



CERTIFICATE OF ANALYSIS

Product	CITRAL
Batch Number	4377504
Best Before End	NOVEMBER 2022

NATURAL OCCURRENCE	IN LEMON, ORANGE, ETC; ISOLATED FROM LEMONGRASS OIL.
APPEARANCE	CLEAR ,PALE YELLOW LIQUID.(REDISH - YELLOW ON KEEPING).
REF. IND. AT 20° C.	1. 486 TO 1. 490.
OPT.ROTN.	0° / INACTIVE
ASSAY	96 % MIN. G.C.
BOILING PT.	228° C./ ATM.PR.
SP.GR.AT 25° / 25° C.	0. 885 TO 0.891.
ODOUR	STRONG - FRESH, LEMON PEEL LIKE.
FLAVOUR/TASTE	BITTERISH, LEMON PEEL LIKE.
SOLUBILITY	SOLUBLE IN 1: 1 RATIO IN PROPYLENE GLYCOL & MINERAL OIL.
USES	: FLAVOUR AND FRAGRANCE INDUSTRY, PERFUMERY COMPOUND, SOAPS.CANDLES



DECLARATION OF ALLERGENS

PRODUCT	Citral Oil
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MATERIAL	CAS NUMBER	TOTAL ALLERGEN INCLUSION LEVEL (%)
AMYL CINNAMAL	122-40-7	-
BENZYL ALCOHOL	100-51-6	-
CINNAMYL ALCOHOL	104-54-1	-
CITRAL	5392-40-5	96
EUGENOL	97-53-0	-
HYDROXYCITRONELLAL	107-75-5	-
ISO EUGENOL	97-54-1	-
AMYL CINNAMYL ALCOHOL	101-85-9	-
BENZYL SALICYLATE	118-58-1	-
CINNAMAL	104-55-2	-
COUMARIN	91-64-5	-
GERANIOL	106-24-1	-
HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	31906-04-4	-
ANISE ALCOHOL	105-13-5	-
BENZYL CINNAMATE	103-41-3	-
FARNESOL	4602-84-0	-
BUTYLPHENYL METHYLPROPIONAL	80-54-6	-
LINALOOL	78-70-6	-
BENZYL BENZOATE	120-51-4	-
CITRONELLOL	106-22-9	-
HEXYL CINNAMAL	101-86-0	-
LIMONENE	5989-27-5	-
METHYL 2-OCTYNOATE	111-12-6	-
ALPHA-ISOMETHYL IONONE	127-51-5	-
EVERNIA PRUNASTRI EXTRACT	90028-68-5	-
EVERNIA FURFURACEA EXTRACT	90028-67-4	-
		96%



BRIEF MANUFACTURING PROGRESS FLOW CHART

Manufacturing process of Citral Essential Oils

- harvesting Grass →
- Collecting of Grass , →
- Drying the Grass in sun light →
- **Filling of crushed Seed in Vessel** →
- Steam distillation process start →
- Collection of oil from separator Tank →
- **Filling of Lemon Grass oil in Vessel** →
- Friction distillation process start →
- Collection of oil from Tank →
- Filtration of oil and dirty part. →
- Storage of Oils in drums →
- Testing of lot sample for quality →
- Send to warehouse for sale .



GMO AND VEGAN STATEMENT

Citral Essential Oil(Cymbopogon Citratus)

CUSTOMS TARIFF NO. : 3301.29.00.00
COUNTRY OF ORIGIN : INDIA

We certify that no alcohol or animal derivatives were used during the manufacturing process.

We further certify that it does not contain any chemical, pesticides or alcohol And it is GMO free product.

We confirm that material did not undergo irradiation during any stage of the manufacturing process.

This is also confirm that this oil is suitable for Vegan users.

03.01.2019



IFRA

CITRAL ESSENTIAL OIL

INCI Name :CYMBOPOGON FLEXUOSUS/CITRATUS

We certify that the above compound is in compliance with the standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA 48TH Amendment), provided it is used in the following class(es) at a maximum concentration level of:

IFRA Class(es) (See Annex for Details)	Max Level of Use (%)
Class 1{(*)}	No Limit(*)
Class 2	No Limit
Class 3A	No Limit
Class 3B	No Limit
Class 3C	No Limit
Class 3D	No Limit
Class 4A	No Limit
Class 4B	No Limit
Class 4C	No Limit
Class 4D	No Limit
Class 5	No Limit
Class 6{(*)}	No Limit(*)
Class 7A	No Limit
Class 7B	No Limit
Class 8A	No Limit
Class 8B	No Limit
Class 9A	No Limit
Class 9B	No Limit
Class 9C	No Limit
Class IOA	No Limit
Class 10B	No Limit
Class 11	No Limit

(*) IFRA would recommend that any material used to impart perfume or flavour in products intended for human ingestion should consist of ingredients that are in compliance with appropriate regulations for foods and food flavourings.

The IFRA Standards regarding use restrictions are based on safety assessments by the Panel of Experts of the RESEARCH INSTITUTE FOR FRAGRANCE MATERIALS (RIFM) and are enforced by the IFRA Scientific Committee.

Evaluation of individual Fragrance ingredients is made according to the safety standards contained in the relevant section of the IFRA Code of Practice.

It is the ultimate responsibility of our customer to ensure the safety of the final product (containing this fragrance) by further testing if need be.

ANNEX: Definition of IFRA Classes

FINISHED PRODUCT TYPES	IFRA CATEGORY
Lip Products of all types (solid and liquid lipsticks, balms, clear or coloured, etc.), Children's Toys.	Class 1
Deodorant and Antiperspirant Products of all types including any product with Intended or a reasonably foreseeable use on the axillae or labelled as such (spray, stick, roll-on, under-arm, deodorant-cologne and body spray, etc.) Nose Pore Strips. Fragranced Bracelets.	Class 2
Hydroalcoholic Products - Applied to Recently Shaved Skin (includes After Shave)	Class 3A
Hydroalcoholic Products Applied to Recently Shaved Skin (includes After Shave) Fine Fragrance.	Class 3B
Eye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc.) including eye care. Men's Facial creams and Balms. Baby Creams, Lotions, Oils. Body Paint for Children.	Class 3C
Tampons.	Class 3D
Hydroalcoholic Products applied to unshaved skin (includes aqueous based, alcoholic based and hydroalcoholic) like Cologne, Eau de cologne, Eau de Parfum or Parfum. Ingredients or Perfume Kits. Scent Pads, Foil Packs. Scent Strips for hydroalcoholic products.	Class 4A
Fine Fragrance - Hydroalcoholic Products applied to unshaved skin (includes aqueous based, alcoholic based and hydroalcoholic) like Cologne, eau de cologne, Eau de Parfum or parfum.	Class 4B
Hair Styling Aids, Sprays of all types (pumps, aerosol sprays, etc.) Body Creams, Oils, Lotions of all types (except baby creams, lotions and oils). Body sprays (including Body Mist) with no intended or reasonably foreseeable use on the axillae. Fragrance Compounds for Cosmetic Kits. Foot care products. Hair deodorant.	Class 4C
Body Paint except those for children) fragrance Cream, Solid Perfumes.	Class 4D

Facial Masks. Women's Facial Creams/Facial Make-up, Hand Cream, Hand Sanitizers, Baby Powder and Talc, Hair Permanent and other hair chemical treatments (e.g. relaxers) but not hair dyes, Wipes or Refreshing Tissues for Face, Neck, Hands, Body, Dry Shampoo or Waterless Shampoo.	5(*)
Mouthwash, including Breath Sprays, Toothpaste.	Class 6
Intimate Wipes, Baby Wipes.	Class 7A
Insect Repellent (intended to be applied to skin).	Class 7B
Make-up Removers of all types (not including face cleansers). Hair Styling Aids Non-Spray of all types (mousse, gels, leave-conditioners, etc.), Nail Care, Powders and talc's, all types (except baby powder and talc's)	Class 8A
Hair Dyes	Class 8B
Conditioner (Rinse-Off), Liquid Soap, Shampoos of all types (including baby shampoos), Face Cleansers of all types (washes, gels, scrubs, etc.). Shaving Creams of all types (stick, gels, foams, etc.), All Depilatories (including waxes for mechanical hair removal), Body Washes of all types (including baby washes) and Shower Gels of all types, Bar Soap (Toilet Soap), Bath Gels, Foams, Mousses, Salts, Oils and Other Products added to bathwater.	Class 9A
Feminine hygiene - pads, liners, Toilet paper, Wheat bags.	Class 9B
Facial tissues, Napkins, Paper towels, Other Aerosols (including air freshener sprays and air freshener pump sprays, but not including deodorants/antiperspirants, hair styling aids/sprays	Class 9C
Hand wash Laundry Detergents of all types including concentrates, Fabric Softeners of all types including fabric softener sheets, household Cleaning Products, Other Types (fabric cleaners, soft surface cleaners, carpet cleaners, etc.) Machine Wash Laundry Detergents (liquids, powders, tablets, etc.) including laundry bleach and concentrates, Hand Dishwashing Detergent including concentrates, Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.), Shampoos for pets, Dry cleaning kits, Scented gloves, socks, tights with moisturisers.	Class 10A
Diapers, Toilet seat wipes.	Class 10B

<p>All non-skin contact or incidental skin contact including: Candles, Air Fresheners and Fragrance of all types (concentrated aerosol with metered doses (range 0.05-0.8ml/spray), plug-ins, solid substrate, membrane delivery, electrical), Air Delivery Systems, Cell Phone Cases, Pot pourri, powders, fragrance sachets, liquid refills for air fresheners (non-cartridge systems), Reed diffusers, Liquid refills for air fresheners (cartridge systems), Shoe Polishes, Deodorisers/Maskers not intended for skin contact (e.g. fabric drying machine deodorisers, carpet powders), Insecticides (mosquito coil, paper, electrical for clothing etc.) excluding aerosols, Scent delivery system using a dry air technology that releases a fragrance without sprays, aerosols or heated oils (technology of nebulisation), Air freshening crystals, Toilet Blocks, Joss Sticks or Incense Sticks, Machine-only wash Detergent and Deodorisers, Machine-only Laundry Detergent (e.g. Liquitabs)**, Plastic articles (excluding toys), Fuels, Fragranced lamp ring, Scratch and Sniff (sampling technology), Paints, Cat Litter, Animal Sprays (all types), Treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorisers for textiles or fabrics), Floor Wax, Odoured Distilled Water (that can be added to steam irons).</p>	<p>Class 11</p>
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*Class 5, Facial Masks: There are several types of mask: peel off (similar to rinse-off, rinse off and leave-on (you only remove the excess with facial tissue). To ease the split the most restrictive, i.e. leave-on is applied for all.

**Liquitabs corresponds to a dose of liquids wrapped in a film: no contact with hands is expected under normal conditions of use.

The table was prepared with the intention to cover the vast majority of the products; however, it may not cover some specific applications. In this case other classes may be attributed bases on a specific risk assessment.



SAFETY DATA SHEET
CITRAL ESSENTIAL OIL

21/02/20

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : CITRAL ESSENTIAL OIL

CAS number : 5392-40-5

FEMA #: 2303 HTC #: 2912.19.1000

Ec no. : 226-394-6

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Concentrated material for manufacturing purposes only.

1.3. Details of the supplier of the safety data sheet

Supplier MADAR Corporation Limited
19-20 Sandleheath Industrial Estate
Fordingbridge
Hampshire
SP6 1PA

1.4. Emergency telephone number

Emergency telephone + 44 1425 655555 Office Hours are 09:00 - 17:30 weekdays only

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification : (1907/2006)

Physical hazards : Not Classified

Health hazards : Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Asp. Tox. 1 - H304

Environmental hazards : Aquatic Chronic 3 - H412

2.2. Label elements

Pictogram

Signal word : Danger



Hazard statements	H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P331 Do NOT induce vomiting.
Contains	: CITRAL 96%
Supplementary precautionary Statements	: P261 Avoid breathing vapour/ spray P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

SECTION 3 : Composition/information on ingredients

3.2. Mixtures

96% CITRAL CAS: 5392-40-5, EC: 226-394-6

Classification (EC 1907/2006) Eye Irrit. 2, H319, Aquatic Acute 1, H400, M Acute = 1, Aquatic Chronic 1, H410 M Chronic = 1

0.4 – 1.0% Geranial CAS-No.: 106-24-1 EC No.: 203-377-1

Classification (EC 1107/2009) Asp. Tox. 1, H304, Flam. Liq. 3, H226, Skin Irrit. 2, H315, Skin Sens. 1, H317

0.4 – 1.0% Limonene CAS-No.: 5989-27-5 EC No.: 227-813-5

CAS number: 138-86-3 EC number: 205-341-0

M factor (Acute) = 1 M factor (Chronic) = 1

Classification

Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410



SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	:Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information	:Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. See Section 11 for additional information on health hazards.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	:No specific recommendations.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:Extinguish with the following media: Foam, carbon dioxide or dry powder.
Unsuitable extinguishing media	:Water.

5.2. Special hazards arising from the substance or mixture

Specific hazards	:Toxic gases or vapours.
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5.3. Advice for firefighters

Protective actions during Firefighting	:Containers close to fire should be removed or cooled with water.
Special protective equipment for firefighters	:Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions :Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. No smoking, sparks, flames or other sources of ignition near spillage.

6.2. Environmental precautions

Environmental precautions :Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up :Keep combustible materials away from spillage. Eliminate all sources of ignition. Provide adequate ventilation. Contain and absorb spillage with sand, earth or other non-combustible material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions :Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin, eyes and clothing.

Advice on general occupational hygiene : Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions : Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Protect from freezing and direct sunlight.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Ingredient comments :No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate ventilation.

Eye/face protection :Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn:
Chemical splash goggles or face shield.

Hand protection :Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body protection :Wear appropriate clothing to prevent any possibility of skin contact.
Wear apron or protective clothing in case of contact.



Hygiene measures :No specific hygiene procedures recommended but good personal hygiene practices Should always be observed when working with chemical products.

Respiratory protection :No specific recommendations. Respiratory protection may be required if excessive Airborne contamination occurs.

Environmental exposure controls :Residues and empty containers should be taken care of as hazardous waste according To local and national provisions.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance :Liquid.

Colour :Clear Yellow .

Odour : Strong – Fresh, Lemon Peel Like

Flash point 97.5 °C

Relative density :~ 0.885 TO 0.891@ 25°C

9.2. Other information

Refractive index : ~1.486 TO 1.490@ 25°C

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability :Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions :Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid :Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid :Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products:Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) :65,000.0

Ingestion :May be fatal if swallowed and enters airways.

Skin contact :Irritating to skin. May cause sensitisation by skin contact.

Eye contact :Causes serious eye irritation.



Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) : 1,300.0

Species :Rat

ATE oral (mg/kg) :1,300.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀mg/kg) :2,500.0

Species :Rabbit

ATE dermal (mg/kg) :2,500.0

SECTION 12: Ecological Information

Ecotoxicity : Harmful to aquatic life with long lasting effects.

12.1. Toxicity

LIMONENE

Acute aquatic toxicity

LE(C)₅₀ :0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) :1

Chronic aquatic toxicity

M factor (Chronic) :1

12.2. Persistence and degradability

Persistence and degradability :The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential :The product does not contain any substances expected to be bio accumulating.

12.4. Mobility in soil

Mobility :The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment :This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods :Dispose of waste product or used containers in accordance with local regulations

SECTION 14: Transport information

General :The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number : Not applicable.



14.2. UN proper shipping name :Not applicable.

14.3. Transport hazard class(es) :No transport warning sign required.

14.4. Packing group :Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant :No.

14.6. Special precautions for user :Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation :Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

:Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18December 2006 concerning the Registration, Evaluation, Authorisation and Restriction Of Chemicals (REACH) (as amended).

Guidance :Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Key literature references and sources for data : European Chemicals Agency, <http://echa.europa.eu/>

Issued by Regulatory Manager

Revision 2

Hazard statements in full :H226 Flammable liquid and vapour.
:H302 Harmful if swallowed.
:H304 May be fatal if swallowed and enters airways.
:H315 Causes skin irritation.
:H317 May cause an allergic skin reaction.
:H319 Causes serious eye irritation.
:H400 Very toxic to aquatic life.
:H410 Very toxic to aquatic life with long lasting effects.
:H411 Toxic to aquatic life with long lasting effects.
:H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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QUALITY CONTROL DEPARTMENT
SPECIFICATION SHEET

Product - **CITRAL OIL** Date : 30.11.2019

NATURAL OCCURRENCE	IN LEMON, ORANGE, ETC; ISOLATED FROM LEMONGRASS OIL.
APPEARANCE	CLEAR ,PALE YELLOW LIQUID.(REDISH – YELLOW ON KEEPING).
REF. IND. AT 20° C.	I. 486 TO I. 490.
OPT.ROTN.	0° / INACTIVE
ASSAY	96 % MIN. G.C.
BOILING PT.	228° C./ ATM.PR.
SP.GR.AT 25° / 25° C.	0. 885 TO 0.891.
ODOUR	STRONG – FRESH, LEMON PEEL LIKE.
FLAVOUR / TASTE	BITTERISH, LEMON PEEL LIKE.
SOLUBILITY	SOLUBLE IN 1:1 RATIO IN PROPYLENE GLYCOL & MINERAL OIL.

CUSTOMS TERRIF NO. : 3301.29.00.00

COUNTRY OF ORIGIN : INDIA

IFRA Not restricted by IFRA

**USES : FLAVOUR AND FRAGRANCE INDUSTRY,
PERFUMERY COMPOUND, SOAPS.CANDLES**

IN THE OPINION OF THE UNDERSIGNED THE SAMPLE COLLECTED FROM PRODUCTION UNIT IS COMPLIES WITH ABOVE SPECIFICATIONS/INTERNATIONAL STANDARD QUALITY.