Cosmetic Product Safety Report

nail polish

This safety assessment relates to the formulation described below. If the information below is incorrect, please amend and resubmit for reassessment.

Manufacturer: Yiwu Shining Cosmetics Co., Ltd
Lot No.: 22.10.2025
Country of Origin: China
Item No.: 5404 Professional Studio Nail Art
Age grading: 6+
Buyer: Buki France

PRODUCT FORMULATION

The chemical names shown below refer to the raw materials used to formulate this product. The identity of the raw materials is not necessarily based on the International Nomenclature of Cosmetic Ingredients (INCI) and does not represent the INCI listing that must be shown on the product label and is for assessment purposes only. An outline INCI label can be prepared on request.

Chemical Name	Conc %	% Max Active	% Max Active in Product	CAS No	Einecs No
ETHYL ACETATE	42.8	100	42.8	141-78-6	205-500-4
BUTYL ACETATE	39.0789	100	39.0789	123-86-4	204-658-1
NITROCELLULOSE	13.42156	100	13.42156	9004-70-0	POLYMER
ACETYL TRIBUTYL CITRATE	7.06281	100	7.06281	77-90-7	201-067-0
ADIPIC ACID/NEOPENTYL GLYCOL/TRIMELLITIC ANHYDRIDE COPOLYMER	6.4	100	6.4	28407-73-0	POLYMER
ISOPROPYL ALCOHOL	5.74406	100	5.74406	67-63-0	200-661-7
TITANIUM DIOXIDE / CI 77891	1.56	100	1.56	13463-67-7	236-675-5
MICA	1.44	100	1.44	12001-26-2	310-127-6
RED 6 LAKE / CI 15850	1.31	100	1.31	5858-81-1/5281-04-9	227-497-9/226-109-5
ACRYLATES COPOLYMER	1.15	100	1.15	25133-97-5 / 25035-88-5/ 25685-29-4/ 26300-51-6/ 159666-35-0/ 25212-88-8/ 25035-69-2	607-492-1
STEARALKONIUM BENTONITE	1.05	100	1.05	130501-87-0	-
STYRENE/ACRYLATES COPOLYMER	1.006	100	1.006	9010-92-8/ 25034-86-0/ 27306-39-4/ 25085-34-1	POLYMER
N-BUTYL ALCOHOL	0.939	100	0.939	71-36-3	200-751-6
YELLOW 5 LAKE / CI 19140	0.6	100	0.6	1934-21-0/12225-21-7	217-699-5/235-428-9
BENZOPHENONE-1	0.3825	100	0.3825	131-56-6	205-029-4
IRON OXIDE / CI 77499	0.3093	100	0.3093	12227-89-3 / 1309-37-1 / 1317-61-9 / 1345-25-1 / 1345-27-3 / 52357-70-7	235-442-5 / 215-168-2 / 215-277-5 / 215-721-8 / 215-722-3 / 257-870-1
SILICA	0.19	100	0.19	7631-86-9 / 112945-52-5 / 60676-86-0 /63231-67-4	231-545-4/ 262-373-8/ 310-060-2
STEARALKONIUM HECTORITE	0.1125	100	0.1125	94891-33-5/ 71011-26-2/ 12691-60-0	305-633-9 / 275-126-4
TRIMETHYLPENTANEDIYL DIBENZOATE	0.096	100	0.096	68052-23-3	268-316-3
FERRIC AMMONIUM FERROCYANIDE / CI 77510	0.0497	100	0.0497	14038-43-8 / 12240-15-2 / 25869-00-5	237-875-5/ 247-304-1
POLYVINYL BUTYRAL	0.0481	100	0.0481	63148-65-2 / 68648-78-2	POLYMER
CI 60725	0.00003	100	0.00003	81-48-1	201-353-5

Substance toxicological summary was listed in this report and detailed data are stored in Intertek owned in house database, could provide on specific request. MSDS/SDS, TDS/COA were listed in the Appendix 1.

LABELLED WARNINGS & INSTRUCTIONS OF USE

CONSUMER EXPOSURE

Product Class: Nail polish
IFRA Product type: Nail Care (Conditioners/Cuticle softeners/Creams/Oil Lotions) of all types
IFRA Category: Category 5C
Targeted Population:Children six years of age 19.7kg (Mean)

Amount per application/g:	0.20	Number of applications per day:	2-3 times per week
Skin Surface Area of Application/cm^2:	4	Physical form:	Liquid
Total Amount applied per day/g:	0.09	Part of body exposed to undiluted product:	Nails and cuticles
Estimated Daily Exposure mg/kg/day:	-		
Amount Per Unit Area of Skin per day mg/cm^2/day:	5.00		
Retention factor:	0.10		
Exposure Time Neat:	720 Minutes		
Exposure Time Dilute:	Not Applicable		
Exposure time Solvent Inhalation:	Not Applicable		
Exposure time Aerosol Inhalation:	Not Applicable		

This product has been assessed taking into account that it will be used by children aged six and older.

MICROBIOLOGICAL QUALITY

To comply with "Guidelines on Microbiological Quality of the Finished Cosmetic Product" under SCCS's Notes of Guidance, the following limits apply to this product:

Category 2: Other cosmetic products. Total Aerobic Mesophilic Microorganisms (Bacteria plus yeast and mould) should not exceed 1000 cfu/g or ml in the product. Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus and Candida albicans must not be detectable in 1 g or ml of the cosmetic.
This formulation contains raw materials which will help create an environment that is hostile to microbial growth and microbial growth may be inhibited. Example of these materials are listed in Guidelines for the risk assessment and identification of microbiologically low risk products, BS ISO 29621.

This formulation contains raw materials which will help create an environment that is hostile to microbial growth and it may be inhibited. This product may not require preservative challenge testing. Example of these materials are listed in Guidelines for the risk assessment and identification of microbiologically low risk products, BS ISO 29621.

STABILITY OF COSMETIC PRODUCT

It is assumed that the responsible person has selected all pertinent criteria required to evaluate the stability of this cosmetic product during reasonable foreseeable conditions of storage. The stability report provided by the supplier and based upon the conclusions made therein, this cosmetic product appears to be stable under reasonably foreseeable storage conditions.

Stability Test Report or Data of Cosmetic Product can see report prepared by the customer.

PACKAGING COMPATIBILITY

It is assumed that the responsible person has identified the most applicable testing required to determine the packaging stability and its interaction with the cosmetic product contained within it. Taking into consideration the information supplied to the assessor, there appears to be no immediate health concern due to the characteristics of packaging materials in direct contact with the final product.

Package Compatibility Test Report and/or data can see report number GZHH00410115 by Intertek.

SERIOUS / UNDESIRABLE EFFECTS

The supplier has confirmed that no undesirable effects or serious undesirable effects of this cosmetic product have been reported or, where relevant, cosmetic products with a similar formulation.

Serious/ Undesirable Effects of Cosmetic Product Report/Declaration can see report prepared by the customer.

FRAGRANCE COMPOSITIONS

This formulation does not contain a synthetic fragrance and therefore a fragrance safety evaluation as per IFRA code of practice is not applicable to this product.

According to Cosmetic Regulation (EC) No. 1223/2009, a complete cosmetic product safety report shall, at a minimum, contain cosmetic product safety information and cosmetic product safety assessment. The former includes raw materials and packaging material specifications, toxicological profile of substance (taking into account of purity of substance) contained in the cosmetic product and any known undesirable effects of the cosmetic product.

TOXICOLOGICAL & REGULATORY REVIEW

The product contains antifoaming, colorants, film forming, light stabilizer, plasticizer, solvent and viscosity controlling agents to beautify the nails.
None of the ingredients is on the prohibition list of the Cosmetic Regulation (EC) No. 1223/ 2009. All colorants are approved under EU regulation, however, manufacturer should make sure that they comply with the restrictions set out in the Annex IV of Cosmetic Regulation (EC) No. 1223/2009.
Most of the ingredients are commonly used in cosmetic products and reviewed by CIR Panel. For the ingredient lack of NOAEL, the CIR Panel confirmed that Butyl Acetate, Nitrocellulose, Adipic Acid/Neopentyl Glycol/Trimellitic Anhydride Copolymer, Acrylates Copolymer, Stearalkonium Bentonite, Styrene/Acrylates Copolymer, n-Butyl Alcohol, Benzophenone-1 and Stearalkonium Hectorite are safe for use at current level. Mica, Trimethylpentanediyl Dibenzoate and Polyvinyl Butyral is lower than the highest historical usage of leave-on cosmetics in Inventory of Existing Cosmetic Ingredients in China (IECIC, 2021) and therefore safe to use in this product. Mica is a series of silicate minerals of varying chemical composition but with similar physical properties. The SCCS agrees that a dermal absorption value of 0.000192% is an appropriate value to use in risk assessment. Due to the low concentration of mica in the formulation and low dermal absorption, safety concerns are not expected with this ingredient for use in cosmetics.
This formulation may contain risk substances methanol and acrylamide due to the presence of Isopropyl Alcohol, Polyvinyl Butyral, Acrylates Copolymer and Styrene/Acrylates Copolymer. According to the provided statement, the risk substances with a trace concentration may not cause safety concerns.
The raw materials used to formulate this product are all well known ingredients. They are present at typical concentrations where they are unlikely to cause irritation or allergy.
Heavy metals test report was prepared by customer, and specific in Report No. ZHCJ25010160001 by Intertek.
No existing studies from human volunteers were provided.
If used as directed, use of this product should be uneventful.

Effects of the product as supplied on the skin

The formulation as supplied may cause only minimal skin irritation even if exposure is prolonged and/or repeated.
Repeated exposure to the formulation as supplied is unlikely to produce allergy by skin contact.
Exposure to this product is unlikely to result in phototoxic effects.
Unlikely to cause damage to internal organs following absorption through the skin.

Effects of the product as supplied on the eye

Accidental exposure of the eye to the formulation as supplied may result in minimal eye irritation.

Effects following ingestion of the product as supplied

The formulation as supplied if swallowed is unlikely to cause harm.

Effects of inhaling the product

Inhalation is an unlikely route of exposure.

Overall Assessment Conclusion

The ingredients are legally permitted as per Cosmetic Regulation (EC) No 1223/2009 and its amendments and the safety assessment has been carried out in accordance to this regulation. They must comply with the relevant purity standards for cosmetic ingredients. It is assumed that these ingredients do not contain any undisclosed impurities/contaminants that would affect the conclusions reached. The product must be manufactured in accordance with EU Guidance on Good Manufacturing Practice.
Under normal or reasonably foreseeable conditions of use, product made to this formulation is unlikely to produce an abnormally high number of adverse reactions.

Cosmetic Regulations Product Safety Assessor

Leshuai Zhang, Professor, PhD, DABT, ERT, UKRT

Intertek GM Testing Services Zhuhai Co. Ltd.
6/F, R&D and Testing/B, Guangdong-Macau TCM Park commercial Service center, 2522 Huan Dao Bei Road, Hengqin New Area, Zhuhai, China

Date: 27 Dec 2025

SUMMARY OF TOXICOLOGICAL INFORMATION OF SUBSTANCES

Remark: Substance toxicological summary was listed in this section and used only for MoS calculation, please refer to Toxicological Profiles of Substances for full information.

Chemical Substance: ETHYL ACETATE

EU INCI NAME:ETHYL ACETATE
CAS: 141-78-6 Function: solvents
EINECS: 205-500-4
Appearance: Liquid

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> Xi R11-36-66-67

EU CLP Harmonised Classification> Flam. Liq. 2; Eye Irrit. 2
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.06134666 MoS - Adult 60kg: 14670.7 NOAEL mg/kg bw day: 900
SED Child mg/kg bw/day: 0.22040718 MoS - Child 16.7kg: 4083.3 NOAEL test method: oral in rats
SED Baby mg/kg bw/day: 0.62386440 MoS - Baby 5.9kg: 1442.6

Toxicological Summary:

The ingredient is not acutely toxic via oral, dermal and inhalation, a skin irritatant, an eye irritatant, a skin sensitizer, mutagenicity/genotoxicity carcinogenic, a reproductive toxicant. Low bioaccumulative potential. No data about the phototoxic. Based on this information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics when formulated to be non-irritating.

Chemical Substance: BUTYL ACETATE

EU INCI NAME:BUTYL ACETATE
CAS: 123-86-4 Function: Solvent
EINECS: 204-658-1

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> R10-66/67

EU CLP Harmonised Classification>
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.05601309 No NOAEL Available
SED Child mg/kg bw/day: 0.20124463 No NOAEL Available
SED Baby mg/kg bw/day: 0.56962464 No NOAEL Available

Toxicological Summary:

Cosmetic Functions : Masking / Solvent for nail care preparations, nail varnishes and removers. A strong smelling solvent with distinct narcotic properties. The intensity of its odour will help minimise exposure to the vapour. Prolonged contact with the skin may cause degreasing. Ethyl and Butyl Acetate were relatively nontoxic when administered orally, dermally or by inhalation to rabbits, rats, mice and guinea pigs. Moderate to severe irritant in unrinsed rabbit eyes and a mild irritant in rinsed rabbit eyes at 25% . Butyl Acetate was not a sensitizer in either mice or guinea pigs but was a mild skin irritants but not sensitizers to humans. Nonmutagenic when tested by the Ames procedure,Did not induce mitotic aneuploidy in yeast and chromosomal aberrations in Chinese hamster fibroblasts. Butyl Acetate was not teratogenic when inhaled. (CIR Compendium 2009)

Chemical Substance: NITROCELLULOSE

EU INCI NAME:NITROCELLULOSE
CAS: 9004-70-0
EINECS: polymer

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> R11-20

EU CLP Harmonised Classification>
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.01923756 No NOAEL Available
SED Child mg/kg bw/day: 0.06911701 No NOAEL Available
SED Baby mg/kg bw/day: 0.19563629 No NOAEL Available

Toxicological Summary:

Cosmetic Functions : Film Forming / Suspending Agent-Nonsurfactant. Nitrocellulose a highly flammable compound is formed by reacting nitric acid with cellulose itself has low toxicity and is not an irritant. It has many industrial uses due to its properties as a film forming of nitrocellulose lacquers, photography film and cosmetics. Once applied it produces a shiny, tough, nontoxic, non irritating and non allergenic film that adheres well to the nail plate. The film is also oxygen permeable, allowing gas exchange between the atmosphere and the nail plate which ensures healthy nail growth.

Chemical Substance: ACETYL TRIBUTYL CITRATE

EU INCI NAME:ACETYL TRIBUTYL CITRATE
CAS: 77-90-7 Function: film formers
EINECS: 201-067-0

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> Unclassified

EU CLP Harmonised Classification> Unclassified
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.01012336 MoS - Adult 60kg: 9878.1 NOAEL mg/kg bw day: 100
SED Child mg/kg bw/day: 0.03637135 MoS - Child 16.7kg: 2749.4 NOAEL test method: 13 week study in rats with an in utero
SED Baby mg/kg bw/day: 0.10294943 MoS - Baby 5.9kg: 971.3
Toxicological Summary:

Cosmetic Functions : Film Forming / Masking / Perfuming / Plasticiser. A solvent used in nail products up to 7%. Acute studies of oral toxicity found LD50 , 7000 mg/kg (no ref.) and LD 50 (rat) >25,000 mg/kg (Fiabila) respectively. The CIR Expert panel identified that 99% of this ingredient is excreted. In acute, short-term, subchronic, and chronic feeding studies, these ingredients were relatively nontoxic. Produced some evidence of eye irritation however this cleared after 48h after exposure. Non toxic in rabbit (dermal) and did not show evidence of sensitization in guinea pig (maximization test). The Fiabila Raw Material Data Sheet indicated that it may cause eye or skin irritation in susceptible individuals. Not genotoxic in bacterial or mammalian assays. No evidence of tumor induction in rat (2 year feeding study). Not a developmental or reproductive toxicant in studies in mice and rats. Limited clinical testing of Acetyl Triethyl Citrate and Acetyl Tributyl Citrate
was negative for both skin irritation and sensitization. The CIR panel concluded that this ingredient was not expected to pose a risk of sensitization when used in a nail product. □Excessive exposure may result in defatting of the skin. Unlikely to cause adverse effects when used at typical concentrations (<10%) in cosmetic formulations.
A 13 week study in rats with an in utero exposure has identified a NOAEL of 100 mg/kg bw/day. In a concluding remark by the CSTEE, the opinion that the risk assessment has provided sufficient sound scientific evidence to show that toys plasticized with acetyl tributyl citrate (ATBC) can be safely mouthed by children. Scientific Committee on Toxicity, ecotoxicity and the Environment (CSTEE) C7/GF/csteeop/ATBC/080104 D(04)

Chemical Substance: ADIPIC ACID/NEOPENTYL GLYCOL/TRIMELLITIC ANHYDRIDE COPOLYMER

EU INCI NAME:ADIPIC ACID/NEOPENTYL GLYCOL/TRIMELLITIC ANHYDRIDE COPOLYMER
CAS: 28407-73-0 Function: Polymer
EINECS: polymer

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> Not classified

EU CLP Harmonised Classification> Not classified
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00917333 No NOAEL Available
SED Child mg/kg bw/day: 0.03295808 No NOAEL Available
SED Baby mg/kg bw/day: 0.09328813 No NOAEL Available
Toxicological Summary:

Cosmetic Functions : Film Forming. An inert and fully cured polymer with minimal allergenic and irritant properties. Unlikely to cause problems when used in a nail varnish.

Chemical Substance: ISOPROPYL ALCOHOL

EU INCI NAME:ISOPROPYL ALCOHOL
CAS: 67-63-0 Function: Solvent/ Antifoaming agent/ viscosity decreasing
EINECS: 200-661-7
Appearance: liquid

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> R11-36-67

EU CLP Harmonised Classification> Flam. Liq. 2; Eye Irrit. 2; STOT SE 3
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00823315 MoS - Adult 60kg: 48584.0 NOAEL mg/kg bw day: 400
SED Child mg/kg bw/day: 0.02958018 MoS - Child 16.7kg: 13522.5 NOAEL test method: developmental toxicity study
SED Baby mg/kg bw/day: 0.08372697 MoS - Baby 5.9kg: 4777.4
Toxicological Summary:

The ingredient is not acutely toxic by oral or dermal administration or inhalation. It is not a skin irritant or sensitizer. It causes severe eye irritation and has low bioaccumulation potential. It is not mutagenic, a developmental toxicant and it is not classifiable as to its carcinogenicity. No data was available for phototoxicity. Central nervous system depression and behavioural effects have been noted at extremely high concentrations. Based on this information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics when formulated to be non-irritating and at concentrations where the central nervous system depression and behavioural effects are no longer a concern.

Chemical Substance: TITANIUM DIOXIDE/ CI 77891

EU INCI NAME:CI 77891 (TITANIUM DIOXIDE)

CAS: 13463-67-7 Function: UV Filter/colorant/light stabilizers/opacifying agent

EINECS: 236-675-5 Melting Point: 1843

Appearance: Solid Boiling Point: 2500–3000 calculated value

Water Solubility: Insoluble in water <0.1mg/L

Cosmetic Regulatory Summary:

EU Cosmetics Status: Approved colour all products

Regulatory Summary:

EU DSD/DPD Classification› unclassified

EU CLP Harmonised Classification› unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00223600	MoS - Adult 60kg: 167710.1	NOAEL mg/kg bw day: 375
SED Child mg/kg bw/day: 0.00803353	MoS - Child 16.7kg: 46679.3	NOAEL test method: rats
SED Baby mg/kg bw/day: 0.02273898	MoS - Baby 5.9kg: 16491.5	

Toxicological Summary:

Titanium dioxide is unlikely to cause adverse effects at the typical concentrations used in cosmetics. Available as a micronised product which may present a respiratory irritation hazard when handled in bulk. Use of such grades is generally restricted to liquid formulations where the likelihood of the formation of respirable atmospheres is low. Can be produced in either anatase or rutile crystal form. Rutile TiO2 produces higher opacity and greater scatter than anatase since the rutile crystal has a higher index of refraction; anatase is less abrasive than rutile, but is also used with UV brighteners, since rutile reduces the efficiency of the brighteners due to UV absorption in the same wavelength range. Generally, rutile is preferred for coatings due to its higher opacity.

Chemical Substance: MICA

EU INCI NAME:MICA

CAS: 12001-26-2 Function: Opacifying

EINECS: 310-127-6

Appearance: Crystalline solid (HSDB, 2012)

Water Solubility: insoluble in water (HSDB, 2012)

Cosmetic Regulatory Summary:

EU Cosmetics Status: Not controlled

Regulatory Summary:

EU DSD/DPD Classification› unclassified

EU CLP Harmonised Classification› unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00206400	No NOAEL Available	NOAEL mg/kg bw day: -
SED Child mg/kg bw/day: 0.00741556	No NOAEL Available	NOAEL test method: -
SED Baby mg/kg bw/day: 0.02098983	No NOAEL Available	

Toxicological Summary:

No relevant information was found regarding the ingredient's acute toxicity, skin irritancy, eye irritancy, skin sensitization potential, mutagenicity, carcinogenicity, reproductive toxicity, bioaccumulation or phototoxicity. However, mica is exempt from certification for the protection of the public health according to 21CFR§73 as it may be safely used as a diluent in color additive mixtures for food (21 CFR, 2013b) and it is permitted in cosmetics intended to be applied to the area of the eye (21 CFR, 2013a). Moreover, mica is permitted for use in lipsticks (21 CFR, 2012). Based on the available information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics.

Chemical Substance: RED 6 LAKE/ CI 15850

EU INCI NAME:CI 15850

CAS: 5858-81-1/5281-04-9 Function: Colour

EINECS: 227-497-9/226-109-5

Appearance: Powder

Log Kow: 3.587 ± 0.796

Cosmetic Regulatory Summary:

EU Cosmetics Status: Approved colour all products

Regulatory Summary:

EU DSD/DPD Classification› Unclassified

EU CLP Harmonised Classification› Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00187766	MoS - Adult 60kg: 79886.3	NOAEL mg/kg bw day: 150
SED Child mg/kg bw/day: 0.00674610	MoS - Child 16.7kg: 22235.0	NOAEL test method: 2-year repeat dose study in rats
SED Baby mg/kg bw/day: 0.01909491	MoS - Baby 5.9kg: 7855.4	

Toxicological Summary:

The ingredient is not acutely toxic, a skin irritant, an eye irritant, a skin sensitizer mutagenic or a reproductive toxicant. Carcinogenicity data was inconclusive (SCCNFP, 2004). No data was readily available on its bioaccumulation potential or phototoxicity. Based on this information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics.

Chemical Substance: ACRYLATES COPOLYMER

EU INCI NAME:ACRYLATES COPOLYMER

CAS: 25133-97-5/ 25035-88-5/ 25685-29-4/ 26300-51-6/ 159666-35-0/ 25212-88-8/ 25035-69-2

Function: Antistatic/ Binding / Film forming

EINECS: 607-492-1

Appearance: Liquid

Cosmetic Regulatory Summary:

EU Cosmetics Status: Not controlled

Regulatory Summary:

EU DSD/DPD Classification› Unclassified

EU CLP Harmonised Classification› Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00164833	No NOAEL Available	NOAEL mg/kg bw day: -
SED Child mg/kg bw/day: 0.00592215	No NOAEL Available	NOAEL test method: -
SED Baby mg/kg bw/day: 0.01676271	No NOAEL Available	

Toxicological Summary:

The ingredient is not acutely toxic via oral, dermal and inhalation routes, a skin irritant, an eye irritant, a skin sensitizer, mutagenic. It is not a carcinogenic, a reproductive toxicant, bioaccumulative according to data from read across, there is no data on phototoxic. Acrylates Copolymer is a copolymer (CIR, 2002), dermal absorption should not occur. The substances was not be classified as CMR according to CLP. Based on this information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics

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Chemical Substance: STEARALKONIUM BENTONITE

EU INCI NAME:STEARALKONIUM BENTONITE

CAS: 130501-87-0

EINECS: -

Cosmetic Regulatory Summary:

EU Cosmetics Status: Not controlled

Regulatory Summary:

EU DSD/DPD Classification› unclassified

EU CLP Harmonised Classification›

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00150500	No NOAEL Available
SED Child mg/kg bw/day: 0.00540718	No NOAEL Available
SED Baby mg/kg bw/day: 0.01530508	No NOAEL Available

Toxicological Summary:

Function: Gel forming and viscosity controlling agent. This is a clay reacted with stearalkonium chloride. As supplied it will be irritating to the skin and eye but once incorporated into a nail varnish at up to 2% unlikely to cause allergy or irritancy.

Chemical Substance: STYRENE/ACRYLATES COPOLYMER

EU INCI NAME:STYRENE/ACRYLATES COPOLYMER

CAS: 9010-92-8/ 25034-86-0/ 27306-39-4/ 25085-34-1

Function: Film forming/Opacifying

EINECS: polymer

Cosmetic Regulatory Summary:

EU Cosmetics Status: Not controlled

Regulatory Summary:

EU DSD/DPD Classification› Unclassified

EU CLP Harmonised Classification›

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00144193	No NOAEL Available
SED Child mg/kg bw/day: 0.00518059	No NOAEL Available
SED Baby mg/kg bw/day: 0.01466372	No NOAEL Available

Toxicological Summary:

Cosmetic Functions : Film Forming/Opacifying/Viscosity controlling. A polymeric material. Copolymer formed from styrene and ethylhexyl acrylate, and one or more monomers of acrylic acid, methacrylic acid or one of their simple esters An essentially inert polymeric material. Likely to have minimal toxic properties providing monomers are present at minimal levels. Unlikely to have potential to cause severe skin or eye irritation even on prolonged contact, not expected to give rise to skin sensitization provided the raw material is well cured. Polymers of this type have not been associated with mutagenicity. The above data is read across data from similar polymers used as cosmetic ingredients particularly in adhesive products already in the marketplace. Acrylates polymers are generally uniformly produced and leave very little residual monomer. The main residue often being 2-ethylhexyl acrylate. This monomer was not found to be genotoxic but is carcinogenic when applied at a concentration of 21% to the skin of C3H mice and not carcinogenic in studies using NMRI mice. Other safety concern include inhalation particularly with acrylic acid which is a nasal irritant. Stated to exhibit very little toxicity. In skin studies in rabbit acrylates copolymer did produce irritation, but no evidence of sensitization was found. On that basis, the CIR expert panel concluded that Acrylates copolymer and other acrylate polymers group of chemicals listed were considered as safe for use as cosmetic ingredients. This ingredient is listed in Cosing as an existing cosmetic ingredient. International Journal of Toxicology November 2002 vol. 21 no. 3 suppl 1-50

Chemical Substance: N-BUTYL ALCOHOL

EU INCI NAME: N-BUTYL ALCOHOL
CAS: 71-36-3 Function: denaturants / solvents
EINECS: 200-751-6

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> R10-22-37/38/-41-67

EU CLP Harmonised Classification>
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00134590 No NOAEL Available
SED Child mg/kg bw/day: 0.00483556 No NOAEL Available
SED Baby mg/kg bw/day: 0.01368711 No NOAEL Available
Toxicological Summary:

Cosmetic Functions : Denaturant / Perfuming / Solvent. A narcotic solvent which is irritating to the skin and eye. When present at less than 1% in a formulation unlikely to cause irritancy or allergy. May be used at up to 14% in a nail varnish provided the nail varnish is applied sparingly and not spread over the surrounding skin.

Chemical Substance: YELLOW 5 LAKE/ CI 19140

EU INCI NAME:CI 19140
CAS: 1934-21-0/12225-21-7 Function: Colour
EINECS: 217-699-5/235-428-9
Appearance: Powder
Log Kow: -10.17
Water Solubility: Soluble in water
Cosmetic Regulatory Summary:
EU Cosmetics Status: Approved colour all products
Regulatory Summary:
EU DSD/DPD Classification> Unclassified

EU CLP Harmonised Classification> Unclassified
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00086000 MoS - Adult 60kg: 3069767.4 NOAEL mg/kg bw day: 2640
SED Child mg/kg bw/day: 0.00308982 MoS - Child 16.7kg: 854418.6 NOAEL test method: 2-generation oral rat carcinogenicity study
SED Baby mg/kg bw/day: 0.00874576 MoS - Baby 5.9kg: 301860.4
Toxicological Summary:

The ingredient is not acutely toxic by oral administration. It is not an eye irritant, a skin sensitizer, mutagenic, carcinogenic or a reproductive toxicant. No data was available for skin irritation. Its bioaccumulative potential cannot be determined from the available data. Available data is inconclusive, but suggests that it is possibly phototoxic. Based on this information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics when formulated to be non-phototoxic and non-irritating.

Chemical Substance: BENZOPHENONE-1

EU INCI NAME:BENZOPHENONE-1
CAS: 131-56-6 Function: U.V. absorbers
EINECS: 205-029-4

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled
Regulatory Summary:
EU DSD/DPD Classification> unclassified

EU CLP Harmonised Classification>
Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00054825 No NOAEL Available
SED Child mg/kg bw/day: 0.00196976 No NOAEL Available
SED Baby mg/kg bw/day: 0.00557542 No NOAEL Available
Toxicological Summary:

A widely used UV absorber. Not reported to be mutagenic in the Ames test. LD50 >5g/kg. Some, but not high, potential to irritate the skin or eye. Benzophenone-1 is not on the list of EU approved UV absorbers but may be used at low levels to stabilise the colour of products. At a concentration of up to 2% (updated August 2006 CIR list of found safe as used) in a leave-on product unlikely to cause irritation or allergy.

Chemical Substance: IRON OXIDE/ CI 77499

EU INCI NAME:CI 77499

CAS: 12227-89-3 / 1309-37-1 / 1317-61-9 / 1345-25-1 / 1345-27-3 / 52357-70-7

EINECS: 235-442-5/ 215-168-2/ 215-277-5/ 215-721-8/ 215-722-3/ 257-870-1

Function: Colour

Appearance: Powder

Cosmetic Regulatory Summary:

EU Cosmetics Status: Approved colour all products

Regulatory Summary:

EU DSD/DPD Classification> R7

EU CLP Harmonised Classification> Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00004433 MoS - Adult 60kg: 1127828.0

SED Child mg/kg bw/day: 0.00015928 MoS - Child 16.7kg: 313912.1

SED Baby mg/kg bw/day: 0.00045084 MoS - Baby 5.9kg: 110903.0

NOAEL mg/kg bw day: 50

NOAEL test method: 8-generation study

Toxicological Summary:

This ingredient is not a reproductive toxicant or phototoxic. The ingredient cannot be classified as to its carcinogenicity or bioaccumulation potential based on the available information. Furthermore, according to Annex IV in the Cosmetic Regulation of the European Union, this colourant ingredient is regarded as safe for unrestricted use in cosmetics (EEC, 2009). Based on this information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics.

Chemical Substance: SILICA

EU INCI NAME:SILICA

CAS: 7631-86-9 / 112945-52-5 / 60676-86-0 /63231-67-4

EINECS: 231-545-4/ 262-373-8/ 310-060-2

Function: Abrasive/ Absorbent/ Anticaking/ Bulking, Opacifying/ Viscosity Controlling

Appearance: White fluffy powder (CIR, 2009)

Water Solubility: Insoluble (JECFA, 1973)

Cosmetic Regulatory Summary:

EU Cosmetics Status: Not controlled

Regulatory Summary:

EU DSD/DPD Classification> unclassified

EU CLP Harmonised Classification> unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00027233 MoS - Adult 60kg: 32974296.2

SED Child mg/kg bw/day: 0.00097844 MoS - Child 16.7kg: 9177845.7

SED Baby mg/kg bw/day: 0.00276949 MoS - Baby 5.9kg: 3242472.4

NOAEL mg/kg bw day: 8980

NOAEL test method: 6 months oral in rats

Toxicological Summary:

The ingredient is not acutely toxic by oral or dermal administration or inhalation. It is not a skin irritant, an eye irritant, a skin sensitizer. It is not mutagenic, carcinogenic nor a reproductive toxicant. It has low bioaccumulation potential. No data was available for phototoxicity. Based on this information and other scientific literature on this ingredient, safety concerns are not expected with this ingredient for use in cosmetics.

Chemical Substance: STEARALKONIUM HECTORITE

EU INCI NAME:STEARALKONIUM HECTORITE

CAS: 94891-33-5 / 71011-26-2

EINECS: 305-633-9 / 275-126-4

Function: Polymer

Cosmetic Regulatory Summary:

EU Cosmetics Status: Not controlled

Regulatory Summary:

EU DSD/DPD Classification> Unclassified

EU CLP Harmonised Classification> Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00016125 No NOAEL Available

SED Child mg/kg bw/day: 0.00057934 No NOAEL Available

SED Baby mg/kg bw/day: 0.00163983 No NOAEL Available

Toxicological Summary:

Cosmetic Functions : Gel Forming / Viscosity Controlling / Suspending Agent -Nonsurfactant. A clay derivative formed as the reaction product of Hectorite and Stearalkonium Chloride. Mainly used as a thickening agent. Short term dermal toxicity studies with rabbits showed no dermal irritation at concentrations up to 50%. At 5% caused moderate eye irritation, likely due to the particulate nature of some components of clay. Not mutagenic in the Ames test. Overall this ingredient is most unlikely to give rise to adverse effects at the concentrations seen in cosmetics.

Chemical Substance: TRIMETHYLPENTANEDIYL DIBENZOATE

EU INCI NAME:TRIMETHYLPENTANEDIYL DIBENZOATE

CAS: 68052-23-3

EINECS: 268-316-3

Function: Plasticizer

Cosmetic Regulatory Summary:

EU Cosmetics Status: Not controlled

Regulatory Summary:

EU DSD/DPD Classification> Unclassified

EU CLP Harmonised Classification> Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00013760 No NOAEL Available

SED Child mg/kg bw/day: 0.00049437 No NOAEL Available

SED Baby mg/kg bw/day: 0.00139932 No NOAEL Available

Toxicological Summary:

Functions : Plasticizer. Oral and dermal LD50 values >5g/kg practically non irritating to skin and eyes. Unlikely to cause adverse effects when used as a plasticiser in a nail polish type product.

Chemical Substance: FERRIC AMMONIUM FERROCYANIDE/ CI 77510

EU INCI NAME:CI 77510
CAS: 14038-43-8 / 12240-15-2 / 25869-00-5
EINECS: 237-875-5/ 247-304-1
Appearance: Powder

Cosmetic Regulatory Summary:
EU Cosmetics Status: Approved colour all products

Regulatory Summary:
EU DSD/DPD Classification› Unclassified

EU CLP Harmonised Classification› Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00007123	MoS - Adult 60kg: 35094286.6	NOAEL mg/kg bw day: 2500
SED Child mg/kg bw/day: 0.00025594	MoS - Child 16.7kg: 9767909.7	NOAEL test method: 12 week repeated dose study in rats
SED Baby mg/kg bw/day: 0.00072444	MoS - Baby 5.9kg: 3450938.1	

Toxicological Summary:

The ingredient is not acutely toxic, a skin irritant, an eye irritant, a skin sensitizer, mutagenic, bioaccumulative, nor is it chronically toxic. No information was available on its carcinogenicity, reproductive toxicity or phototoxicity. Based on the available information and its permission for use in cosmetic products (including those used in the eye area) in the EU, Canada, and the US (Health Canada, 2011; 21 CFR, 2010; EEC, 2009), safety concerns are not expected with this ingredient for use in cosmetics.

Chemical Substance: POLYVINYL BUTYRAL

EU INCI NAME:POLYVINYL BUTYRAL
CAS: 63148-65-2 / 68648-78-2
EINECS: POLYMER
Function: Binding/ Film forming/ Viscosity controlling

Cosmetic Regulatory Summary:
EU Cosmetics Status: Not controlled

Regulatory Summary:
EU DSD/DPD Classification› R36/37/38

EU CLP Harmonised Classification› Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00006894	No NOAEL Available	NOAEL mg/kg bw day: -
SED Child mg/kg bw/day: 0.00024770	No NOAEL Available	NOAEL test method: -
SED Baby mg/kg bw/day: 0.00070111	No NOAEL Available	

Toxicological Summary:

Function:Binder, film former, viscosity controlling. The polymer produced by the condensation of polyvinyl alcohol and butylaldehyde. A fully polymerised material which forms a flexible film. Used as a hardener in nail varnishes or adhesives as a film former. Unlikely to cause irritation or allergy.

Chemical Substance: CI 60725

EU INCI NAME:CI 60725
CAS: 81-48-1
EINECS: 201-353-5
Function: Colour
Appearance: Powder

Cosmetic Regulatory Summary:
EU Cosmetics Status: Approved colour all products

Regulatory Summary:
EU DSD/DPD Classification› Unclassified

EU CLP Harmonised Classification› Unclassified

Systemic Exposure Dosage / Margin of Safety:

SED Adult mg/kg bw/day: 0.00000004	No NOAEL Available	NOAEL mg/kg bw day: -
SED Child mg/kg bw/day: 0.00000015	No NOAEL Available	NOAEL test method: -
SED Baby mg/kg bw/day: 0.00000043	No NOAEL Available	

Toxicological Summary:

The ingredient is not carcinogenic. No data was available for acute toxicity, skin and eye irritation, skin sensitization, mutagenicity, reproductive toxicity, bioaccumulation and phototoxicity. As this ingredient is permitted in Europe in cosmetics as a colorant (EEC, 2009), and other scientific literature on this ingredient, safety concerns are not expected with this ingredient.

Note: In the absence of NOAEL data, the Margin of Safety (MoS) has not been calculated.
Unless otherwise determined and in the absence of literature or other experimental data, a Dermal Absorption (DAp) of 100% is taken as the worst case scenario.
NOAEL: No Observed Adverse Effect Level; MoS: Margin of Safety; SED Systemic Exposure Dosage
Calculation of Margin of Safety: MoS = NOAEL / SED

Reference for skin surface area, exposures and application quantities are derived from:
1. RIVM Report 320104001/2006
2. References sited in Dermal Sensitization Quantitative Risk Assessment (QRA) For Fragrance Ingredients, 2006 revision
3. Exposure factors handbook 2009 Update
4. The SCCS's Notes of Guidance for the Testing of Cosmetic Ingredients and their Safety Evaluation 12th Revision SCCS/1647/22

5. Colipa Data SCCNFP/0321/02
6. McNamara et al, Food Chem. Tox; 2007, 45, 2086
7. Loretz et al, Food Chem. Tox; 2008, 46, 1516
N.B. Exposure times have been taken from RIVM Report 320104001/2006
8. Body weights taken from Exposure factors handbook 2009 Update and mean values have been used unless specified otherwise
9. ConsExpo database
10. New default values for the spray model, RIVM, March 2010

This formulation has been safety assessed by Intertek with reference to Articles 3 and 10 of Cosmetic Regulation (EC) No. 1223/2009. The safety assessment is based on the chemical specification and toxicological profile of the ingredients as supplied at the time of assessment.
The supplier to this safety assessment is advised to ask for a new safety evaluation if any change in formulation occurs, change in raw materials used, abnormally high number of adverse events are recorded, changes in recommended uses or other circumstances that may affect the safety of this product.

The REACH dossier, IUCLID Datasheet, OECD SIDS and EU RAR often include unpublished data, not otherwise available; however, it must be noted that the authorities have issued legal disclaimers for the databases. The declaimer, among other cautions, stressed that the data in the dossier, datasheet, data set or report are not necessarily comprehensive, complete, accurate or up-to-date. Use of the data may also be subject to copyright laws. Therefore, data from the such resource are used as supporting information.

Leshuai Zhang, Toxicologist, Intertek China
Professor, PhD, DABT, ERT, UKRT, DCST

Education

Ph. D., Comparative Biomedical Sciences **Aug 2005 – May 2010**
Center for Chemical Toxicology Research and Pharmacokinetics, College of Veterinary Medicine, North Carolina State University, Raleigh, North Carolina, USA

M. S., Molecular Biology **Sept 2002 – June 2005**
Department of applied Biology, East China University of Science and Technology &
Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Science, Shanghai, China

B. S., Biochemistry **Sept 1998 – June 2002**
Department of applied Biology, East China University of Science and Technology

Certificate

DCST, Diplomat of Certified Toxicologist CST	**Apr 2021**
ERT, Europe Registered Toxicologist	**Aug 2018**
UKRT, UK Registered Toxicologist	**Aug 2018**
DABT, Diplomate of American Board of Toxicology	**Oct 2015**

Career Experience

Mar 2021 – Present, Toxicologist, Intertek China

February 2014 – Present, Professor in School of Radiation Medicine and Protection (SRMP), Soochow University, Suzhou, Jiangsu Province, China

Research Interests: Polysaccharides from traditional medical herbs and tumor immunotherapy; Bismuth compounds and nephrotoxicity; Hepatotoxicity and phospholipidosis by liver spheroids (3D cell culture); Microcontact printing technology and cell backpack based drug delivery system

November 2012 – January 2014, Research Assistant Professor in the Nanotechnology Innovation Center of Kansas State University.

Research Interests:Food safety (toxicity) on primary hepatocytes; Nanocorona and Nanotoxicology studies

June 2010 – June 2012, Research Fellow in the Division for Drug Safety Research, Center for Drug Evaluation and Research, Food and Drug Administration, supported by the Oak Ridge Institute of Science and Education Fellowship Program. Under the supervision of Dr. Rodney Rouse and Dr.Thomas Colatsky.

Research Description: Drug induced pancreatitis in vivo, biomarker evaluation and toxicity mechanisms; Nanoparticle toxicity prediction in vitro; Calcium signaling in drug induced cardiovascular injury

Aug 2005 – June 2010, Graduate Research Assistant, Center for Chemical Toxicology Research and Pharmacokinetics, Department of Clinical Sciences, College of Veterinary Medicine, North Carolina State University, Raleigh, North Carolina. Under the supervision of Nancy A. Monteiro-Riviere.

Research Description: Quantum dot nanoparticle penetration and absorption in skin; Cytotoxicity of nanoparticles via MTT/Cell Titer Blue/Cell Titer 96AQ/LDH assays, live/dead fluorescence markers and apoptosis/necrosis markers, inflammatory factors release and reactive oxygen species (ROS); Nanoparticle cellular uptake and mechanisms by human epidermal keratinocytes, dendritic cells and mesenchymal stem cell derived adipose cells

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Journal Reviewers

Journal Name	IF	Review #
Biomaterials	10.3	2
ACS Applied Materials & Interfaces	8.5	9
Nanoscale	7	3
Particle and Fibre Toxicology	6.6	2
Wiley Interdisciplinary Reviews-Nanomedicine and Nanobiotechnology	6.1	8
Carbohydrate Polymer	6	4
Nanotoxicology	6	1
Biomacromolecules	5.7	1
Nanomedicine-Nanotechnology Biology and Medicine	5.6	8
Science of the Total Environment	5.6	1
International Journal of Biological Macromolecules	4.8	7
ACS Biomaterials Science & Engineering	4.5	1
International Journal of Nanomedicine	4.5	23
Scientific Reports	4	3
Toxicological Sciences	3.6	2
Metallomics	3.6	1
Toxicology	3.5	6
Toxicology letters	3.5	22
Cellular Immunology	3.3	3
Toxicology in vitro	3.1	31
Journal of Applied Toxicology	3.1	1
Archives of Pharmacal Research	2.5	1
Cancer Management and Research	2.2	1
Frontiers in Veterinary Science	2	1
IET Nanobiotechnology	1.9	1
Toxicology and Industrial Health	1.6	20
Toxicologic Pathology	1.4	3
Animal Biotechnology	1.3	1
International Journal of Toxicology	1.2	16
Journal of Nanoscience and Nanotechnology	1.1	1
Cutaneous and Ocular Toxicology	1.1	2
Nanoimpact		3
Nanotoday		2
Nanoscale Advances		1
Applied In Vitro Toxicology		1
Theranostics		1
Total		**195**

Funding Support

1. Design of cell backpacks by micro contact printing and their applications in tumor immunotherapy. National Natural Science Foundation of China #32171403, 2022/01-2025/12
2. Hepatotoxicity of copper sulfide nanoparticles. National Natural Science Foundation of China #31971319, 2020/01-2023/12
3. Bismuth nanomaterials and nephrotoxicity, National Natural Science Foundation of China #31771104，2018/01-2021/12
4. Influence of Graphene oxide Derivatives on phospholipidosis, National Natural Science Foundation of China #81401511，2015/01- 2017/12
5. Immunoregulatory function on herbal polysaccharide on dendritic cells, National Natural Science Foundation of China #81373950，2014/01 - 2017/12

Awards and Scholarships

1. Outstanding young scholars awarded by Chinese Society of Toxicology (2020)
2. Battelle Memorial Research Award of the Dermal Toxicology Specialty Section at the 48th Annual Meeting of the National Society of Toxicology (SOT), Baltimore, MD, 2009. Research Proposal “Inhibition of multi-walled carbon nanotubes in human epidermal keratinocytes by lectin or niacinamide”, $2500.
3. First place award for the MB Research Award, at the 47th Annual Meeting of the National Society of Toxicology (SOT), Seattle, Washington, 2008.
4. Third place for best poster at the In Vitro and Alternative Methods Specialty Section at the 47th Annual Meeting of the National Society of Toxicology (SOT), Seattle, Washington, 2008.
5. Toxicology and Applied Pharmacology, Certificate of Recognition for one of Elsevier’s Top 10 Cited Articles on Scopus 2007-2008.

Professional Associations and Activities

2021 – Present Associate Editor, Journal of Nanobiotechnology

2021 – Present Editor Board Member, Toxicology Research and Applications

2016 – Present Officer, Nanotoxicology Specialty Section, Chinese Society of Toxicology

2012 – Present Associate Editor, Toxicology and Industrial Health

2012 – 2015 Education Committee Officer, US Society of Toxicology

2011 – 2012 Officer, Nanotoxicology Specialty Section, US Society of Toxicology

2009 – Present Full membership, Sigma Xi Scientific Research Society

2006 – Present Membership in US Society of Toxicology

EUROTOX

This is to Certify that

LESHUAI ZHANG

may use the title

ERT

EUROPEAN REGISTERED TOXICOLOGIST

whilst registered with the

UK

Register of Toxicology

Signature

June 26, 2018

Date

EUROTOX

Basle, SWITZERLAND

Federation of European Toxicologists and European Societies of Toxicology

March 20, 2024

Re: EUROTOX ERT status

The following letter is to confirm that **LESHUAI ZHANG** has been a member of the EUROTOX European Register of Toxicologists since 2018. The title European Registered Toxicologist (ERT) is accorded by EUROTOX to individuals who have been accepted by their national register.

Once registered, toxicologists must re-affirm their registration credentials on a 5-yearly basis, and document their continued professional awareness and education, as well as their current activity in the subject. **According to our files, LESHUAI ZHANG was re-registered by the UK national register for the period 2023- 2028.**

The European Register of Toxicologists is a service of EUROTOX established in 1994. It constitutes a list of toxicologists who excel by high standards of education, skills, experience, and professional standing.

Please don't hesitate to contact me if further information is needed.

Cordially,

Prof. Martin Wilks

Office of the Secretary-General

Prof. Martin Wilks, ERT
Swiss Centre for Applied Human Toxicology Universität Basel
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www.eurotox.com
eMail: secretariat@eurotox.com

bts
THE BRITISH TOXICOLOGY SOCIETY

Royal Society of Biology

This is to certify that

Leshuai Zhang

has been registered with the

UK Register of Toxicologists

and is bound by the codes of conduct of the

Royal Society of Biology
and
British Toxicology Society

for the period

21st May 2018 to 20th May 2023

Lesley Stanley

Dr Lesley Stanley, ERT
(Panel Chair)

bts
the british toxicology society

Royal Society of Biology

This is to certify that

Leshuai Zhang

has been included within the

UK Register of Toxicologists

and is bound by the codes of conduct of the

Royal Society of Biology

and

British Toxicology Society

for the period

21 May 2023 to **20 May 2028**

Mr Mark Hosford, ERT
(Panel Chair)

Incorporated by Royal Charter
Registered Charity No: 277981

The American Board of Toxicology

hereby declares that

Leshuai Zhang

having fulfilled all the Board's requirements is

Certified in General Toxicology

October 29, 2015

president

corporate secretary

AMERICAN BOARD OF TOXICOLOGY, INC.

August 2019

Dr. Leshuai Zhang
Guoliyuan Xincun 76-202
Nantong, 226001
China

Dear Dr. Zhang:

This letter is to inform you of the status of your recertification application.

Your application is in order and you passed the Literature Review assessment. Therefore, nothing further is required. In December of 2020 (**NOT 2019)** you will receive a letter and sticker affirming your recertification for five years.

Please note, Diplomates are strongly encouraged to record activities related to recertification on an ongoing basis via the ABT website.

If you have any questions, please contact the ABT office.

Sincerely,

Susie Masten
Executive Director

P. O. Box 97786, Raleigh, NC 27624
(919) 841-5022
E-Mail: info@abtox.org