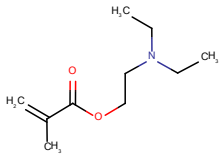
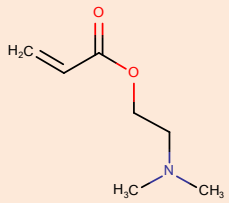
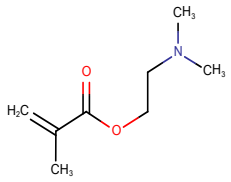
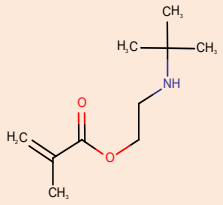
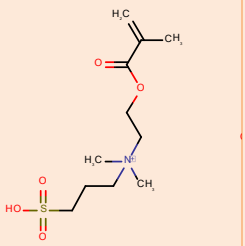
Assessment of regulatory needs

Authority: European Chemicals Agency (ECHA)

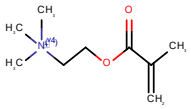
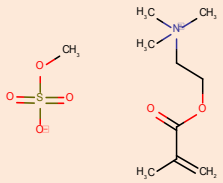
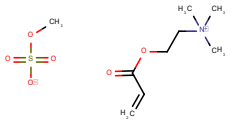
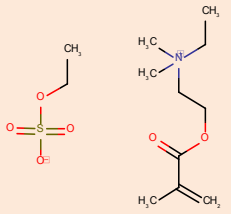
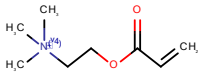
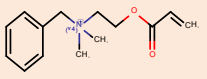
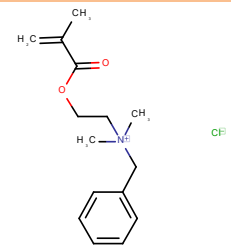
Group Name: Acrylate and methacrylate amines

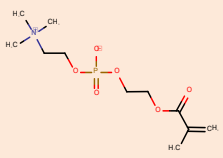
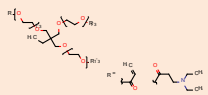
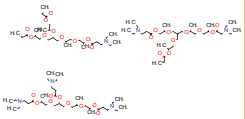
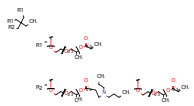
Revision history

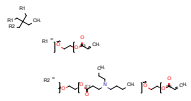
Version	*Date*	*Description*
1.0	14 October 2021	

EC / List number	CAS number	Substance name	Chemical structures	Registration type (full, OSII or TII, NONS), highest tonnage band among all the registrations (t/y) [1]
Subgroup 1: Secondary / tertiary amines acrylate / methacrylate				
203-275-7	105-16-8	2-(diethylamino)ethyl methacrylate		Full, 10-100
219-460-0	2439-35-2	2-(dimethylamino) ethyl acrylate		Full, 100-1000
220-688-8	2867-47-2	2-dimethylaminoethyl methacrylate		Full, >1000
223-228-4	3775-90-4	2-tert-butylaminoethyl methacrylate		Full, 100-1000
Subgroup 2: Quaternary amines acrylate / methacrylate				
222-860-8	3637-26-1	dimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl](3-sulphopropyl)ammonium hydroxide		Full, not (publicly) available

[1] Note that the total aggregated tonnage band may be available on ECHA's webpage at https://echa.europa.eu/information-on-chemicals/registered-substances

225-733-5	5039-78-1	[2-(methacryloyloxy)ethyl]trimethylammonium chloride		Full, >1000
229-995-1	6891-44-7	[2-(methacryloyloxy)ethyl]trimethylammonium methyl sulphate		Full, 1-10
236-029-2	13106-44-0	[2-(acryloyloxy)ethyl]trimethylammonium methyl sulphate		Pre-registered
236-195-6	13223-03-5	ethyldimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl]ammonium ethyl sulphate		Full, not (publicly) available
256-176-6	44992-01-0	[2-(acryloyloxy)ethyl]trimethylammonium chloride		Full, >1000
256-283-8	46830-22-2	benzyldimethyl[2-[(1-oxoallyl)oxy]ethyl]ammonium chloride		Full, not (publicly) available
256-288-5	46917-07-1	benzyldimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl]ammonium chloride		C&L notification

417-560-0	67881-98-5	3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide		Full, not (publicly) available
Subgroup 3: Ethoxylates/propoxylate acrylate amines				
500-425-6	159034-91-0	Propylidynetrimethanol, ethoxylated, esters with acrylic acid, reaction products with diethylamine		Full, 10-100
500-744-0	162492-10-6	Glycerol, propoxylated, esters with acrylic acid, reaction products with diethylamine		Full, not (publicly) available
601-101-8	111497-86-0	2-Propenoic acid, (1-methyl-1,2-ethanediyl) bis[oxy(methyl-2,1-ethanediyl)] ester, reaction products with diethylamine		Full, 100-1000
605-658-8	173011-06-8	1-Butanamine, N-butyl-, reaction products with polyethylene-polypropylene glycol ether with trimethylolpropane (3:1) acrylate		Full, not (publicly) available
605-659-3	173046-61-2	Ethanamine, N-ethyl-, reaction products with polyethylene-polypropylene glycol ether with trimethylolpropane (3:1) acrylate (>1 <6.5 mol EO and >1 < 6.5 mol PO)		Full, not (publicly) available

606-330-7	195008-76-5	1-Butanamine, N-butyl-, reaction products with polyethylene glycol monoacrylate ether with trimethylolpropane (3:1)		C&L notification
701-363-4	-	propylidynetrimethanol, ethoxylated, esters with acrylic acid and its reactions products with dibutylamine		Full, not (publicly) available

This table contains also group members that are only notified under the CLP Regulation. However, the list is not necessarily exhaustive. Should further regulatory risk management action on one or more substances in the group be considered, ECHA may make an additional search for related C&L notified substances to be included in the group and develop an assessment of regulatory needs for them.

Contents

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The author does not accept any liability with regard to the use that may be made of the information contained in this document. Usage of the information remains under the sole responsibility of the user. Statements made or information contained in the document are without prejudice to any further regulatory work that ECHA, the Member States or other regulatory agencies may initiate at a later stage. Assessment of regulatory needs and their conclusions are compiled on the basis of available information and may change in light of newly available information or further assessment.

Foreword

The purpose of the assessment of regulatory needs of a group of substances is to help authorities conclude on the most appropriate way to address the identified concerns for a group of substances or a single substance, i.e. the combination of the regulatory risk management instruments to be used and any intermediate steps, such as data generation, needed to initiate and introduce these regulatory measures.

An assessment of regulatory needs can conclude that regulatory risk management at EU level is required for a (group of) substance(s) (e.g. harmonised classification and labelling, Candidate List inclusion, restriction, other EU legislation) or that no regulatory action is required at EU level. While the assessment is done for a group of substances, the (no) need for regulatory action can be identified for the whole group, a subgroup or for single substance(s).

The assessment of regulatory needs is an important step under ECHA's Integrated Regulatory Strategy. However, it is not part of the formal processes defined in the legislation but aims to support them.

The assessment of regulatory needs can be applied to any group of substances or single substance, i.e., any type of hazards or uses and regardless of the previous regulatory history or lack of such. It can be done based on a different level of information. A Member State or ECHA can carry out this case-by-case analysis. The starting point is available information in the REACH registrations and any other REACH and CLP information. However, a more extensive set of information can be available, e.g. assessment done under REACH/CLP or other EU legislation, or can be generated in some cases (e.g. further hazard information under dossier evaluation). Uncertainties associated to the level of information used should be reflected in the documentation. It will be revisited when necessary. For example, after further information is generated and the hazard has been clarified or when new insights on uses are available. It can be revisited by the same or another authority.

The responsibility for the content of this assessment rests with the authority that developed it. It is possible that other authorities do not have the same view and may develop further assessment of regulatory needs. The assessment of regulatory needs does not yet initiate any regulatory process but any authority can consequently do so and should indicate this by appropriate means, such as the Registry of Intentions.

For more information on Assessment of regulatory needs please consult ECHA website[2].

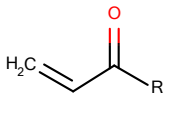
[2] https://echa.europa.eu/understanding-assessment-regulatory-needs

Glossary

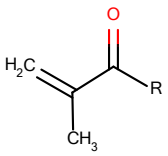
ARN	Assessment of Regulatory Needs
CCH	Compliance Check
CLH	Harmonised classification and labelling
CMR	Carcinogenic, mutagenic and/or toxic to reproduction
DEv	Dossier evaluation
ED	Endocrine disruptor
NONS	Notified new substances
OEL	Occupational exposure limit
OSII or TII	On-site isolated intermediate or transported isolated intermediate
PBT/vPvB	Persistent, bioaccumulative and toxic/very persistent and very bioaccumulative
RMOA	Regulatory management options analysis
RRM	Regulatory risk management
SEv	Substance evaluation
STOT RE	Specific target organ toxicity, repeated exposure
SVHC	Substance of very high concern

1 Overview of the group

ECHA has grouped together structurally similar substances based on the presence of amine moiety combined with the acrylate and methacrylate moiety as shown in the figure below.



acrylates



methacrylates

The group consists of 20 substances (11 acrylate and 9 methacrylate amines) of which 17 have full registrations, 1 is only pre-registsred and 2 are only notified under the CLP Regulation.

This group complements the other group of (meth)acrylates, namely: “Esters from acrylic and methacrylic acid with linear and branched aliphatic alcohols, simple acids and salts, aliphatic cyclic alcohols, polyols and ether alcohols (other than methanol and ethanol)” already assessed for possible regulatory needs.

For the current group subgrouping was considered based on structural similarities and on potential hazards related to the functional groups present:

Subgroup 1: Secondary/tertiary amines acrylate/methacrylate
Subgroup 2: Quaternary amines acrylate/methacrylate
Subgroup 3: Ethoxylate/propoxylate acrylate amines

Based on information reported in the REACH registration dossiers, the substances are mainly used in the production of polymers or as precursors in the manufacture of other chemicals. The substances in subgroup 1 and 3 have a similar use pattern. They are used in industrial and in widespread professional and consumer applications, predominantly in adhesives and sealants, coatings and paints, inks and toners and polymer preparations and products. Other uses, reported only for EC 220-688-8, include fillers, putties, plasters and modelling clay, cosmetics, washing and cleaning products, paper, board and textile treatment products (with article service life) and lubricants and greases. For all uses, exposure of workers (both in industrial and professional settings) and consumers to the substances as such, in mixtures, and as a residual monomer in (pre-) polymer preparations, and possibly in articles cannot be excluded. The substances in subgroup 2 have mainly industrial use as intermediate and laboratory chemicals, with limited exposure for workers.

Note on the scope of ECHA's assessment of regulatory needs

Regarding hazards, the focus of ECHA's assessment is on CMR (carcinogenic, mutagenic and/or toxic to reproduction), sensitiser, ED (endocrine disruptor), PBT/vPvB or equivalent (e.g. substances being persistent, mobile and toxic), aquatic toxicity hazard endpoints and therefore only those are reflected in the table in section 3. This does not mean that the substances do not have other known or potential hazards. In some specific cases, where ECHA identifies a need for regulatory risk management action at EU level for other hazards (e.g. neurotoxicity, STOT RE), such additional hazards may be addressed in the assessment. An overview of classification is presented in Annex 1.

On the exposure side, ECHA is mainly using the information on uses reported in the registration dossiers (IUCLID) as a proxy for assessing the potential for exposure to humans and releases to the environment. The potential for release / exposure is generally considered high for "widespread" uses, i.e. professional and consumer uses and uses in articles. For these uses, normally happening at many places, the expected level of control is *à priori* considered limited. The chemical safety reports are not necessarily consulted and no quantitative exposure assessment is performed at this stage.

2 Justification for the (no) need for regulatory risk management action at EU level

Based on currently available information, there is no need for (further) EU regulatory risk management for all susbstances in the group.

The substances of subgroup 1 (excluding EC 219-460-0 due to high local toxicity) have potential reproductive toxicity hazard (expected due to the metabolism to amine alcohols), as showed by the data on EC 203-275-7 (potential Repr. 2). Due to the structural similarity with the substances of subgroup 1 and the potential to generate amine alcohol metabolites, the potential reproductive toxicity hazard can be extended to all substances in subgroup 2, but is has to be clarified first by data generation, whenever possible.

In addition, most of the substances in the sub-group 2 generate choline or monoethylcholine metabolites which have a potential to modify neurotransmission, and thereby, have a potential for systemic toxicity (neurotoxicity) following repeated exposure (STOT RE). No systemic toxicity data is available for the subgroup 2 and the potential hazard should be further explored through data generation, whenever possible.

Data generation through CCH is needed as a first step to clarify the potential for reproductive toxicity and neurotoxicity.

All substances in the subgroup 1 and 3 are known skin sensitisers, with either harmonised classification as Skin Sens Cat 1 or self-classification as Skin Sens Cat

1A and as Skin Sens. 1B (see details in the table in Annex I). The available data indicate that the acrylic ester has strong potency to induce skin sensitisation while the potency for methacrylate esters is lower.

Assessment of the regulatory needs for a group of other (meth)acrylates[3] identified respiratory sensitisation as a potential hazard for lower molecular weight (meth)acrylates (which are more volatile), or in case of spraying applications. No information is available on the respiratory sensitisation potential of the substances of this group. Therefore, no further actions are proposed. However, if more relevant information becomes available for other (meth)acrylates and the concern could be expanded, the conclusions for this group can be revisited.

With regards to the environmental hazard, known or potential aquatic toxicity and/or inconclusive PBT properties were identified for some substances. Data generation through CCH will be done, whenever possible (ECs/Lists 219-460-0, 223-228-4, 500-425-6 and 601-101-8).

Based on the currently available information on potential hazard and on uses, the following considerations are made to support the conclusion on no need for EU regulatory risk management for all group substances:

- for industrial and professional uses, sufficient and consistent self-classification by registrants should trigger adequate risk management measures according to workplace legislation;
- for consumer uses, adequate product labelling should in principle provide consumers with sufficient information to manage risks arising from the use of mixtures containing these substances.

However, there is a concern related to skin sensitisers (potentially) present in consumer mixtures and the need to further investigate whether further regulatory actions are needed and what would be the best options to address this concern. Such concern has already been identified in other groups of substances and was brought for further discussion to Member States. Work is ongoing on this generic issue by both Member States and ECHA which may affect the regulatory actions on substances in this group. Therefore, it is proposed that there is currently no need for EU-wide regulatory risk management.

[3] “Esters from acrylic and methacrylic acid with linear and branched aliphatic alcohols, simple acids and salts, aliphatic cyclic alcohols, polyols and ether alcohols (other than methanol and ethanol)”

3 Conclusions and actions

The conclusions and actions proposed in the table below are based on the REACH and CLP information available at the time of the assessment by ECHA. The main source of information is the registration dossiers. Relevant public assessments may also be considered. When new information (e.g. on hazards through evaluation processes, or on uses) will become available, the document will be updated and conclusions and actions revisited

Subgroup name, EC/List number, substance name	Human Health Hazard	Environmental Hazard	Relevant use(s) & exposure potential	Last foreseen action	Action
Subgroup 1 - Secondary/tertiary amines acrylate/methacrylate 219-460-0, 2-(dimethylamino)ethyl acrylate 220-688-8, 2-dimethylaminoethyl methacrylate 203-275-7, 2-(diethylamino)ethyl methacrylate 223-228-4, 2-tert-butylaminoethyl methacrylate	Known or potential hazard for skin sensitisation for reproductive toxicity In addition, EC 219-460-0: Known or potential hazard for STOT RE	No hazard or unlikely hazard for PBT/vPvB EC 223-228-4: Inconclusive hazard for PBT/vPvB EC 219-460-0: Known or potential hazard for aquatic toxicity	Subgroups 1 and 3: Industrial, widespread professional and consumer uses in polymer production and products, inks and toners, manufacture of chemicals, cosmetics (only EC 220-688-8). Exposure of workers and consumers cannot be excluded.	**Currently no need for EU RRM** <u>Justification:</u> For subgroups 1 and 3: For industrial and professional uses, correct self-classification should trigger adequate risk management measures according to workplace legislation. Adequate product labelling should	• CCH For EC 219-460-0; EC 223-228-4 • Await for CCH on EC 220-688-8 to be concluded.

Subgroup 2 - Quaternary amines acrylate / methacrylate 222-860-8, dimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl](3-sulphopropyl)ammonium hydroxide 225-733-5, [2-(methacryloyloxy)ethyl]trimethylammonium chloride 229-995-1, [2-(methacryloyloxy)ethyl]trimethylammonium methyl sulphate 236-029-2, [2-(acryloyloxy)ethyl]trimethylammonium methyl sulphate (pre-registered) 236-195-6, ethyldimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl]ammonium ethyl sulphate 256-176-6, [2-(acryloyloxy)ethyl]trimethylammonium chloride 256-283-8, benzyldimethyl[2-[(1-oxoallyl)oxy]ethyl]ammonium chloride 256-288-5, benzyldimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl]ammonium chloride (only C&L notification)	Known or potential hazard for STOT RE (neurotoxicity) for reproductive toxicity EC 417-560-6 Additional potential hazard for skin sensitisation	No hazard or unlikely hazard for PBT/vPvB ECs 222-860-8, 256-283-8, 256-288-5: Inconclusive hazard for PBT/vPvB	Subgroup 2: industrial use as intermediate in the manufacture of other chemicals and as monomer in polymer production. Low potential for exposure is expected.	provide consumers with sufficient information to manage risks arising from the use of mixtures containing these substances. The concern related to the presence of skin sensitisers in consumer mixtures is under investigation <u>For subgroup 2:</u> Based on the prevalence of industrial applications, appropriate self-classification should trigger adequate risk management measures in workplaces.	CCH for EC 225-733-5; EC 236-195-6; EC 256-176-6; EC 256-283-8

417-560-0, n.a.					
Subgroup 3 - Ethoxylates/propoxylate acrylate amines 500-425-6, propylidynetrimethanol, ethoxylated, esters with acrylic acid, reaction products with diethylamine 500-744-0, glycerol, propoxylated, esters with acrylic acid, reaction products with diethylamine 601-101-8, reaction products of (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate with diethylamine 605-658-8 605-659-3 606-330-7 (only C&L notification) 701-363-4, propylidynetrimethanol, ethoxylated, esters with acrylic acid and its reactions products with dibutylamine	Known or potential hazard for skin sensitisation	Inconclusive hazard for PBT/vPvB Lists 605-658-8, 701-363-4: No hazard or unlikely hazard for PBT/vPvB			CCH For EC 500-425-6; List 601-101-8

Annex 1: Overview of classifications

Data extracted on 14 June 2021

EC / List No	CAS No	Substance name	Harmonised classification	Classification in registrations	Classification in C&L notifications (*)
225-733-5	5039-78-1	[2-(methacryloyloxy)ethyl]trimethylammonium chloride	-	-	Skin Sens. 1 H317[12 out of 17] Skin Irrit. 2 H315[3 out of 17] Acute Tox. 4 H302[1 out of 17] STOT Single Exp. 3 H335, affected organs: Inhalation[3 out of 17] Eye Damage 1 H318[1 out of 17] STOT Single Exp. 3 H335, affected organs: respiratory system[1 out of 17] STOT Single Exp. 3 H335, affected organs: respiratory tract[1 out of 17] Eye Irrit. 2 H319[11 out of 17]
601-101-8	111497-86-0	Reaction products of (1-methyl-1,2-ethanediyl) bis[oxy(methyl-2,1-ethanediyl)] diacrylate with diethylamine	-	Skin Irrit. 2 H315 Eye Irrit. 2 H319 Skin Sens. 1B H317 Aquatic Chronic 3 H412	Skin Sens. 1 H317[1 out of 17]
220-688-8	2867-47-2	2-dimethylaminoethyl methacrylate	Skin Sens. 1 H317 Acute Tox. 4 H302 Acute Tox. 4 H312 Eye Irrit. 2 H319 Skin Irrit. 2 H315	Acute Tox. 4 H302 Acute Tox. 4 H312 Skin Corr. 1B H314 Eye Damage 1 H318 Skin Sens. 1B H317 Skin Sens. 1A H317 Skin Irrit. 2 H315 Eye Irrit. 2 H319	Repr. 2 H361[1 out of 71] STOT Single Exp. 3 H336, affected organs: central nerve[1 out of 71] Acute Tox. 2 H330[2 out of 71] Aquatic Chronic 3 H412[2 out of 71]

				Skin Sens. 1 H317	
256-283-8	46830-22-2	benzyldimethyl[2-[(1-oxoallyl)oxy]ethyl]ammonium chloride	-	Aquatic Chronic 3 H412	Eye Irrit. 2 H319[2 out of 2] Skin Sens. 1 H317[2 out of 2]
223-228-4	3775-90-4	2-tert-butylaminoethyl methacrylate	Skin Sens. 1 H317 Eye Irrit. 2 H319 Skin Irrit. 2 H315	Acute Tox. 4 H302 Skin Corr. 1C H314 Eye Damage 1 H318 Skin Sens. 1B H317	Skin Irrit. 2 H315[18 out of 20] Eye Irrit. 2 H319[19 out of 20] Skin Sens. 1 H317[19 out of 20] Aquatic Chronic 3 H412[2 out of 20]
605-659-3	173046-61-2	-	-	Eye Irrit. 2 H319 Skin Sens. 1A H317 Aquatic Chronic 2 H411	-
256-288-5	46917-07-1	benzyldimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl]ammonium chloride	-	-	Skin Irrit. 2 H315[1 out of 1] Eye Irrit. 2 H319[1 out of 1] Skin Sens. 1 H317[1 out of 1]
606-330-7	195008-76-5	1-Butanamine, N-butyl-, reaction products with polyethylene glycol monoacrylate ether with trimethylolpropane (3:1)	-	-	Skin Irrit. 2 H315[1 out of 3] Aquatic Chronic 2 H411[1 out of 3] Skin Sens. 1A H317[1 out of 3] STOT Single Exp. 3 H335, affected organs: Inhalation[1 out of 3] Skin Sens. 1 H317[1 out of 3] Eye Irrit. 2 H319[3 out of 3]
219-460-0	2439-35-2	2-(dimethylamino)ethyl acrylate	-	Eye Damage 1 H318 Skin Sens. 1 H317 [intermediate (active)] Skin Corr. 1A H314 [intermediate (active)] Acute Tox. 4 H302 Acute Tox. 3 H311 Acute Tox. 1 H330 Skin Corr. 1B H314	STOT Single Exp. 1 H370, affected organs: Respiratory System, Central Nervous System[1 out of 7] Repr. 2 H361[1 out of 7] Flam. Liquid 3 H226[2 out of 7]

				Skin Sens. 1A H317 Aquatic Acute 1 H400 Aquatic Chronic 3 H412	
605-658-8	173011-06-8	605-658-8	-	Skin Sens. 1A H317	-
203-275-7	105-16-8	2-(diethylamino)ethyl methacrylate	Skin Sens. 1 H317 Acute Tox. 4 H332 Eye Irrit. 2 H319 Skin Irrit. 2 H315	Skin Sens. 1 H317 Acute Tox. 4 H302 Acute Tox. 4 H332 Eye Irrit. 2 H319 Skin Irrit. 2 H315	Skin Corr. 1B H314[1 out of 16] Eye Damage 1 H318[1 out of 16]
500-425-6	159034-91-0	Propylidynetrimethanol, ethoxylated, esters with acrylic acid, reaction products with diethylamine	-	Eye Irrit. 2 H319 Skin Sens. 1A H317	Aquatic Chronic 3 H412[2 out of 6] STOT Single Exp. 3 H335, affected organs: Inhalation[1 out of 6] Skin Sens. 1 H317[1 out of 6] Skin Irrit. 2 H315[1 out of 6]
222-860-8	3637-26-1	dimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl](3-sulphopropyl)ammonium hydroxide	-	-	Acute Tox. 4 H302[2 out of 3] Acute Tox. 4 H312[2 out of 3]
229-995-1	6891-44-7	[2-(methacryloyloxy)ethyl]trimethylammonium methyl sulphate	-	-	Skin Irrit. 2 H315[1 out of 3]
500-744-0	162492-10-6	Glycerol, propoxylated, esters with acrylic acid, reaction products with diethylamine	-	Eye Damage 1 H318 Skin Sens. 1A H317 Aquatic Chronic 3 H412	Skin Irrit. 2 H315[1 out of 6] Eye Irrit. 2 H319[4 out of 6]
236-195-6	13223-03-5	ethyldimethyl[2-[(2-methyl-1-	-	Skin Sens. 1 H317	-

		oxoallyl)oxy]ethyl]ammonium ethyl sulphate		Skin Sens. 1B H317	
417-560-0	67881-98-5	-	-	Skin Sens. 1 H317	-
256-176-6	44992-01-0	[2-(acryloyloxy)ethyl]trimethylammonium chloride	-	Acute Tox. 4 H302	Skin Sens. 1 H317[7 out of 14] Eye Irrit. 2 H319[11 out of 14] Acute Tox. 4 H332[3 out of 14]
701-363-4	-	propylidynetrimethanol, ethoxylated, esters with acrylic acid and its reactions products with dibutylamine	-	Eye Irrit. 2A H319 Skin Sens. 1A H317 Aquatic Chronic 2 H411	-
222-860-8	3637-26-1	dimethyl[2-[(2-methyl-1-oxoallyl)oxy]ethyl](3-sulphopropyl)ammonium hydroxide	-	-	Acute Tox. 4 H302[2 out of 3] Acute Tox. 4 H312[2 out of 3]
229-995-1	6891-44-7	[2-(methacryloyloxy)ethyl]trimethylammonium methyl sulphate	-	-	Skin Irrit. 2 H315[1 out of 3]
500-744-0	162492-10-6	Glycerol, propoxylated, esters with acrylic acid, reaction products with diethylamine	-	Eye Damage 1 H318 Skin Sens. 1A H317 Aquatic Chronic 3 H412	Skin Irrit. 2 H315[1 out of 6] Eye Irrit. 2 H319[4 out of 6]
236-195-6	13223-03-5	ethyldimethyl[2-[(2-methyl-1-oxoallyl)ox	-	Skin Sens. 1 H317	-

		y]ethyl]ammonium ethyl sulphate		Skin Sens. 1B H317	
417-560-0	67881-98-5	-	-	Skin Sens. 1 H317	-
256-176-6	44992-01-0	[2-(acryloyloxy)ethyl]trimethylammonium chloride	-	Acute Tox. 4 H302	Skin Sens. 1 H317[7 out of 14] Eye Irrit. 2 H319[11 out of 14] Acute Tox. 4 H332[3 out of 14]
701-363-4	-	propylidynetrimethanol, ethoxylated, esters with acrylic acid and its reactions products with dibutylamine	-	Eye Irrit. 2A H319 Skin Sens. 1A H317 Aquatic Chronic 2 H411	-

(*) the number in brackets indicates the number of notifications received. Each notification can represent a group of notifiers, therefore the number may differ from the C&L inventory which displays number of notifiers.

Annex 2: Overview of uses based on information available in registration dossiers

Data extracted on 14 June 2021

Main types of applications structured by product or article types	EC/List 203-275-7	EC/List 219-460-0	EC/List 220-688-8	EC/List 223-228-4	EC/List 222-860-8	EC/List 225-733-5	EC/List 229-995-1	2 EC/List 36-195-6	EC/List 256-176-6	EC/List 256-283-8	EC/List 417-560-0	EC/List 500-425-6	EC/List 500-744-0	EC/List 601-101-8	EC/List 605-658-8	EC/List 605-659-3	EC/List 701-363-4
	Subgroup 1				**Subgroup 2**							**Subgroup 3**					
PC 1: Adhesives, sealants	**C**		**C**	I	I	I						F, I, **P**		F, I	**A**	F, I	**A**
PC 2: Adsorbents			**C**														
PC 3: Air care products			**C**														
PC 4: Anti-freeze and de-icing products			**C**														
PC 7: Base metals and alloys			**C**														
PC 8: Biocidal products (e.g. disinfectants, pest control)			**C**														
PC 9a: Coatings and paints, thinners, paint removes	I		F, **P**, **C**	I		I						F, I, **P**	F, I	F, I, **P**	F, I, **A**	F, I	F, I, **P**, **A**
PC 9b: Fillers, putties, plasters,	I, **P**, **C**		**C**														

Main types of applications structured by product or article types	EC/List 203-275-7	EC/List 219-460-0	EC/List 220-688-8	EC/List 223-228-4	EC/List 222-860-8	EC/List 225-733-5	EC/List 229-995-1	2 EC/List 36-195-6	EC/List 256-176-6	EC/List 256-283-8	EC/List 417-560-0	EC/List 500-425-6	EC/List 500-744-0	EC/List 601-101-8	EC/List 605-658-8	EC/List 605-659-3	EC/List 701-363-4
modelling clay																	
PC 9c: Finger paint				I													
PC 13: Fuels							I										
PC 15: Non-metal-surface treatment products			**C**														
PC 18: Ink and toners	F, I, **P**, **C**, **A**		**C**									F, I, **P**	F, I, **P**	F, I, **P**	F, I, **P**	F, I, **P**	F, I, **P**
PC 19: Intermediate	F, I	I	F, I, **P**, **C**	I, **P**		I	I	I	I	I	I		I	I			
PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents			**C**		I, **P**	I											
PC 21: Laboratory chemicals	I		**C**	F	I, **P**	I											
PC 23: Leather treatment products			**C**			I											
PC 24: Lubricants, greases, release products			**C**														
PC 26: Paper			F, I,			I											

Main types of applications structured by product or article types	EC/List 203-275-7	EC/List 219-460-0	EC/List 220-688-8	EC/List 223-228-4	EC/List 222-860-8	EC/List 225-733-5	EC/List 229-995-1	2 EC/List 36-195-6	EC/List 256-176-6	EC/List 256-283-8	EC/List 417-560-0	EC/List 500-425-6	EC/List 500-744-0	EC/List 601-101-8	EC/List 605-658-8	EC/List 605-659-3	EC/List 701-363-4
and board treatment products			**C**, **A**														
PC 31: Polishes and wax blends			**C**														
PC 32: Polymer preparations and compounds	I, **C**, **A**	I	I, **P**, **C**, **A**	F, I	I	F, I				I		F, I, **P**			**A**		**A**
PC 33: Semiconductors			**C**														
PC 34: Textile dyes, and impregnating products			**C**														
PC 35: Washing and cleaning products			**C**														
PC 37: Water treatment chemicals			**C**				I										
PC 39: Cosmetics, personal care products			I, **C**														
PC41: Oil and gas exploration or production products			**C**														

F: formulation, I: industrial use, P: professional use, C: consumer use, A: article service life; P, C and A are highlighted in red to indicate widespread use with potential for exposure/release

Annex 3: Overview of completed or ongoing regulatory risk management activities

Based on the data extracted on 10 June 2021, no completed or ongoing regulatory risk management activities to report.