)." That guidance document explains that where alkyl chains are not identified as branched, they are assumed to be linear:

> H. Conventions used for representing alkyl chains
>
> 1. Linear (i.e., normal) chains have no prefix
>
> In other chemical representation systems, the prefix "n" is used to indicate that an alkyl chain is linear, or unbranched. The "n" prefix is often used in the trade literature as well. However, the CAS representation system used for the TSCA Inventory uses no prefix to indicate linear chains; **linearity is assumed unless a prefix qualifies the substance differently. This difference in representation has led to some confusion.** For TSCA purposes, if there is no modifying term with an alkyl substance name, the alkyl chain is assumed to be linear, with the point of attachment to the rest of the molecule at the first methylene (-CH2-) group. The lack of such a prefix denotes a linear alkyl chain and that there is no branching, unless other terms denoting branching are included.[7]

ACC recognizes that this nomenclature convention is consistent with some other regulatory chemical nomenclature systems. For example, under REACH, ECHA has issued nomenclature guidance which states:

> Branched groups shall be mentioned as such in the name. Substances containing alkyl groups without any further information cover only the unbranched linear chains unless otherwise specified.[8]

While EPA has posted its nomenclature guidance documents on its new chemicals website, it has not referred to this informal guidance or this naming convention in any of its many materials related to NPs and NPEs, including its 2010 Chemical Action Plan on NPs and NPEs, the advance notice of proposed rulemaking on testing NPs and NPEs, its rulemaking adding the NP category under EPCRA § 313, and the proposed SNUR. Yet it has acknowledged in the nomenclature guidance document itself that "[t]his difference in representation has led to some confusion," which is certainly an understatement.

Before relying on its informal guidance in a rulemaking such as a SNUR, EPA should undertake an effort to publicize the policy basis of the nomenclature guidance in the context of NPs and NPEs to clarify for the regulated community the underlying basis for its assertions that the NPs and NPEs listed in Table 1 of the proposed SNUR refer only to chemicals with linear alkyl chains. This would help further establish that the use of CAS names that do not specify

[7] EPA, "Toxic Substances Control Act Inventory Representation for Certain Chemical Substances Containing Varying Carbon Chain Lengths (Alkyl Ranges Using the CX-Y Notation)" (1995), § III.H, http://www.epa.gov/oppt/newchems/pubs/alkyl-rg.txt (emphasis added).

[8] ECHA, "Guidance for identification and naming of substances under REACH and CLP," Version 1.3 (Feb. 2014), at 43, http://echa.europa.eu/documents/10162/13643/substance_id_en.pdf.

branched alkyl chains for NPs and NPEs having such chains is incorrect. ACC and its members are prepared to offer assistance to EPA in undertaking this matter.

## 3. Rather than Proceed with the Proposed SNUR, EPA Should Accept Inventory Correction Applications for Incorrectly-Identified Branched NPs and NPEs

EPA has asserted that there are probably many erroneous listings of branched NPs and NPEs using CAS names indicating linear alkyl chains (because "branched" is not included in the CAS names). For example, EPA's 2010 Chemical Action Plan for NPs and NPEs states:

> Much of the literature refers to the linear (or normal-) nonylphenol (CASRN 25152-52-3), often the specific para-regioisomer (i.e. 4-n-nonylphenol, CASRN 104-40-5). Many, but not all, references are inaccurate about the identity of the substances listed as nonylphenol. This is likely due to inaccurate identities in the source material. A supplier of nonylphenol may use CASRN 104-40-5, signifying 4-n-nonylphenol, while actually supplying branched 4-nonylphenol (CASRN 84852-15-3).[9]

Similarly, the preamble to the proposed SNUR asserts:

> EPA believes that this linear NPE [CAS No. 9016-45-9] was incorrectly identified and the manufacturer was in fact producing a branched NPE (i.e., another chemical entirely).[10]

This situation is global in nature. For example, according to ECHA data,[11] nonylphenol, ethoxylated, CAS No. 9016-45-9, was pre-registered under REACH, and it was the subject of a registration dossier. It has been classified under the CLP regulation. It is listed under the EU's Prior Informed Consent (PIC) regulation implementing the Rotterdam Convention. Under that regulation there have been 423 export notifications, 37 valid consents provided by the designated national authority of importing countries outside the EU, and 123 notifications for imports to the EU. Clearly, the EU regards this CAS number as corresponding to a chemical which is in active international commerce, notwithstanding the fact that ECHA has the same nomenclature convention regarding linear and branched alkyl chains as does EPA.

Similarly, according to Environment Canada data,[12] of the three CAS numbers most commonly used for NPs in Canadian industry, none corresponds to a branched NP (because none has "branched" in its name). Of the 17 CAS numbers most commonly used for NPEs in the Canadian chemical industry, only two have "branched" in their names. Of the eight CAS numbers for NP and NPE derivatives or salts most commonly used in Canadian industry, none corresponds to a branched NP (because none has "branched" in its name).

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[9] EPA, "Nonylphenol (NP) and Nonylphenol Ethoxylates (NPEs) Action Plan" (Aug. 18, 2010) at 2, http://www.epa.gov/oppt/existingchemicals/pubs/actionplans/RIN2070-ZA09_NP-NPEs%20Action%20Plan_Final_2010-08-09.pdf.

[10] 79 Fed. Reg. at 59188.

[11] See ECHA, "Search for Chemicals," http://echa.europa.eu/ (search on 9016-45-9).

[12] Environment Canada, "Nonylphenol and its Ethoxylates Contained in Products," https://www.ec.gc.ca/planp2-p2plan/default.asp?lang=En&n=419EC26A-1.

On the public TSCA Inventory, there are 379 chemicals that include *nonylphen* in their names, of which only 61 (16%) include "branched" in their names.[13] The remaining 318 do not include "branched," and so, under EPA's nomenclature guidance, would be assumed to be linear. In practice, however, it is very likely that most or all of those 318 NP derivatives are branched. Thus, it is also clear that in the U.S., notwithstanding EPA's 1995 nomenclature guidance, industry practice has been to regard CAS names that do not include "branched" as applying to branched NPs, NPEs, and their derivatives.

In light of this widespread usage of linear names for what may well be branched NPs and NPEs, and the confusion that EPA acknowledges, EPA should remove currently produced but incorrectly-identified branched NPs and NPEs from the SNUR. After having publicized and explained this nomenclature convention as a policy matter applicable to NPs and NPEs, EPA should accept Inventory correction applications (perhaps for a defined period of time) for incorrectly-identified branched NPs and NPEs.[14]

EPA's 1980 notice on Inventory corrections gave the following example of an acceptable correction:

> Discovery that a chemical substance is different from that reported previously, e.g., determining that a chemical substance reported as A is actually C ….[15]

That scenario certainly applies to a branched NP or NPE that was reported as linear (because "branched" was not included in the name).

The correction process would allow the deletion of Inventory entries for NPs and NPEs with branched alkyl chains but that do not have "branched" in their names, and the replacement of those entries with entries that do include "branched" in their names. However, in recent years, EPA has sometimes been reluctant to accept Inventory corrections, insisting instead that the applicant must submit a PMN with the correct identity.[16] This practice is not appropriate where an Inventory correction would otherwise meet the criteria of the 1980 notice. It is particularly not appropriate where, as here, EPA acknowledges that there has been widespread misunderstanding of the nomenclature convention which EPA believes should be applied.

One alternative to the correction mechanism might be to require manufacturers of branched NPs and NPEs to file PMNs where an Inventory entry covering their branched NP or NPE does not exist. This is not a good alternative. The PMN process is generally much more burdensome than filing an Inventory correction application for both applicants and EPA. At least a dozen

[13] See Attachment A, an excerpt from the public TSCA Inventory.

[14] There are other substances on the TSCA Inventory that would benefit from an Inventory correction, e.g., UVCB substances that share the same CAS number but are, in fact, different substances with different hazard profiles such as crude tall oil and distilled tall oil, which share CAS No. 8002-26-4.

[15] 45 Fed. Reg. 50544 (July 29, 1980).

[16] See, e.g., 75 Fed. Reg. 8266 (Feb. 24, 2010) (final clarification of chemical identification describing activated phosphors for TSCA Inventory purposes, requiring PMNs or exemptions to be filed after the effective date of the clarification); 66 Fed Reg. 34193 (June 27, 2001 (correction of chemical nomenclature for monomer acid and derivatives for TSCA Inventory purposes; "Manufacturers of monomer acid derivatives not on the Inventory have 1 year to complete the PMN process to comply with this nomenclature correction.").

times, in notices related to the Paperwork Reduction Act, EPA has justified the correction mechanism on the basis that the continued acceptance of Inventory correction applications is much less burdensome than having to resort to the PMN process:

> The correction mechanism ensures the accuracy of the Inventory without imposing an unreasonable burden on the chemical industry. Without the Inventory correction mechanism, a company that submitted incorrect information would have to file a premanufacture notification (PMN) under TSCA section 5 to place the correct chemical substance on the Inventory whenever the previously reported substance is found to be misidentified. This would impose a much greater burden on both EPA and the submitter than the existing correction mechanism.[17]

Making the correction process unavailable would also raise a concern about EPA's use of its new chemicals authority in connection with these existing chemicals. If EPA were to review PMNs for NPs, NPEs, and their derivatives, it might want to issue a section 5(e) order for those existing chemicals. Yet these would not be new chemicals in any meaningful practical or legal sense. Neither should they be subject to SNURs for chemicals that have gone through the PMN process, since they are long-time existing chemicals whose uses are ongoing.

Congress deliberately limited EPA's ability to address ongoing uses of existing chemical substances. Section 6 contains numerous procedural and substantive limitations on EPA's ability to regulate such chemical substances and their ongoing uses. EPA should not attempt to bypass those limitations by insisting that incorrectly-identified branched NPs and NPEs be made the subject of PMNs. Instead, it should accept Inventory correction applications for them.

### 4. Where Commenters Report Ongoing Uses of Linear NPs and NPEs, EPA Should Exclude Those Uses From the Final SNUR

In this potentially unique situation, EPA considers that reports of the use of linear NPs and NPEs in the scientific literature, in submissions to regulatory agencies, and in SDSs to be erroneous, because those reports are thought to be based on incorrect nomenclature. Yet the fact remains that, by and large, the world continues to regard linear-based CAS names as applicable to branched NPs and NPEs. In this rulemaking, EPA should take industry practice into account. As explained in the introduction to the 1985 edition of the TSCA Inventory:

> NOTE: Entries on the Inventory should be considered as precisely descriptive as possible of the commercial chemical substance, consistent with industry practice.

The industry practice has long been to regard CAS names without "branched" in their names as being applicable to branched NPs, NPEs, and their derivatives.

[17] See 79 Fed. Reg. 36310 (June 26, 2014); 78 Fed. Reg. 71603, 71605 (Nov. 29, 2013); 76 Fed. Reg. 14655, 14656 (Mar. 17, 2011); 75 Fed. Reg. 47589, 47590-91 (Aug. 10, 2010); 73 Fed. Reg. 8042, 8043 (Feb. 12, 2008); 72 Fed. Reg. 54034, 574036 (Sept. 21, 2007); 70 Fed. Reg. 3196 (Jan. 21, 2005); 69 Fed. Reg. 62043, 62045 (Oct. 22, 2004); 66 Fed. Reg. 59591 (Nov. 29, 2001); 66 Fed. Reg. 9842, 9844 (Feb. 12, 2001); 63 Fed. Reg. 38827 38828(July 20, 1998); 63 Fed. Reg. 13243, 13244 (Mar. 18, 1998).

Importers, processors, and users of NP and NPE derivatives are in a particularly difficult position, because their suppliers may have indicated (possibly incorrectly) that the starting materials or the final commercial products were linear (since "branched" was not included in the CAS name). (See Attachment A.) They should not be responsible for conducting expensive chemical analysis to determine whether in fact their products are linear or branched.

EPA should not insist on the submission of Inventory correction applications for branched NPs, NPEs, and their derivatives. In many cases, it will be difficult or impossible to identify the original submitter of the linear names for those branched chemicals. Those original submitters may no longer exist, or they may no longer own the business units that made or imported those branched chemicals. Processors and end users are not in a position to submit Inventory correction applications, since they did not make original Inventory submissions. They may not even know whether their chemicals are linear or branched. Many domestic manufacturers and importers may have relied on industry practice and existing linear names (i.e., names that did not include "branched") on the Inventory to conclude that the chemicals they planned to manufacture or import were on the Inventory. Thus, the correction process is not a complete answer to this situation.

Under TSCA section 5(a)(2), EPA cannot promulgate a SNUR for an ongoing use of an existing chemical substance, since that use is not "new." Where a commenter indicates that use of a listed linear NP or NPE is ongoing, EPA should exclude that NP or NPE from the scope of the final SNUR. EPA should not presume that all such reports are erroneous.

Even if technically erroneous, the industry practice globally is to use CAS names which do not include a branched designation for NPs and NPEs which may in fact be branched. This industry practice means that a SNUR for NPs and NPEs listed in Table 1 of the proposed SNUR, which are presumed by EPA to be linear, will directly affect currently manufactured branched NPs and NPEs whose uses are ongoing, but which are used and marketed under CAS names that could be interpreted as indicating that they are linear (because they do not include "branched"). Such a SNUR would be beyond EPA's statutory authority.

## 5. ACC Members Are Manufacturing, Importing, or Processing Some of the Listed NPs and NPEs

ACC has been informed by some of its members that they are manufacturing, importing, or processing the following NPs or NPEs listed in Table 1 or Table 2 of the proposed SNUR for the uses indicated in Attachment B. Accordingly, EPA should exclude these uses for those chemicals from the final SNUR.

## 6. EPA Should Clarify the "Intermediate" Exception for NPs Listed in Table 2

The proposed SNUR would exclude from the SNUR for the NPs in Table 2 of the proposed SNUR use "as an intermediate or an epoxy cure catalyst." EPA should clarify the scope of that exemption.

EPA defines "intermediate" in the PMN regulations as follows:

> *Intermediate* means any chemical substance that is consumed, in whole or in part, in chemical reactions used for the intentional manufacture of another chemical substance(s) or mixture(s), or that is intentionally present for the purpose of altering the rates of such chemical reactions.[18]

EPA should clarify that, for polymers, the term "intermediate" includes not only monomers but also other reactants.[19] Other reactants may include chain-transfer agents, cross-linking agents, or blocking agents. While EPA has indicated in the PMN context the meaning of "other reactant," it should do so in this context as well.

[18] 40 C.F.R. § 720.3(n), made applicable to the SNUR regulations by 40 C.F.R. § 721.3.

[19] See 40 C.F.R. § 720.45(a)(2) ("monomers and other reactants" charged to the reactor at greater than two percent must be reported for a polymer in a PMN); 54 Fed. Reg. 27174 (June 28, 1989) (clarifying "other reactant" to include chain-transfer or cross-linking agents).

## ATTACHMENT A

## Excerpt from the Public TSCA Inventory

## Chemicals with *nonylphen* in Their CAS Names

Note: 379 total listings, of which 61 include "branched" in the name

| CAS Number | CAS Name | UVCB | Flag |
|---|---|---|---|
| 100765-56-8 | 1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)-, reaction products with polyethylene glycol mono(nonylphenyl) ether phosphate | UVCB | N; XU |
| 102322-78-1 | Formaldehyde, polymers with branched and linear nonylphenol, cyclohexylamine and ethylene oxide | UVCB | N; XU |
| 102900-03-8 | Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2-propanediol (2:1), polymer with 1,3-diisocyanatomethylbenzene, nonylphenol-blocked | UVCB | N; P; XU |
| 104133-71-3 | Formaldehyde, polymer with 4-nonylphenol and oxirane, benzoate hydrogen 2-sulfobutanedioate, sodium salt | | N; P; XU |
| 104242-08-2 | Formaldehyde, polymer with 1,3-benzenedimethanamine, 4-(1,1-dimethylethyl)phenol, nonylphenol and C,C,C-trimethyl-1,6-hexanediamine | | N; XU |
| 11096-42-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, compd. with iodine | | XU |
| 1152269-15-2 | Formaldehyde, polymers with branched 4-nonylphenol and ethylenediamine | UVCB | XU |
| 118460-96-1 | Formaldehyde, polymer with methylphenol, nonylphenol and phenol, bisulfited | UVCB | N; XU |
| 118922-84-2 | 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, nonylphenol-blocked | UVCB | N; P; XU |
| 12068-19-8 | 3,6,9,12,15-Pentaoxaheptadecan-1-ol, 17-(nonylphenoxy)-, 1-(dihydrogen phosphate), sodium salt (1:2) | | |
| 125304-10-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-(dinonylphenoxy)-, branched | UVCB | P; XU |
| 125904-12-3 | Benzene, 1,3-diisocyanatomethyl-, homopolymer, methanol- and nonylphenol-blocked | UVCB | P; XU |
| 127087-87-0 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched | UVCB | XU |
| 129595-12-6 | Rosin, maleated, polymer with bisphenol A, p-tert-butylphenol, formaldehyde, nonylphenol and pentaerythritol | UVCB | XU; Y1 |
| 129828-31-5 | 2-Propenoic acid, polymer with 4-(1,1-dimethylethyl)phenol, formaldehyde, 2,5-furandione, 2-methyloxirane, 4-nonylphenol and oxirane | | P; XU |

| | | | |
|---|---|---|---|
| 131794-65-5 | 1,2-Ethanediol, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2-[(4-nonylphenoxy)methyl]oxirane | | P; XU |
| 133448-35-8 | Poly(oxy-1,2-ethanediyl), .omega.-hydroxy-.omega.'-(nonylphenoxy)-.alpha.,.alpha.'-phosphinicobis- | | XU |
| 133475-41-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxoisooctadecyl)-.omega.-(nonylphenoxy)- | | XU |
| 143372-53-6 | Fatty acids, tall-oil, reaction products with N-(3-aminopropyl)-1,3-propanediamine, compds. with polyethylene glycol hydrogen maleate branched 4-nonylphenyl ether | UVCB | XU |
| 144468-71-3 | Poly(oxy-1,2-ethanediyl), .alpha.-[(2Z)-3-carboxy-1-oxo-2-propen-1-yl]-.omega.-(4-nonylphenoxy)-, branched | UVCB | P; XU |
| 14569-71-2 | 2-Propanol, 1,3-bis(4-nonylphenoxy)- | | |
| 146644-92-0 | Benzamide, 4-[2-(2-hydroxy-5-nonylphenyl)diazenyl]-N-[4-[2-(2-hydroxy-5-nonylphenyl)diazenyl]phenyl]- | | P |
| 146988-03-6 | 2-Propanol, 1,3-bis(4-nonylphenoxy)-, branched, potassium salt | UVCB | P |
| 146988-04-7 | 2-Propanol, 1,3-bis(4-nonylphenoxy)-, branched | UVCB | P |
| 147060-74-0 | Formaldehyde, polymers with branched 4-nonylphenol | UVCB | XU |
| 147094-54-0 | Oxirane, 2-[(4-nonylphenoxy)methyl]-, branched | UVCB | |
| 147923-40-8 | Amines, C14-18 and C16-18-unsatd. alkyl, ethoxylated, compds. with branched .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphates | UVCB | XU |
| 148373-01-7 | Amines, tallow alkyl, ethoxylated, compds. with polyethylene glycol hydrogen sulfate nonylphenyl ether | UVCB | E; P; S |
| 150678-63-0 | Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-(4-nonylphenoxy)-, branched | UVCB | P; XU |
| 152143-21-0 | Ethanol, 2,2',2''-nitrilotris-, compds. with polyethylene glycol mono(branched 4-nonylphenyl) ethers phosphates | UVCB | XU |
| 152143-22-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched, phosphates | UVCB | XU |
| 152143-23-2 | Oxirane, 2-methyl-, polymer with oxirane, mono(4-nonylphenyl) ether, branched | UVCB | XU |
| 153130-57-5 | Oxirane, 2-methyl-, polymer with 2-tetradecyloxirane, mono(dinonylphenyl) ether | | P; XU |
| 153795-76-7 | Formaldehyde, polymers with branched 4-nonylphenol, ethylene oxide and propylene oxide | UVCB | XU |
| 154397-82-7 | Formaldehyde, reaction products with diethanolamine, diisopropanolamine and nonylphenol, propoxylated | UVCB | P; XU |

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| 155240-08-7 | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched | UVCB | P; XU |
| 164907-73-7 | Formaldehyde, reaction products with 1-dodecanethiol and 4-nonylphenol | UVCB | P |
| 166432-59-3 | Rosin, fumarated, polymer with dinonylphenol, formaldehyde, nonylphenol and pentaerythritol | UVCB | P; XU |
| 169873-96-5 | Cashew, nutshell liq., polymer with branched 4-nonylphenol and formaldehyde | UVCB | P; XU |
| 169873-97-6 | Cashew, nutshell liq., polymer with branched 4-nonylphenol, ethylene oxide, formaldehyde and propylene oxide | UVCB | P; XU |
| 176227-28-4 | Coconut oil, ester with polyethylene glycol mono(branched 4-nonylphenyl) ether | UVCB | XU |
| 181828-08-0 | Rosin, maleated, polymer with formaldehyde, nonylphenol and pentaerythritol, zinc salts | UVCB | XU |
| 184489-39-2 | 2-Oxiranemethanol, polymer with nonylphenol, sulfate, ammonium salt | | XU |
| 184719-86-6 | Soybean oil, polymer with diethylene glycol, phthalic anhydride, polyethylene-polypropylene glycol mono(nonylphenyl) ether and polymethylenepolyphenylene isocyanate | UVCB | P; XU |
| 184719-88-8 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-[1-[(4-nonylphenoxy)methyl]-2-(2-propen-1-yloxy)ethoxy]-, branched, ammonium salts | UVCB | P; S |
| 185765-80-4 | Rosin, maleated, polymer with branched 4-nonylphenol, formaldehyde and pentaerythritol | UVCB | XU |
| 186100-09-4 | 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene and ethenylbenzene, ester with .alpha.-(dinonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) | | XU; Y1 |
| 186811-27-8 | Poly(oxy-1,2-ethanediyl), .alpha.-[1-[(4-nonylphenoxy)methyl]-2-(2-propen-1-yloxy)ethyl]-.omega.-hydroxy-, branched | UVCB | P; XU |
| 189702-71-4 | 1,2,3-Propanetriol, polymer with 2,4-diisocyanato-1-methylbenzene, 2-methyloxirane, oxirane and 1,2-propanediol, branched 4-nonylphenol-blocked | UVCB | P; XU |
| 189896-64-8 | Oxirane, 2-methyl-, polymer with 2,4-diisocyanato-1-methylbenzene and oxirane, branched 4-nonylphenol-blocked | UVCB | P; XU |
| 192464-31-6 | Naphtha (petroleum), light steam-cracked, debenzenized, polymd., polymer with dinonylphenol, formaldehyde, fumaric acid, nonylphenol, pentaerythritol and rosin | UVCB | P; XU |
| 193562-40-2 | Formaldehyde, polymer with 2-methyloxirane, nonylphenol and oxirane | | XU |
| 193635-31-3 | Formaldehyde, polymer with 4-nonylphenol, ether with .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)] | | XU |
| 193635-33-5 | Formaldehyde, polymer with 4-nonylphenol, ether with 2-methyloxirane polymer with oxirane mono[hydrogen (2Z)-2-butenedioate] | | XU |

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| 193635-72-2 | Oxirane, 2-methyl-, polymer with oxirane, 2-aminomethylethyl 4-nonylphenyl ether, branched | UVCB | E; N; P; S |
| 20227-53-6 | Phosphorous acid, 2-(1,1-dimethylethyl)-4-[1-[3-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-methylethyl]phenyl bis(4-nonylphenyl) ester | | |
| 203742-97-6 | Formaldehyde, reaction products with branched 4-nonylphenol and 1-dodecanethiol | UVCB | P |
| 20427-84-3 | Ethanol, 2-[2-(4-nonylphenoxy)ethoxy]- | | |
| 207996-36-9 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(4-nonylphenoxy)-, branched, ammonium salt | UVCB | XU |
| 213077-23-7 | Phosphorous acid, mixed 4-isononylphenyl and lauryl and tridecyl triesters | UVCB | P |
| 213779-09-0 | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(1-oxo-2-propen-1-yl)-.omega.-(4-nonylphenoxy)-, branched | UVCB | XU |
| 215462-84-3 | Fatty acids, C18-unsatd., dimers, polymers with nonylphenol and 3,3'-[oxybis(2,1-ethanediyloxy)]bis[1-propanamine] | UVCB | XU |
| 221353-37-3 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched, phosphates, ammonium salts | UVCB | XU |
| 227753-81-3 | 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, .alpha.-[(2Z)-3-carboxy-1-oxo-2-propen-1-yl]-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) and ethenylbenzene | | P; XU |
| 244235-47-0 | Ethanone, 1-(2-hydroxy-5-nonylphenyl)-, oxime, branched | UVCB | |
| 26027-38-3 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy- | | XU |
| 26569-08-4 | Phosphonic acid, bis(nonylphenyl) ester | | |
| 26571-11-9 | 3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol, 26-(nonylphenoxy)- | | |
| 27176-93-8 | Ethanol, 2-[2-(nonylphenoxy)ethoxy]- | | |
| 27177-05-5 | 3,6,9,12,15,18,21-Heptaoxatricosan-1-ol, 23-(nonylphenoxy)- | | |
| 27177-08-8 | 3,6,9,12,15,18,21,24,27-Nonaoxanonacosan-1-ol, 29-(nonylphenoxy)- | | |
| 27985-91-7 | Zinc, bis[O,O-bis(nonylphenyl) phosphorodithioato-.kappa.S,.kappa.S']- | | |
| 27986-36-3 | Ethanol, 2-(nonylphenoxy)- | | |
| 28212-44-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-(4-nonylphenoxy)- | | P; XU |
| 28299-18-5 | Poly(oxy-1,2-ethanediyl), .alpha.-(2,4-dinonylphenyl)-.omega.-hydroxy- | | XU |

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| 288620-90-6 | Ethanol, 2,2',2''-nitrilotris-, compds. with polyethylene glycol hydrogen sulfate branched nonylphenyl ether (1:1) | UVCB | XU |
| 29994-44-3 | 3,6,9,12,15-Pentaoxaheptadecan-1-ol, 17-(nonylphenoxy)-, 1-(dihydrogen phosphate) | | |
| 30846-35-6 | Formaldehyde, polymer with 4-nonylphenol and oxirane | | XU |
| 3115-49-9 | Acetic acid, 2-(4-nonylphenoxy)- | | |
| 31605-35-3 | Formaldehyde, polymer with 4-nonylphenol | | XU |
| 31691-97-1 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(4-nonylphenoxy)-, ammonium salt (1:1) | | XU |
| 331955-56-7 | Isocyanic acid, polymethylenepolyphenylene ester, branched 4-nonylphenol-blocked | UVCB | P; XU |
| 333784-10-4 | 2-Oxiranemethanol, homopolymer, mono(nonylphenyl) ether, branched and linear | UVCB | P; S |
| 36878-20-3 | Benzenamine, ar-nonyl-N-(nonylphenyl)- | | |
| 37205-87-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(isononylphenyl)-.omega.-hydroxy- | | XU |
| 37238-34-9 | Formaldehyde, polymer with nonylphenol and phenol | | XU |
| 37251-69-7 | Oxirane, 2-methyl-, polymer with oxirane, mono(nonylphenyl) ether | | XU |
| 37339-32-5 | Methanone, (2-hydroxy-5-nonylphenyl)phenyl-, oxime | | |
| 37340-60-6 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, phosphate, sodium salt | | XU |
| 37523-33-4 | Formaldehyde, polymer with 2-methyloxirane and 4-nonylphenol | | XU |
| 38142-11-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-(4-nonylphenoxy)-, sodium salt (1:1) | | XU |
| 38638-05-0 | Phosphoric acid, nonylphenyl diphenyl ester | | |
| 38796-94-0 | Poly(oxy-1,2-ethanediyl), .alpha.-(2-methyl-1-oxo-2-propen-1-yl)-.omega.-(4-nonylphenoxy)- | | XU |
| 39464-64-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(dinonylphenyl)-.omega.-hydroxy-, phosphate | | XU |
| 40404-63-5 | Formaldehyde, polymer with 4-nonylphenol and phenol | | XU |
| 50974-47-5 | Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxo-2-propen-1-yl)-.omega.-(nonylphenoxy)- | | XU |
| 50974-49-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(2-methyl-1-oxo-2-propen-1-yl)-.omega.-(nonylphenoxy)- | | XU |

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| 51382-32-2 | Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-phosphinicobis[.omega.-(nonylphenoxy)-, potassium salt (1:1) | | XU |
| 51609-41-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, phosphate | | XU |
| 51617-74-4 | Ethanol, 2-amino-, compd. with .alpha.-sulfo-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) (1:1) | | XU |
| 51811-79-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, phosphate | | XU |
| 51938-25-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(2-nonylphenyl)-.omega.-hydroxy- | | XU |
| 52002-51-4 | Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-nonylphenol (5:1) | | XU |
| 52019-35-9 | Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-nonylphenol (5:1) | | P; XU |
| 52368-50-0 | Decanoic acid, 2-[2-(nonylphenoxy)ethoxy]ethyl ester | | |
| 52503-15-8 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, phosphate, potassium salt | | XU |
| 53339-38-1 | Formaldehyde, polymer with N1-(2-aminoethyl)-1,2-ethanediamine and nonylphenol | | XU |
| 54478-52-3 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-(2-sulfoethoxy)-, sodium salt (1:1) | | XU |
| 54612-40-7 | Poly(oxy-1,2-ethanediyl), .alpha.-acetyl-.omega.-(nonylphenoxy)- | | N; P; XU |
| 54771-30-1 | Phosphorous acid, dinonylphenyl bis(nonylphenyl) ester | | |
| 55062-09-4 | Phosphorous acid, 2-ethylhexyl bis(nonylphenyl) ester | | |
| 55845-06-2 | Formaldehyde, polymer with nonylphenol and oxirane | | XU |
| 56323-90-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-(nonylphenoxy)-, sodium salt (1:1) | | XU |
| 56685-58-6 | Poly(oxy-1,2-ethanediyl), .alpha.-phosphono-.omega.-(nonylphenoxy)-, sodium salt (1:2) | | XU |
| 56889-59-9 | Formaldehyde, polymer with tris(nonylphenyl) phosphite | | XU |
| 56968-08-2 | Glycine, N-[(2-hydroxy-5-nonylphenyl)methyl]-N-methyl-, sodium salt (1:1) | | |
| 57451-03-3 | Ethanol, 2,2',2''-nitrilotris-, compd. with .alpha.-sulfo-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) (1:1) | | XU |
| 57579-17-6 | Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-methylenebis[.omega.-(nonylphenoxy)- | | XU |
| 58085-73-7 | Methanone, (2-hydroxy-5-nonylphenyl)phenyl- | | |

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| 58449-19-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-(2-sulfoethoxy)-, sodium salt (1:1) | | XU |
| 59006-81-4 | Formaldehyde, polymer with .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) | | XU |
| 59139-23-0 | Ethanol, 2-amino-, compd. with .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate | | XU |
| 59986-55-9 | Methanone, (3-chloro-2-hydroxy-5-nonylphenyl)phenyl-, oxime, (1Z)- | | |
| 59986-59-3 | Methanone, (3-chloro-2-hydroxy-5-nonylphenyl)phenyl-, oxime, (1E)- | | |
| 60474-62-6 | Cholest-5-en-3-ol (3.beta.)-, 3-(nonylphenyl carbonate) | | |
| 60785-18-4 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dinonylphenoxy)-, potassium salt (1:1) | | XU |
| 61089-50-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(dinonylphenyl)-.omega.-hydroxy-, (2Z)-2-butenedioate | | XU; Y1 |
| 61827-43-8 | Poly(oxy-1,2-ethanediyl), .alpha.-[(9Z)-1-oxo-9-octadecen-1-yl]-.omega.-(nonylphenoxy)- | | XU |
| 61837-81-8 | Ethanol, 2,2'-iminobis-, compd. with .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate | | XU |
| 63302-49-8 | Phosphorochloridous acid, bis(4-nonylphenyl) ester | | |
| 63302-94-3 | Phosphoric acid, bis(nonylphenyl) phenyl ester | | |
| 63323-16-0 | 2,5-Furandione, polymer with ethenylbenzene and .alpha.-[(ethenylphenyl)methyl]-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) | | XU |
| 63340-28-3 | Phosphoric acid, (1-methyl-1-phenylethyl)phenyl nonylphenyl phenyl ester | | |
| 63351-73-5 | Ethanol, 2-[2-[2-[2-(nonylphenoxy)ethoxy]ethoxy]ethoxy]-, 1-(hydrogen sulfate), ammonium salt (1:1) | | |
| 63428-92-2 | Formaldehyde, polymer with 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 63428-94-4 | Formaldehyde, polymer with 2,4-dinonylphenol, 1,2-ethanediamine and 4-nonylphenol | | XU |
| 63450-27-1 | 1,3-Benzenedicarboxylic acid, 1,3-bis(nonylphenyl) ester | | |
| 63451-49-0 | 1-Naphthalenamine, N-(nonylphenyl)- | | |
| 63494-85-9 | Formaldehyde, polymer with 4-methyl-2-nonylphenol and 4-methylphenol | | XU |
| 63494-86-0 | Formaldehyde, polymer with dinonylphenol and nonylphenol | | XU |
| 63727-43-5 | Formaldehyde, polymer with .alpha.-(4-nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) | | XU |

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| 64131-28-8 | Phenol, 2,6-bis[(2-hydroxy-3,5-dinonylphenyl)methyl]-4-nonyl- | | |
| 64771-73-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(dinonylphenyl)-.omega.-hydroxy-, phosphate, barium salt | | XU |
| 65045-86-5 | Ethanethiol, 2-(4-nonylphenoxy)-, 1,1'-(hydrogen phosphorodithioate) | | |
| 65045-87-6 | Zinc, bis[O,O-bis[2-(4-nonylphenoxy)ethyl] phosphorodithioato-.kappa.S,.kappa.S']-, (T-4)- | | |
| 65605-53-0 | 2-Propenoic acid, 2-methyl-, 2-(diethyloxidoamino)ethyl ester, polymer with .alpha.-fluoro-.omega.-[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene) and .alpha.-(2-methyl-1-oxo-2-propen-1-yl)-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl | | XU |
| 65756-48-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(2-carboxyethyl)-.omega.-(nonylphenoxy)-, sodium salt (1:1) | | XU |
| 65761-26-4 | Formaldehyde, polymer with dinonylphenol and 4-(1,1,3,3-tetramethylbutyl)phenol | | XU |
| 65829-79-0 | Formaldehyde, polymer with 1,3-benzenediol and 4-nonylphenol | | XU |
| 66172-78-9 | 3,6,9,12,15,18-Hexaoxaeicosan-1-ol, 20-(dinonylphenoxy)-, 1-(dihydrogen phosphate) | | |
| 66172-79-0 | 3,6,9,12,15-Pentaoxaheptadecan-1-ol, 17-(nonylphenoxy)-, 1,1'-(hydrogen phosphate) | | |
| 66172-80-3 | 3,6,9,12,15-Pentaoxaheptadecan-1-ol, 17-(nonylphenoxy)-, 1,1'-(hydrogen phosphate), sodium salt (1:1) | | |
| 66172-81-4 | 3,6,9,12,15-Pentaoxaheptadecan-1-ol, 17-(nonylphenoxy)-, 1,1'-(hydrogen phosphate), compd. with 2,2'-iminobis[ethanol] (1:1) | | |
| 66172-82-5 | 3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol, 26-(nonylphenoxy)-, 1,1'-(hydrogen phosphate) | | |
| 66172-83-6 | 3,6,9,12,15,18-Hexaoxaeicosan-1-ol, 20-(dinonylphenoxy)-, 1,1'-(hydrogen phosphate) | | |
| 66172-84-7 | 3,6,9,12,15-Pentaoxaheptadecan-1-ol, 17-(nonylphenoxy)-, 1-(dihydrogen phosphate), compd. with 2,2'-iminobis[ethanol] (1:2) | | |
| 66172-85-8 | 3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol, 26-(dinonylphenoxy)- | | |
| 66197-78-2 | 3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol, 26-(nonylphenoxy)-, 1-(dihydrogen phosphate) | | |
| 66988-46-3 | Oxirane, 2-methyl-, polymer with oxirane, mono(2,4-dinonylphenyl) ether | | XU |
| 67815-84-3 | 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 1,3-diisocyanatomethylbenzene, isononylphenol, 2-methyloxirane, oxirane and 1,2-propanediol | | XU |
| 67845-40-3 | 3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol, 26-(4-nonylphenoxy)-, 1-acetate | | |

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| 67859-74-9 | Phosphorous acid, bis(2-ethylhexyl) nonylphenyl ester | | |
| 67890-12-4 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(isononylphenoxy)-, potassium salt (1:1) | | XU |
| 678991-31-6 | Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxo-2-propen-1-yl)-.omega.-(4-nonylphenoxy)-, branched | UVCB | XU |
| 67905-85-5 | 9,12-Octadecadienoic acid (9Z,12Z)-, dimer, polymer with N1-(2-aminoethyl)-1,2-ethanediamine, formaldehyde, 2-methyloxirane, 4-nonylphenol, (9Z,12Z)-9,12-octadecadienoic acid trimer and oxirane | | XU |
| 67905-87-7 | Formaldehyde, polymer with N1-(2-aminoethyl)-1,2-ethanediamine, 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 67905-88-8 | Formaldehyde, polymer with N1-(2-aminoethyl)-1,2-ethanediamine, 4-nonylphenol and oxirane | | XU |
| 67905-89-9 | Formaldehyde, polymer with N1-(2-aminoethyl)-1,2-ethanediamine, 2-methyloxirane and 4-nonylphenol | | XU |
| 67905-90-2 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, 4-(1,1-dimethylpropyl)phenol, 4-nonylphenol and oxirane | | XU |
| 67905-91-3 | 2-Propenoic acid, polymer with formaldehyde, 2,5-furandione, 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 67905-93-5 | Formaldehyde, polymer with 4-(1,1-dimethylpropyl)phenol and 4-nonylphenol | | XU |
| 67905-94-6 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, 4-(1,1-dimethylpropyl)phenol and 4-nonylphenol | | XU |
| 67905-95-7 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol and 4-nonylphenol | | XU |
| 67905-96-8 | Formaldehyde, polymer with N1-(2-aminoethyl)-1,2-ethanediamine and 4-nonylphenol | | XU |
| 67906-04-1 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, 4-(1,1-dimethylpropyl)phenol, 2-methyloxirane and 4-nonylphenol | | XU |
| 67922-57-0 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, phosphate, magnesium salt | | XU |
| 67989-71-3 | Poly(oxy-1,2-ethanediyl), .alpha.-(1,28-dihydroxy-1-oxido-2,5,8,11,14,17,20,23,26-nonaoxa-1-phosphaoctacos-1-yl)-.omega.-(nonylphenoxy)- | | XU |
| 67989-96-2 | 1,3-Isobenzofurandione, polymer with 2,2-bis(hydroxymethyl)-1,3-propanediol and .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) | | XU |
| 67999-57-9 | Poly(oxy-1,2-ethanediyl), .alpha.-[3-carboxy-1-oxosulfopropyl]-.omega.-(nonylphenoxy)-, sodium salt (1:2) | | XU |
| 68003-22-5 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dinonylphenoxy)-, ammonium salt (1:1) | | XU |
| 68003-25-8 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dinonylphenoxy)- | | XU |

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| 68015-46-3 | Fatty acids, tall-oil, polymers with epoxidized soybean oil, polyethylene glycol mono(nonylphenyl) ether, styrene and trimethylolethane | UVCB | XU |
| 68025-15-0 | Poly(oxy-1,2-ethanediyl), .alpha.-phosphono-.omega.-(nonylphenoxy)-, potassium salt (1:2) | | XU |
| 68025-21-8 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dinonylphenoxy)-, sodium salt (1:1) | | XU |
| 68038-17-5 | Fatty acids, C18-unsatd., dimers, compds. with diethylenetriamine-formaldehyde-p-nonylphenol polymer and tall-oil fatty acids | UVCB | XU |
| 68069-33-0 | 2-Propenoic acid, ethyl ester, polymer with ethenylbenzene and .alpha.-[(ethenylphenyl)methyl]-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) | | XU |
| 68071-47-6 | Distillates (petroleum), hydrotreated middle, polymers with dicyclopentadiene, dipentaerythritol, formaldehyde, fumaric acid, indene, isophthalic acid, linseed oil, maleic anhydride, methyldicyclopentadiene, methylstyrene, nonylphenol, oleylamine, 1-prope | UVCB | XU |
| 68072-38-8 | 2-Oxiranemethanol, polymer with nonylphenol | | XU |
| 68084-59-3 | 2-Propenoic acid, 2-methyl-, polymer with .alpha.-(2-methyl-1-oxo-2-propen-1-yl)-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) | | XU |
| 68084-61-7 | Phosphoric trichloride, polymer with formaldehyde and nonylphenol | | XU |
| 68092-60-4 | Formaldehyde, polymer with 2-methylbenzenamine and 4-nonylphenol | | XU |
| 68092-61-5 | Formaldehyde, polymer with 2-methyloxirane and nonylphenol | | XU |
| 68109-60-4 | Formaldehyde, polymer with N1-(2-aminoethyl)-1,2-ethanediamine and .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl), (9Z)-9-octadecenoate (ester) | | XU |
| 68110-37-2 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, nonylphenol and phenol | | XU |
| 68123-25-1 | Poly(oxy-1,2-ethanediyl), .alpha.-[3-[bis(2-hydroxyethyl)amino]-2-hydroxypropyl]-.omega.-(4-nonylphenoxy)- | | XU |
| 68133-20-0 | Formaldehyde, polymer with dinonylphenol, 2-methyloxirane and nonylphenol | | XU |
| 68133-21-1 | Formaldehyde, polymer with dinonylphenol, 2-methyloxirane, nonylphenol and oxirane | | XU |
| 68133-22-2 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, dinonylphenol, 2-methyloxirane, nonylphenol and oxirane | | XU |

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| 68140-39-6 | Formaldehyde, polymer with 2-(chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], 2-methyloxirane, 2-methyloxirane polymer with oxirane ether with 1,2,3-propanetriol (3:1), nonylphenol and oxirane | | XU |
| 68140-74-9 | Formaldehyde, polymer with 2-(chloromethyl)oxirane, 4-(1,1-dimethylethyl)phenol, 4-(1,1-dimethylpropyl)phenol, 4,4'-(1-methylethylidene)bis[phenol], 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 68140-83-0 | Formaldehyde, polymer with dinonylphenol, nonylphenol and oxirane | | XU |
| 68152-52-3 | Rosin, fumarated, polymer with dipentaerythritol, formaldehyde and nonylphenol | UVCB | XU |
| 68152-62-5 | Rosin, maleated, polymer with formaldehyde, nonylphenol and pentaerythritol | UVCB | XU |
| 68154-32-5 | Fatty acids, coco, esters with polyethylene glycol mono(nonylphenyl) ether | UVCB | XU |
| 68155-79-3 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, 4-(1,1-dimethylpropyl)phenol, 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 68155-83-9 | Formaldehyde, polymer with 4-(1,1-dimethylpropyl)phenol, 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 68156-15-0 | Benzenemethanesulfonic acid, ar-hydroxy-, sodium salt (1:1), polymer with formaldehyde and nonylphenol | | XU |
| 68171-44-8 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, 4-nonylphenol and oxirane | | XU |
| 68186-33-4 | Phosphorous acid, dinonylphenyl nonylphenyl ester | | |
| 68188-99-8 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 68201-89-8 | Formaldehyde, polymer with 2-(chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 68213-70-7 | Tung oil, polymer with formaldehyde, nonylphenol and phenol | UVCB | XU |
| 68214-46-0 | Formaldehyde, polymer with 2-(chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], 2-methyloxirane, 2-methyloxirane polymer with oxirane ether with 1,2,3-propanetriol (3:1), 4-nonylphenol and oxirane | | XU |
| 68298-70-4 | Hexanedioic acid, polymer with formaldehyde, 2-methyloxirane, 4-nonylphenol, (9Z,12Z)-9,12-octadecadienoic acid dimer and oxirane | | XU |
| 68299-14-9 | Ethanol, 2-amino-, compd. with .alpha.-(dinonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate | | XU |

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| 68308-57-6 | Tallow, hydrogenated, reaction products with diethanolamine, polyethylene glycol, polyethylene glycol mono(nonylphenyl) ether and trimethylolpropane | UVCB | XU |
| 68332-67-2 | Formaldehyde, polymer with 2-methyloxirane and 4-nonylphenol, didodecylbenzenesulfonate | | XU |
| 68333-52-8 | Fatty acids, tall-oil, polymers with linseed oil, maleic anhydride, pentaerythritol, phthalic anhydride, polyethylene glycol mono(nonylphenyl) ether and soybean oil | UVCB | XU |
| 68333-98-2 | Coconut oil, ester with polyethylene glycol mono(nonylphenyl) ether | UVCB | XU |
| 68334-76-9 | Formaldehyde, polymer with 2-(chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and 4-nonylphenol | | XU |
| 68334-87-2 | Benzoic acid, 2-hydroxy-, polymer with dinonylphenol, formaldehyde and 4-(1,1,3,3-tetramethylbutyl)phenol | | XU |
| 68410-17-3 | Fatty acids, C18-unsatd., dimers, compds. with ethoxylated diethylenetriamine-formaldehyde-p-nonylphenol polymer and tall-oil fatty acids | UVCB | XU |
| 68412-53-3 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched, phosphates | UVCB | XU |
| 68412-54-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched | UVCB | XU |
| 68439-31-6 | 2-Butenedioic acid (2Z)-, polymer with methoxyethene, ester with .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) | | XU |
| 68440-95-9 | Soybean oil, ether with polyethylene glycol mono(4-nonylphenyl) ether | UVCB | XU |
| 68442-67-1 | Barium, carbonate 4-nonylphenol complexes | UVCB | |
| 68443-66-3 | Ethanol, 2,2'-iminobis-, polymer with .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate | | XU |
| 68443-69-6 | 2-Propanol, 1-amino-, polymer with .alpha.-phosphono-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) | | XU |
| 68458-49-1 | Polyphosphoric acids, esters with polyethylene glycol nonylphenyl ether | UVCB | XU |
| 68458-68-4 | Rosin, polymer with dicyclopentadiene, formaldehyde and nonylphenol | UVCB | XU |
| 68458-94-6 | Linseed oil, polymer with bisphenol A, dipentaerythritol, formaldehyde, fumaric acid, glycerol, nonylphenol and rosin | UVCB | XU |
| 68477-16-7 | Tall oil, polymer with formaldehyde, linoleic acid dimer, linoleic acid trimer, 4-nonylphenol and tripentaerythritol, ethoxylated propoxylated | UVCB | XU |
| 68478-41-1 | Barium, 4-nonylphenol phenol complexes | UVCB | |
| 68479-67-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, polymer with ethenylmethylbenzene | | XU |

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| 68511-21-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, phosphate, ammonium salt | | XU |
| 68511-24-0 | Formaldehyde, polymer with 2-methyloxirane, 4-nonylphenol and oxirane, didodecylbenzenesulfonate | | XU |
| 68511-93-3 | 9,12-Octadecadienoic acid (9Z,12Z)-, dimer, reaction products with maleic anhydride, ester with 1,3-bis(4-nonylphenoxy)-2-propanol | UVCB | |
| 68515-89-9 | Barium, carbonate nonylphenol complexes | UVCB | |
| 68516-22-3 | Formaldehyde, polymer with dinonylphenol | | XU |
| 68517-09-9 | Ethanone, 1-(2-hydroxy-5-tert-nonylphenyl)-, oxime | | |
| 68540-71-6 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde, 2-methylphenol and nonylphenol | | XU |
| 68540-74-9 | Poly(oxy-1,2-ethanediyl), .alpha.-phosphono-.omega.-(dinonylphenoxy)-, potassium salt (1:1) | | XU |
| 68541-00-4 | Methanone, (3-chloro-2-hydroxy-5-nonylphenyl)phenyl- | | |
| 68541-55-9 | Formaldehyde, polymer with butylphenol, dinonylphenol, nonylphenol and oxirane | | XU |
| 68552-49-8 | Fatty acids, tall-oil, esters with polyethylene glycol mono(4-nonylphenyl) ether | UVCB | XU |
| 68552-50-1 | Fatty acids, tall-oil, esters with polyethylene glycol mono(dinonylphenyl) ether | UVCB | XU |
| 68553-97-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, phosphate, sodium salt | | XU |
| 68554-52-9 | Siloxanes and Silicones, di-Me, (4-nonylphenoxy)-terminated | UVCB | XU |
| 68568-75-2 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, methylphenol and 4-nonylphenol | | XU |
| 68583-61-9 | Ethanol, 2,2'-iminobis-, compds. with polyethylene glycol mono(branched nonylphenyl) ether phosphates | UVCB | XU |
| 68584-47-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched, phosphates, potassium salts | UVCB | XU |
| 68585-50-2 | Sulfuric acid, reaction products with O,O-bis(nonylphenyl) hydrogen phosphorodithioate and molybdenum oxide (MoO3) | UVCB | |
| 68603-80-5 | Asphalt, reaction products with polyethylene glycol mono(nonylphenyl) ether, aluminum salts | UVCB | XU |
| 68604-64-8 | Fatty acids, coco, esters with polyethylene glycol mono(nonylphenyl) ether, sodium salts | UVCB | XU |
| 68605-30-1 | Barium, nonylphenol tall-oil fatty acids complexes | UVCB | |
| 68610-97-9 | Formaldehyde, polymer with nonylphenol, reaction products with diethanolamine and propylene oxide | UVCB | XU |

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| 68631-00-5 | Formaldehyde, polymer with 1,2-ethanediamine and nonylphenol | | XU |
| 68649-55-8 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(nonylphenoxy)-, branched, ammonium salt | UVCB | XU |
| 68783-44-8 | Fatty acids, tall-oil, esters with polyethylene glycol mono(nonylphenyl) ether, polymd., oxidized, bisulfited | UVCB | XU |
| 68783-45-9 | Fatty acids, tall-oil, esters with polyethylene glycol mono(nonylphenyl) ether, sulfated | UVCB | XU |
| 68783-51-7 | Fatty acids, tall-oil, polymers with epoxidized soybean oil, polyethylene glycol mono(nonylphenyl) ether and trimethylolethane | UVCB | XU |
| 68797-80-8 | 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) | | XU |
| 68815-57-6 | Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mixed esters with fumaric acid and polyethylene glycol mono(nonylphenyl) ether | UVCB | XU |
| 68845-07-8 | Formaldehyde, polymer with nonylphenol, phenol and 1,3,5,7-tetraazatricyclo[3.3.1.13,7]decane | | XU |
| 68855-90-3 | Lecithins, polymers with dipentaerythritol, formaldehyde, fumaric acid, isophthalic acid, linseed oil, nonylphenol, pentaerythritol, rosin, soybean oil and trimethylolpropane | UVCB | XU |
| 68855-91-4 | Linseed oil, polymer with dipentaerythritol, formaldehyde, fumaric acid, nonylphenol and rosin | UVCB | XU |
| 68891-11-2 | Oxirane, 2-methyl-, polymer with oxirane, mono(nonylphenyl) ether, branched | UVCB | XU |
| 68891-21-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(dinonylphenyl)-.omega.-hydroxy-, branched | UVCB | XU |
| 68891-32-7 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dinonylphenoxy)-, branched, ammonium salt | UVCB | XU |
| 68891-33-8 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(nonylphenoxy)-, branched | UVCB | XU |
| 68891-34-9 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dinonylphenoxy)-, branched | UVCB | XU |
| 68891-39-4 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(nonylphenoxy)-, branched, sodium salt | UVCB | XU |
| 68891-40-7 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dinonylphenoxy)-, branched, sodium salt | UVCB | XU |
| 68891-41-8 | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched | UVCB | XU |
| 68908-33-8 | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-nonylphenol (5:1) | | XU |
| 68910-15-6 | Calcium, nonylphenol sulfides phosphosulfurized polybutene complexes | UVCB | XU |

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| 68918-00-3 | Tung oil, polymer with formaldehyde, hexamethylenetetramine, nonylphenol and phenol | UVCB | XU |
| 68918-09-2 | Tallow, hydrogenated, reaction products with diethanolamine and polyethylene glycol mono(nonylphenyl) ether | UVCB | XU |
| 68951-48-4 | Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N1,N2-bis(2-aminoethyl)-1,2-ethanediamine and 2-(chloromethyl)oxirane, nonylphenol-modified | UVCB | XU |
| 68954-73-4 | Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, Me 4-hydroxybenzoate, nonylphenol-modified | UVCB | XU |
| 68954-84-7 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched, phosphates, sodium salts | UVCB | XU |
| 68955-51-1 | Ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., reaction products with polyethylene glycol mono(nonylphenyl) ether phosphate | UVCB | XU |
| 68955-75-9 | Amines, N-tallow alkyltrimethylenedi-, compds. with polyethylene glycol mono(nonylphenyl) ether phosphate | UVCB | XU |
| 68957-76-6 | Ethanol, 2,2',2''-nitrilotris-, compd. with .alpha.-(nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate | | XU |
| 68958-57-6 | Poly(oxy-1,2-ethanediyl), .alpha.-(carboxymethyl)-.omega.-(diisononylphenoxy)-, sodium salt (1:1) | | XU |
| 68958-82-7 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, dinonylphenol, nonylphenol and oxirane | | XU |
| 68958-83-8 | Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, dinonylphenol and nonylphenol | | XU |
| 68966-55-2 | Ethanol, 2,2'-iminobis-, compd. with .alpha.-(4-nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate | | XU |
| 68974-06-1 | 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and .alpha.-[(ethenylphenyl)methyl]-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) | | XU |
| 68988-26-1 | 2-Butenedioic acid (2E)-, mixed esters with polyethylene glycol and polyethylene glycol mono(nonylphenyl) ether, polymer with methacrylic acid and styrene | UVCB | XU |
| 68990-46-5 | Fatty acids, tall-oil, esters with polyethylene glycol mono(nonylphenyl) ether | UVCB | XU |
| 68991-12-8 | Linseed oil, polymer with dipentaerythritol, formaldehyde, fumaric acid, isophthalic acid, nonylphenol, pentaerythritol, rosin and trimethylolpropane | UVCB | XU |
| 69011-24-1 | Formaldehyde, polymers with branched nonylphenol and p-tert-butylphenol | UVCB | XU |
| 69011-25-2 | Formaldehyde, polymers with branched nonylphenol, p-tert-butylphenol, ethylene oxide and propylene oxide | UVCB | XU |
| 69011-26-3 | Formaldehyde, polymers with branched nonylphenol, p-tert-butylphenol, ethylene oxide and propylene oxide, 2-hydroxybutanedioate | UVCB | XU |

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| 69011-27-4 | Formaldehyde, polymers with branched nonylphenol, ethylene oxide and propylene oxide | UVCB | XU |
| 69029-29-4 | Formaldehyde, polymer with nonylphenol and oxirane, hydrogen 2-sulfobutanedioate, sodium salt | | XU |
| 69289-21-0 | Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(dimethyliminio)bis(2-hydroxy-3,1-propanediyl)]bis[.omega.-(2,4-dinonylphenoxy)-, chloride (1:1) | | XU |
| 69847-41-2 | Formaldehyde, polymer with 2-(chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], 2-methyloxirane, nonylphenol and oxirane | | XU |
| 69980-71-8 | Acetic acid, 2-mercapto-, polymer with 2-(chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol], nonylphenyl ester | | XU |
| 70179-80-5 | 4,7,10,13,16,19-Hexaoxaheneicosanoic acid, 21-(4-nonylphenoxy)-, sodium salt (1:1) | | |
| 70179-85-0 | Poly(oxy-1,2-ethanediyl), .alpha.-phosphono-.omega.-(4-nonylphenoxy)-, sodium salt (1:2) | | XU |
| 70247-93-7 | Oxirane, 2-methyl-, polymer with oxirane, 1-ethoxyethyl nonylphenyl ether, branched | UVCB | XU |
| 70248-11-2 | Silicic acid (H2SiO3), sodium salt (1:?), reaction products with polyethylene glycol mono(nonylphenyl) ether and potassium hydroxide | UVCB | XU |
| 70248-44-1 | Rosin, fumarated, polymer with formaldehyde, glycerol, nonylphenol and pentaerythritol | UVCB | XU |
| 70248-46-3 | Rosin, maleated, polymer with formaldehyde, glycerol, nonylphenol and pentaerythritol | UVCB | XU |
| 70624-21-4 | Poly(oxy-1,2-ethanediyl), .alpha.-[3-chloro-2-(3-chloro-2-hydroxypropoxy)propyl]-.omega.-(4-nonylphenoxy)- | | XU |
| 70644-43-8 | Poly(oxy-1,2-ethanediyl), .alpha.-[2-(2-hydroxy-3-sulfopropoxy)-3-sulfopropyl]-.omega.-(4-nonylphenoxy)-, sodium salt (1:2) | | XU |
| 70851-29-5 | Siloxanes and Silicones, di-Me, [[17-(4-nonylphenoxy)-3,6,9,12,15-pentaoxaheptadec-1-yl]oxy]-terminated | UVCB | XU |
| 71002-15-8 | 1,3-Benzenedisulfonic acid, 4-[2-[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]diazenyl]-6-[[4-chloro-6-(4-nonylphenoxy)-1,3,5-triazin-2-yl]amino]-, sodium salt (1:2) | | |
| 71060-59-8 | Amides, C12-18, N-(hydroxyethyl), mixed esters with polyethylene glycol mono(nonylphenyl)ether and 2-sulfobutanedioic acid | UVCB | XU |
| 71077-22-0 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde, 4-nonylphenol and zinc oxide (ZnO) | | XU |
| 71243-71-5 | Rosin, maleated, polymer with p-butylphenol, formaldehyde, glycerol and nonylphenol | UVCB | XU |
| 71342-82-0 | Ethanol, 2,2',2''-nitrilotris-, compds. with polyethylene glycol mono(branched nonylphenyl)ethers phosphates | UVCB | XU |

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| 71501-61-6 | Oxirane, 2-methyl-, polymer with oxirane, mono(hydrogen sulfate), 3,5-dinonylphenyl ether, ammonium salt | | XU |
| 71501-62-7 | Oxirane, 2-methyl-, polymer with oxirane, mono(hydrogen sulfate), 3,5-dinonylphenyl ether, sodium salt | | XU |
| 71549-99-0 | 9,12-Octadecadienoic acid (9Z,12Z)-, dimer, polymer with 3,3'-[oxybis(2,1-ethanediyloxy)]bis[1-propanamine], nonylphenyl ester | | XU |
| 71608-69-0 | Ethanol, 2,2',2''-nitrilotris-, compd. with 2-methyloxirane polymer with oxirane mono(hydrogen sulfate) 3,5-dinonylphenyl ether (1:1) | | XU |
| 71926-19-7 | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(1-oxo-2-propen-1-yl)-.omega.-(nonylphenoxy)- | | XU |
| 72066-94-5 | 2-Propanol, 1,1',1'',1'''-[[(2-hydroxypropoxy)nonylphenylene]bis[methylenenitrilobis(2,1-ethanediyloxy)]]tetrakis- | | |
| 72121-75-6 | Formaldehyde, polymer with 2,2'-iminobis[ethanol], 4,4'-(1-methylethylidene)bis[phenol], nonylphenol and 1,3,5-triazine-2,4,6-triamine | | XU |
| 72187-15-6 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, N-[3-(dimethylamino)propyl]phosphoramidate, aluminum salt | | XU |
| 72245-31-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, [3-(dimethylamino)propyl]phosphoramidates | UVCB | XU |
| 72252-38-1 | 1-Phenanthrenemethanamine, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)-, compd. with .alpha.-sulfo-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) (1:1) | | XU |
| 72391-12-9 | Poly(oxy-1,2-ethanediyl), .alpha.-[(2Z)-1,4-dioxo-4-phenoxy-2-buten-1-yl]-.omega.-(4-nonylphenoxy)- | | XU |
| 72391-13-0 | Poly(oxy-1,2-ethanediyl), .alpha.-[(2Z)-3-carboxy-1-oxo-2-propen-1-yl]-.omega.-(4-nonylphenoxy)-, sodium salt (1:1) | | XU |
| 72391-14-1 | Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-(1,2-phenylenedicarbonyl)bis[.omega.-(4-nonylphenoxy)- | | XU |
| 72391-15-2 | Poly(oxy-1,2-ethanediyl), .alpha.-(2-carboxybenzoyl)-.omega.-(4-nonylphenoxy)-, sodium salt (1:1) | | XU |
| 72391-16-3 | Poly(oxy-1,2-ethanediyl), .alpha.-[2-(phenoxycarbonyl)benzoyl]-.omega.-(4-nonylphenoxy)- | | XU |
| 72403-35-1 | Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(2Z)-1,4-dioxo-2-butene-1,4-diyl]bis[.omega.-(4-nonylphenoxy)- | | XU |
| 72403-43-1 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde and nonylphenol, titanium(4+) salt | | XU |
| 72403-44-2 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde and nonylphenol, aluminum salt | | XU |
| 72403-45-3 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde and nonylphenol, calcium salt | | XU |

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| 72403-46-4 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde and nonylphenol, magnesium salt | | XU |
| 72403-47-5 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde and nonylphenol, barium salt | | XU |
| 72403-49-7 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde and nonylphenol, lithium salt | | XU |
| 72429-00-6 | Benzoic acid, 2-hydroxy-, polymer with formaldehyde and nonylphenol, cerium(4+) salt | | XU |
| 72480-52-5 | Fatty acids, tall-oil, compds. with diethylenetriamine-ethylene oxide-formaldehyde-4-nonylphenol polymer | UVCB | XU |
| 73018-59-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, reaction products with polystyrene | UVCB | XU |
| 73070-39-0 | Formaldehyde, reaction products with branched and linear nonylphenol, sulfonated, sodium salts | UVCB | |
| 73070-43-6 | Poly(oxy-1,2-ethanediyl), .alpha.-[[dimethyl(phenylmethyl)ammonio]acetyl]-.omega.-hydroxy-, branched and linear nonylphenyl ethers, chlorides | UVCB | XU |
| 73070-44-7 | Poly(oxy-1,2-ethanediyl), .alpha.-[2-(dimethyltetradecylammonio)acetyl]-.omega.-hydroxy-, branched and linear nonylphenyl ethers, chlorides | UVCB | XU |
| 73070-45-8 | Poly(oxy-1,2-ethanediyl), .alpha.-[2-(dodecyldimethylammonio)acetyl]-.omega.-hydroxy-, branched and linear nonylphenyl ethers, chlorides | UVCB | XU |
| 7311-27-5 | Ethanol, 2-[2-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]ethoxy]- | | |
| 73287-37-3 | Poly(oxy-1,2-ethanediyl), .alpha.-[3-[(carboxymethyl)(2-hydroxyethyl)amino]-2-hydroxypropyl]-.omega.-(4-nonylphenoxy)-, sodium salt (1:1) | | XU |
| 73891-86-8 | Siloxanes and Silicones, di-Me, hydroxy-terminated, ethers with polypropylene glycol mono(nonylphenyl) ether | UVCB | XU |
| 74486-33-2 | Formaldehyde, polymer with methylphenol, nonylphenol and phenol | | XU |
| 75125-58-5 | Formaldehyde, polymer with 1,3-diisocyanatomethylbenzene, 2-methyloxirane, 4-nonylphenol and oxirane | | XU |
| 75627-31-5 | Poly(oxy-1,2-ethanediyl), .alpha.-[3-[(carboxymethyl)methylamino]-2-hydroxypropyl]-.omega.-(4-nonylphenoxy)-, sodium salt (1:1) | | XU |
| 75810-74-1 | 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and .alpha.-(2-methyl-1-oxo-2-propen-1-yl)-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) | | XU |
| 760949-14-2 | Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer, polypropylene glycol mono(branched 4-nonylphenyl) ether-blocked | UVCB | P; XU |

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| 76666-07-4 | 9,12-Octadecadienoic acid (9Z,12Z)-, dimer, polymer with N1-(2-aminoethyl)-1,2-ethanediamine, formaldehyde, 4-nonylphenol, (9Z,12Z)-9,12-octadecadienoic acid trimer and oxirane | | XU |
| 79412-23-0 | Poly(oxy-1,2-ethanediyl), .alpha.-[(2Z)-3-carboxy-1-oxo-2-propen-1-yl]-.omega.-(nonylphenoxy)- | | P; XU |
| 80146-18-5 | 1,2,3-Propanetriol, polymer with 1,3-diisocyanatomethylbenzene, 2-methyloxirane, oxirane and 1,2-propanediol, isononylphenyl ether | UVCB | XU |
| 82339-03-5 | Formaldehyde, polymer with 4-nonylphenol and oxirane, phosphate | | XU |
| 84732-35-4 | Formaldehyde, polymer with 4-nonylphenol and 4-(1,1,3,3-tetramethylbutyl)phenol | | P; XU |
| 858944-25-9 | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-methyl-.omega.-(4-nonylphenoxy)-, branched | UVCB | P; S |
| 89899-30-9 | Lignin, alkali, polymer with formaldehyde, nonylphenol and phenol | | P; XU |
| 89899-31-0 | D-Glucopyranoside, methyl, polymer with alkali lignin, formaldehyde, nonylphenol and phenol | | P; XU |
| 89899-32-1 | D-Glucopyranoside, methyl, polymer with formaldehyde, nonylphenol and phenol | | P; XU |
| 90051-52-8 | Butanedioic acid, 2-methylene-, polymer with ethyl 2-propenoate, .alpha.-(2-methyl-1-oxo-2-propen-1-yl)-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) and 2-methyl-2-propenoic acid | | XU |
| 9014-90-8 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(nonylphenoxy)-, sodium salt (1:1) | | XU |
| 9014-93-1 | Poly(oxy-1,2-ethanediyl), .alpha.-(dinonylphenyl)-.omega.-hydroxy- | | XU |
| 9016-45-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy- | | XU |
| 9040-38-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(3-carboxy-1-oxo-3-sulfopropyl)-.omega.-(nonylphenoxy)-, sodium salt (1:2) | | XU |
| 9040-65-7 | Formaldehyde, polymer with nonylphenol | | XU |
| 9051-57-4 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(nonylphenoxy)-, ammonium salt (1:1) | | XU |
| 9064-15-7 | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(nonylphenyl)-.omega.-hydroxy- | | XU |
| 9071-85-6 | Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-phosphinicobis[.omega.-(nonylphenoxy)- | | XU |
| 9081-17-8 | Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(nonylphenoxy)- | | XU |
| 92908-52-6 | Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N1,N2-bis(2-aminoethyl)-1,2-ethanediamine, 2-(butoxymethyl)oxirane, 2-(chloromethyl)oxirane and nonylphenol | | XU |

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| 940912-28-7 | Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol | UVCB | P; XU |
| 96805-64-0 | Poly(oxy-1,2-ethanediyl), .alpha.-[[[1-methyl-1-[3-(1-methylethenyl)phenyl]ethyl]amino]carbonyl]-.omega.-(dinonylphenoxy)- | | P; XU |
| 96805-65-1 | 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and .alpha.-[[[1-methyl-1-[3-(1-methylethenyl)phenyl]ethyl]amino]carbonyl]-.omega.-(dinonylphenoxy)poly(oxy-1,2-ethanediyl) | | P; XU |
| 96828-30-7 | Poly(oxy-1,2-ethanediyl), .alpha.-[[[1-methyl-1-[3-(1-methylethenyl)phenyl]ethyl]amino]carbonyl]-.omega.-(nonylphenoxy)- | | N; P; XU |
| 96828-31-8 | 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and .alpha.-[[[1-methyl-1-[3-(1-methylethenyl)phenyl]ethyl]amino]carbonyl]-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) | | N; P; XU |
| 99343-84-7 | Amines, N-tallow alkyltrimethylenedi-, polymers with formaldehyde, hexamethylenediamine and nonylphenol | UVCB | N; P; XU |
| 99821-14-4 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, phosphate, calcium salt | | N; XU |

## Attachment B

## Listed NPs and NPEs Reported by ACC Members as Being Manufactured, Imported, or Processed

| CAS Number | CAS Name | Function of Substance in Product or Raw Material |
|---|---|---|
| 104-40-5 | Phenol, 4-nonyl- | Epoxy catalyst; emulsifier; reactant/intermediate used in synthesis of anti-oxidants, automotive and industrial lubricant additives; intermediate for automotive and industrial lubricant additives |
| 9016-45-9 | Poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy- | Surfactant; component in an emulsifier; thickening additive in putty; wetting agent; defoamer additive component; component in a cleaner; emulsifier; deemulsifier in lubricant additive products; component of automotive and industrial lubricant additive products; processing aid; reactant used in synthesis of dispersants; pesticide inert ingredient; dispersing agent |
| 25154-52-3 | Phenol, nonyl- | Epoxy catalyst; surfactant; wetting agent; emulsifier; processing aid; defoamer additive component; reactant/intermediate for automotive and industrial lubricant additives;fuel additive colorant |
| 26027-38-3 | Poly(oxy-1,2-ethanediyl), α-(4-nonylphenyl)-ω-hydroxy- | Rheology additive |
| 27986-36-3 | Ethanol, 2-(nonylphenoxy)- | Rheology modifier |
| 37205-87-1 | Poly(oxy-1,2-ethanediyl), α-(isononylphenyl)-ω-hydroxy- | Component in colorant; emulsifier; monomer; processing aid; surfactant; wetting agent; reactant/intermediate used in synthesis of anti-oxidants, automotive and industrial lubricant additives |
| 84852-15-3 | Phenol, 4-nonyl-, branched | Activator for epoxy coatings, surfactants that improve compatibility, wetting agents, solubilizers, defoamers; processing aids specific to petroleum production; plasticizer; intermediate; monomer; blocking agent; ion exchange agents; surface active agents; adhesive and sealant chemicals; dyes; pigments; process regulator; epoxy cure catalyst; automotive and industrial lubricant additive; fuel additive colorant; fuel additive colorant component; stabilizer; surfactant; component in an emulsifier; emulsifier; |

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|---|---|---|
| 91672-41-2 | Phenol, 2-nonyl-, branched | Activators for epoxy coatings, surfactants that improve compatibility, wetting agents, solubilizers, defoamers; reactant/intermediate used in synthesis of anti-oxidants, automotive and industrial lubricant additives |