

CERTIFICATE OF CONFORMITY OF FRAGRANCE MIXTURES WITH IFRA STANDARDS

This Certificate assesses the conformity of a fragrance mixture with IFRA Standards and provides restrictions for use as necessary. It is based only on those materials subject to IFRA Standards for the toxicity endpoint(s) described in each Standard.

CERTIFYING PARTY:

Fraterworks
P. O. Box 46009, Park Avenue, Lower Hutt 5044, New Zealand

CERTIFICATE DELIVERED TO:

Customer:

SCOPE OF THE CERTIFICATE:

Product: FRW-50043 IRROZOL 908514

COMPULSORY INFORMATION:

We certify that the above mixture is in compliance with the Standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA), up to and including the 50th Amendment to the IFRA Standards (published June, 2021), provided it is used in the following category(ies) at a maximum concentration level of:

IFRA Category(ies) [see Table 12 in Guidance for the use of IFRA Standards for details]	Level of use (%)*
Category 1	4.0000
Category 2	1.7687
Category 3	6.5995
Category 4	20.0000
Category 5A	8.4473
Category 5B	5.6250
Category 5C	6.5995
Category 5D	1.8860
Category 6	3.4317
Category 7A	6.5995
Category 7B	6.5995
Category 8	1.8860
Category 9	20.0000
Category 10A	20.0000
Category 10B	20.0000
Category 11A	1.8860
Category 11B	1.8860
Category 12	100.0000

**Actual use level or maximum use level*

For other kinds of application or use at higher concentration levels, a new evaluation may be needed; please contact the certifying party.

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OPTIONAL INFORMATION:

Product: FRW-50043 IRROZOL 908514

Information about presence and concentration of fragrance ingredients subject to IFRA Standards in the fragrance mixture named above is as follows:

Materials under the scope of IFRA Standards:	CAS number(s):	Recommendation from IFRA Standard:	Concentration (%) in fragrance mixture or finished product:
a-Bisabolol	515-69-5		0.0030
alpha-Cedrene	469-61-4		0.1215
Benzaldehyde	100-52-7		0.0088
Benzyl cyanide	140-29-4	Prohibition: Benzyl cyanide as such should not be used as fragrance ingredient. The natural extracts containing Benzyl cyanide should not be used as substitutes for this substance. Restriction: On the basis of established maximum concentration levels of this substance in commercially available natural sources (like essential oils and extracts), exposure to this substance from the use of these oils and extracts is not significant and the use of these oils is authorized as long as the level of Benzyl cyanide in the finished product does not exceed 0.01% (100 ppm).	0.0006
beta.-Cedrene	546-28-1		0.0295
Cedr-8-ene	11028-42-5		0.1510
Cuminaldehyde	122-03-2		0.0065
Cyclamen aldehyde	103-95-7	Specification: Cyclamen aldehyde should not contain more than 1.5% of Cyclamen alcohol.	0.3375

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Farnesal	19317-11-4		0.0004
Jasmine absolute (sambac)	1034798-23-6		0.1000
Methyl N-methylantranilate	85-91-6	Specification: This material has been identified for having the potential of forming nitrosamines in nitrosating systems. Downstream users therefore have to be notified of the presence of the material and its potential, to be able to consider adequate protective measures.	0.0048
Methyl β -naphthyl ketone	93-08-3		0.0115
Musk ketone	81-14-1	Specification: Musk xylene (CAS number 81-15-2), which has been prohibited for use in fragrance compounds for environmental reasons (vPvB), can be present in Musk ketone as an impurity. Musk ketone should only be used if it contains less than 0.1% of Musk xylene.	3.0000
o-Methoxycinnamaldehyde	1504-74-1		0.0001

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Oakmoss extracts	9000-50-4	<p>Restriction: For Oakmoss and Treemoss extracts, the restrictions in the Standards are directly linked to the presence of Atranol and Chloroatranol in the finished products. To ensure that those remain below trace levels, the upper concentration levels have not been increased (compared its last publication in the Amendment 43 (2008)).</p> <p>In the presence of Treemoss extracts, the level of Oakmoss in the respective category has to be reduced accordingly, such that the total amount of both extracts does not exceed the maximum permitted level in each category as listed in the table above.</p> <p>If the same fragrance mixture is intended to be used in more than one IFRA Category, then the most restrictive limitation (based on foreseen use concentrations and maximum permitted level) will apply.</p> <p>Specification: Oakmoss extracts must not contain added Treemoss, which is a source of resin acids.</p> <p>Traces of resin acids may be carried over to commercial qualities of Oakmoss in the manufacturing process. These traces must not exceed 0.1% (1000 ppm) of Dehydroabietic acid (DHA) in the extract. The concentration of resin acids in Oakmoss can be measured with an High Performance Liquid Chromatography (HPLC) Reverse Phase – Spectrofluorometry method.</p> <p>Further, levels of Atranol and Chloroatranol should each be below 100 ppm in Oakmoss extracts.</p>	0.5000
p-Methoxybenzaldehyde	123-11-5		0.1671

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Safrole, Isosafrole and Dihydrosafrole	94-59-7	Prohibition: Safrole, Isosafrole and/or Dihydrosafrole as such should not be used as fragrance ingredients. The natural extracts containing Safrole, Isosafrole and/or Dihydrosafrole should not be used as substitutes for these ingredients. Restriction: On the basis of established maximum concentration levels of this substance in commercially available natural sources (like essential oils, extracts and absolutes), exposure to this substance from the use of these oils and extracts is regarded acceptable as long as the total concentration of Safrole, Isosafrole and Dihydrosafrole in the finished consumer product does not exceed 0.01%.	0.0000
Ylang ylang extracts	8006-81-3		1.8844
Methyl ionone, mixed isomers	127-51-5	Restriction: The above limits apply to Methyl ionone isomers used individually or in combination. Specification: Pseudo methyl ionones (CAS numbers 26651-96-7, 72968-25-3, 1117-41-5) should not be used as fragrance ingredient as such. A level of up to 2% of Pseudo methyl ionones as an impurity in Methyl ionones is accepted.	5.5000
alpha-Amyl cinnamic aldehyde	122-40-7		0.1757
Benzyl alcohol	100-51-6		3.0222
Benzyl benzoate	120-51-4		0.1132
Benzyl salicylate	118-58-1		1.7277
Cinnamic aldehyde	104-55-2		0.0114
Cinnamic alcohol	104-54-1		3.7882

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Citral	5392-40-5		0.0229
Citronellol	106-22-9		0.8190
Coumarin	91-64-5		0.0001
Eugenol	97-53-0		0.0236
Farnesol	4602-84-0	Specification: Farnesol should only be used as a fragrance ingredient if it contains a minimum of 96% of farnesol isomers as determined by GLC.	0.0283
Geraniol	106-24-1		0.7109
Hydroxycitronellal	107-75-5		4.1739
Isoeugenol	97-54-1		0.0094
l-Linalool	126-91-0	Specification: Oxidation products of Linalool, especially hydroperoxides, have been demonstrated to be potent sensitizers. d-, l- and dl-Linalool and natural products containing substantial amounts of it, should only be used when the level of (hydro)peroxides is kept to the lowest practical level, for instance by adding antioxidants at the time of production. The addition of 0.1% BHT or α-Tocopherol for example has shown great efficiency. Such products should have a peroxide value of less than 20 millimoles per liter, determined according to the IFRA analytical method for the determination of the peroxide value, which can be downloaded from the IFRA website (www.ifrafragrance.org).	0.5000

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Linalool	78-70-6	Specification: Oxidation products of Linalool, especially hydroperoxides, have been demonstrated to be potent sensitizers. d-, l- and dl-Linalool and natural products containing substantial amounts of it, should only be used when the level of (hydro)peroxides is kept to the lowest practical level, for instance by adding antioxidants at the time of production. The addition of 0.1% BHT or α-Tocopherol for example has shown great efficiency. Such products should have a peroxide value of less than 20 millimoles per liter, determined according to the IFRA analytical method for the determination of the peroxide value, which can be downloaded from the IFRA website (www.ifrafragrance.org).	1.3276
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Date: 15 Mar 2023

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Annex: Definition of IFRA Standard categories by product type

Product type	Category
Lip Products of all types (solid and liquid lipsticks, balms, clear or colored, etc.) Children's toys	1
Deodorant and antiperspirant products of all types including any product with intended or reasonably foreseeable use on the axillae or labelled as such (spray, stick, roll-on, under-arm, deocologne, etc.) Body sprays (including body mist)	2
Eye products of all types (eye shadow, mascara, eyeliner, eye make-up, eye masks, eye pillows, etc.) including eye care and moisturizer Facial make up and foundation Make-up remover for face and eyes Nose pore strips Wipes or refreshing tissues for face, neck, hands, body Body and face paint (for children and adults) Facial masks for face and around the eyes	3
Hydroalcoholic and non-hydroalcoholic fine fragrance of all types (Eau de Toilette, Parfum, Cologne, solid perfume, fragancing cream, aftershaves of all types, etc.) Fragranced bracelets Ingredients of perfume kits and fragrance mixtures for cosmetic kits Scent pads, foil packs Scent strips for hydroalcoholic products	4
Products applied to the face and body using the hands (palms), primarily leave-on:	
Body creams, oils, lotions of all types Foot care products (creams and powders) Insect repellent (intended to be applied to the skin) All powders and talc (excluding baby powders and talc)	5A
Facial toner Facial moisturizers and creams	5B
Hand cream Nail care products including cuticle creams, etc. Hand sanitizers	5C
Baby cream/lotion, baby oil, baby powders and talc	5D
Toothpaste Mouthwash, including breath sprays Toothpowder, strips, mouthwash tablets	6
Products applied to the hair with some hand contact:	
Hair permanent or other hair chemical treatments (rinse-off) (e.g. relaxers), including rinse-off hair dyes	7A
Hair sprays of all types (pumps, aerosol sprays, etc.) Hair styling aids non sprays (mousse, gels, leave- on conditioners) Hair permanent or other hair chemical treatments (leave-on) (e.g. relaxers), including leave-on hair dyes	7B
Intimate wipes Tampons Baby wipes Toilet paper (wet)	8

Annex: Definition of IFRA Standard categories by product type - continued

Product type	Category
<p>Bar soap Shampoo of all type Cleanser for face (rinse-off) Conditioner (rinse-off) Liquid soap Body washes and shower gels of all types Baby wash, bath, shampoo Bath gels, foams, mousses, salts, oils and other products added to bathwater Foot care products (feet are placed in a bath for soaking) Shaving creams of all types (stick, gels, foams, etc.) All depilatories (including facial) and waxes for mechanical hair removal Shampoos for pets</p>	9
Household care products with mostly hand contact:	
<p>Hand wash laundry detergent (including concentrates) Laundry pre-treatment of all types (e.g. paste, sprays, sticks) Hand dishwashing detergent (including concentrates) Hard surface cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.) Machine laundry detergents with skin contact (e.g. liquids, powders) including concentrates Dry cleaning kits Toilet seat wipes Fabric softeners of all types including fabric softener sheets Household cleaning products, other types including fabric cleaners, soft surface cleaners, carpet cleaners, furniture polishes sprays and wipes, leather cleaning wipes, stain removers, fabric enhancing sprays, treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics) Floor wax Fragranced oil for lamp ring, reed diffusers, pot-pourri, liquid refills for air fresheners (non-cartridge systems), etc. Ironing water (Odorized distilled water)</p>	10A
<p>Animal sprays – sprays applied to animals of all types Air freshener sprays, manual, including aerosol and pump Aerosol/spray insecticides</p>	10B
Products with intended skin contact but minimal transfer of fragrance to skin from inert substrate:	
<p>Feminine hygiene conventional pads, liners, interlabial pads Diapers (baby and adult) Adult incontinence pant, pad Toilet paper (dry)</p>	11A
<p>Tights with moisturizers Scented socks, gloves Facial tissues (dry tissues) Napkins Paper towels Wheat bags Facial masks (paper/protective) e.g. surgical masks not used as medical device Fertilizers, solid (pellet or powder)</p>	11B
<p>Candles of all types (including encased) Laundry detergents for machine wash with minimal skin contact (e.g. Liquid tabs, pods) Automated air fresheners and fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5mL/spray), plug-ins, closed systems, solid substrate, membrane delivery, electrical, powders, fragrancing sachets, incense, liquid refills (cartridge), air freshening crystals) Air delivery systems Cat litter Cell phone cases Deodorizers/maskers not intended for skin contact (e.g. fabric drying machine deodorizers, carpet powders) Fuels Insecticides (e.g. mosquito coil, paper, electrical, for clothing) excluding aerosols/sprays Joss sticks or incense sticks Dishwash detergent and deodorizers – for machine wash Olfactive board games Paints Plastic articles (excluding toys) Scratch and sniff Scent pack Scent delivery system (using dry air technology) Shoe polishes Rim blocks (Toilet)</p>	12

Allergen Analysis

Product: FRW-50043 IRROZOL 908514

Ingredient	CAS number(s):	Concentration present as a percentage (%) or "A" for absent
alpha-iso-Methylionone	127-51-5	5.5000
Amyl Cinnamal	122-40-7	0.1757
Amylcinnamyl Alcohol	101-85-9	A
Anise Alcohol	105-13-5	A
Benzyl Alcohol	100-51-6	3.0222
Benzyl Benzoate	120-51-4	0.1132
Benzyl Cinnamate	103-41-3	A
Benzyl Salicylate	118-58-1	1.7277
Butylphenyl Methylpropional (Lilial)	80-54-6	A
Cinnamal	104-55-2	0.0114
Cinnamyl Alcohol	104-54-1	3.7882
Citral	106-26-3, 141-27-5, 5392-40-5	0.0229
Citronellol	106-22-9, 1117-61-9, 141-25-3, 26489-01-0, 6812-78-8, 7540-51-4	0.8190
Coumarin	91-64-5	0.0001
Eugenol	97-53-0	0.0236
Evernia Furfuraceae (Tree Moss) Extract	90028-67-4	A
Evernia Prunastri (Oak Moss) Extract	90028-68-5	A
Farnesol	4602-84-0	0.0283
Geraniol	106-24-1	0.7109
Hexyl Cinnamal	101-86-0	A
Hydroxycitronellal	107-75-5	4.1739
Hydroxyisohexyl 3-Cyclohexene Carboxaldehyde (Lyral)	31906-04-4	A
Isoeugenol	5932-68-3, 97-54-1	0.0094
Limonene	138-86-3, 5989-27-5, 5989-54-8, 7705-14-8	A
Linalool	126-90-9, 126-91-0, 78-70-6	1.8276
Methyl 2-Octynoate	111-12-6	A

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