

# **CERTIFICATE OF ANALYSIS**

PRODUCT BENZOPHENONE CRYST.

BATCH NO 4453018

BEST BEFORE END NOVEMBER 2023

TEST	UNIT	RESULTS
APPEARENCE COLOR ODOR		CRYSTALLINE SOLID (POWDER) WHITE TO PALE YELLOW SWEET, ROSY, SLI HTLY HERBAL
GC ANALYSIS ASSAY	(% GC)	PROFILE SIMILAR TO STANDARD 99.90



FRAGRANCE ALLERGENS

07 April 2021

Product name: BENZOPHENONE CRYST.

Ingredient	Total content (w/w)
Amyl cinnamic alcohol (CAS 101-85-9)	Not Detected
Amyl cinnamic aldehyde (CAS 122-40-7)	Not Detected
Anisyl alcohol (CAS 105-13-5)	Not Detected
Benzyl alcohol (CAS 100-51-6)	Not Detected
Benzyl benzoate (CAS 120-51-4)	Not Detected
Benzyl cinnamate (CAS 103-41-3)  Not Detected	
Benzyl salicylate (CAS 118-58-1)	Not Detected
Cinnamic alcohol (CAS 104-54-1)	Not Detected
Cinnamic aldehyde (CAS 104-55-2)	Not Detected
Citral (CAS 5392-40-5)	Not Detected
Citronellol (CAS 106-22-9)	Not Detected
Coumarin (CAS 91-64-5)	Not Detected
Eugenol (CAS 97-53-0)	Not Detected
Farnesol (CAS 4602-84-0)	Not Detected
Geraniol (CAS 106-24-1)	Not Detected
Hexylcinnamic aldehyde (CAS 101-86-0)	Not Detected
Hydroxycitronellal (CAS 107-75-5)	Not Detected
Hydroxymethylpentylcyclohexene carboxaldehyde (Lyral) (CAS 31906-04-4)	Not Detected
Isoeugenol (CAS 97-54-1)	Not Detected
D-Limonene (CAS 5989-27-5)	Not Detected
Linalool (CAS 78-70-6)	Not Detected
2-methyl-3-(4-(1,1-dimethyl ethyl) phenyl)propanal (Lilial) (CAS 80-54-6)	Not Detected
Methyl heptine carbonate (CAS 111-12-6)	Not Detected
Gamma-methylionone (iso-alfa-Methylionone) (3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one) (CAS 127-51-5)	Not Detected
Treemoss (Evernia furfuracea) (CAS 90028-67-4)	Not Detected
Oakmoss (Evernia prunastri)(CAS 90028-68-5)	Not Detected

Detection limit: 10 ppm

This list comprises references 45, 67 and 69 to 92 in Annex III to Regulation (EC) 1223/2009 (the Cosmetics Regulation).

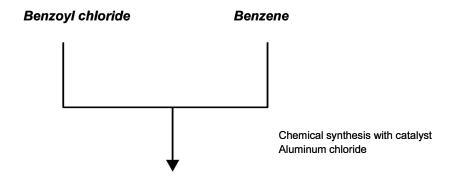
Version date: 4 October 2012



14 November 2018

# **Flowchart of the Production Process**

**Product:** BENZOPHENONE CRYST.



Benzophenone cryst.

Information provided by our supplier(s) and/or according to literature data.



Date :

# Confidential Fragrance Product Information Form

Chemical name:	BENZOPHENONE CRY METHANONE, DIPHEN AROMA CHEMICAL			
INCI Name :	BENZOPHENONE			
CAS number: CAS number(alternative):	119-61-9			
FEMA GRAS number FDA GRAS citation: Molecular Formula: Molecular weight: Generic Chemical class: Purity	2134 172.515 C13 H10 O 182 KETONES > 99.5	n raw mate	erials of mineral and/or petroc	chemical origin
Country of Origin				
	2914390030 CHINA/GERMANY			
material : Yes   BSE Statement	No 🔀		cally modified organism (GMC	
			f "Organic", or "made with Or rogram: Yes (on request)	ganic" as No <b>X</b>
This product is certified as Yes (on request) No		e requirem	nents of Regulation (EC) 834	/2007:
This product may comply v	vith Regulation (EC) 834/	/2007 in te	erms of (certificate on reques	st):
			duction standards for organic ndards for organic production	
2. Regulatory Status of in				
			isted on the following inventor	ries:
Region		Yes No	Inventory Number	
USA EUROPE	TSCA EINECS/ELINCS	X	204-337-6	_

Inis product or all components of the product have been listed on the following inventories:					
Region	Inventory	Yes	No	Inventory Number	
USA	TSCA	X			
EUROPE	EINECS/ELINCS	X		204-337-6	
Canada	DSL/NDSL	X			
Japan	ENCS	X		3-1258 // 4-125	
Australia	AICS	X			
New Zealand	NZIoC	X			
Philippines	PICCS	X			
Korea	ECL	X		KE-02716	
China	IECSC	X			
Taiwan	TCSI				



3. <u>Hazard identification</u> (please see o	ur SDS)		
4. <u>Transportation</u> (please see our SD	S)		
5. <u>CMR Substances</u> (please see our S	SDS)		
6. Animal testing (the product has no	t been tested on	animals for cosmetic p	ourposes.)
7. Fragrance Specific Information			
EU fragrance Allergens Allergens certificate available on requ	est.		
IFRA Certificate IFRA certificate available on request.			
Regulation (EC) 1223/2009 on Cosm Substance(s) which are mentioned in t preservatives, dyes, UV filters, fragrand	he Annexes to the	e EU Cosmetics Regu None present <b>X</b>	lation (other than
Name	CAS-No.	Annex/Ref.	Percentage
	0710 1101		
Other fragrance materials, restricted Halogenated and Nitromusk substan			one present X
Name of Halogenated / Nitromusk	003.	CAS-No.	Percentage
Musk Ketone		81-14-1	
Musk Xylol		81-15-2	
Rosalin		90-17-5	
Polycyclic musk compounds		 N	one present X
Name of Polycyclic musk	CAS-No.	Percentage	
Celestolide® (Crysolide® , ADBI)		13171-00-1	
Galaxolide® (Abbalide®, HHCB)		1222-05-5	
Phantolide® (AHDI)		15323-35-0	
Tonalide® (Fixolide®, AHTN)		21145-77-7	
Traseolide® (ATII)		68140-48-7	
Macrocyclic musk compounds		N	one present X
Name of Macrocyclic Musk		CAS-No.	Percentage



# **Additives and solvents**

anaenen name	None present X  Percentage	Ingredient name	None present X  Percentage
ngredient name Benzyl benzoate	1 orocinage	BHA	. c.ociitage
Diethyl phthalate		BHT	
Dipropyleneglycol		Tocopherol	
Ethanol		1 Goopheror	
Ethyl diglycol		+	
Hercolyn			
sopropyl myristate			
Propyleneglycol			
Triacetin			
Triethyl citrate			
Thourst oldate			
ngredient name	None present Percentage	Preservatives Ingredient name	None present X Percentage
Benzene	< 10 ppm	Methyl benzoate	
Toluene		Ethyl benzoate	
Hexane		Butyl benzoate	
Ethanol	000	Isobutyl benzoate	
Methanol	approx. 260 ppm	n Benzyl alcohol	
Emulsifiers	None present X	UV filters	None present X
ngredient name	Percentage	Ingredient name	Percentage
	None present X		
	None present X	Color Index Number	Percentage
Ingredient name		Color Index Number  Swiss VOC-legislation (d	
ngredient name	nicals according to	Swiss VOC-legislation (d	ated 12.11.1997/ 9
ngredient name			ated 12.11.1997/ 9
Nanomaterials This product contains n	Percentage anomaterials as defi	Swiss VOC-legislation (d	ated 12.11.1997/ 9



Name	•	CAS-No.	Percentage
			100,000
<b>X</b>	The product is listed in the Appendice to t		
12. <u>Suppl</u>	ier Guarantee		
has been of the data of ultimate re	nation contained herein is to the best of our know compiled from the currently existing information otained from the analysis made in our laboratory sponsibility of our customers to ensure the suita testing if need be. This document cancels and re	in our files received from our suppliers ar r. It is provided for your guidance only. It is sbility of the product for their particular pu	nd/or is the rpose

Version 4

Revised

13/06/16



07 April 2021

# **G.M.O. CERTIFICATE**

Product: BENZOPHENONE CRYST.

To our knowledge from the currently existing information in our files received from our suppliers, we certify that the above-mentioned product

- · does not contain,
- · does not consist of,
- is not derived from, and
- is not produced with the aid of

genetically modified organisms (GMO) or derivative ingredients. Therefore, it is exempt from the requirements of the EU Regulations 1829/2003/EC and 1830/2003/EC.

This document is electronically generated and therefore it is not signed



# IFRA CONFORMITY CERTIFICATE

To our knowledge from the currently existing information in our files received from our suppliers and/or the data obtained from the analysis made in our laboratory, we certify that the following product:

## **BENZOPHENONE CRYST**

is not restricted by the Standards of the International Fragrance Association (IFRA 48th Amendment / published June 2015), provided it is used at the following maximum concentration levels in the finished product<sup>(1)</sup>:

Class 1	Not restricted (2)	Class 6	Not restricted	(2)
Class 2	Not restricted	Class 7A	Not restricted	
Class 3A	Not restricted	Class 7B	Not restricted	
Class 3B	Not restricted	Class 8A	Not restricted	
Class 3C	Not restricted	Class 8B	Not restricted	
Class 3D	Not restricted	Class 9A	Not restricted	
Class 4A	Not restricted	Class 9B	Not restricted	
Class 4B	Not restricted	Class 9C	Not restricted	
Class 4C	Not restricted	Class 10A	Not restricted	
Class 4D	Not restricted	Class 10B	Not restricted	
Class 5	Not restricted	Class 11	Not restricted	

<sup>(1)</sup> the concentration of a fragrance ingredient should not exceed the usual concentration of the fragrance compound in the finished product.

Please note this certificate does not include food status conformity check. A separate document, wich may be available depending on the product, is needed for such purpose.

Contains no substances restricted by IFRA standards and bears no IFRA specification.

It may contain the following substance, for which a prohibition standard exists:

**BENZENE** < 0,0001%

Note: the level of benzene has to be kept as low as practicable and should never exceed 1 ppm in the fragrance compound

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.

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

Version Date: 28 September 2016

<sup>(2)</sup> 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 in the countries of planned distribution and, where these are lacking, with the recommendations laid down in the Code of Practice of IOFI (International Organisation of the Flavour Industry).



#### BENZOPHENONE CRYST.

Revision date: 05-08-2016 Version: 3.0/CLP/EN

#### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

#### 1.1. Identification of the substance/mixture

Trade name: BENZOPHENONE CRYST.

Substance name:BENZOPHENONECAS Number:119-61-9CE Number:204-337-6REACH Registration number:01-2119488052-40

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

Raw material for the manufacture of fragrances and/or flavourings.

#### 1.3. Details of the supplier of the safety data sheet

Company: Madar Corporation Limited

Address: 19 - 20 Sandleheath Industrial Estate, Fordingbridge, SP6 1PA

Telephone: 01425 655 555

E-mail: technical@madarcorporation.co.uk

#### 1.4. Emergency telephone number

01425 655 555

## **SECTION 2. HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

Specific target organ toxicity following repeated exposure - Category 2 - H373 Hazardous to the aquatic environment, long-term (chronic) - Category 2 - H411

# 2.2. Label Elements

## Hazard pictograms:





#### Signal Word:

Warning

#### **Hazard statements:**

H373 - May cause damage to organs through prolonged or repeated exposure.

H411 - Toxic to aquatic life with long lasting effects.

## Precautionary statements:

P260 – Do not breathe dust/fume/gas/mist/vapours/spray.

P273 – Avoid release to the environment.

P314 – Get medical advice/attention if you feel unwell.

P391 – Collect spillage.

P501 - Dispose of contents/container according to local legislation.

#### 2.3. Other hazards

No Information available

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.1. Substances

Chemical name: BENZOPHENONE CAS number: 119-61-9 EC number: 204-337-6



#### **BENZOPHENONE CRYST.**

Revision date: 05-08-2016 Version: 3.0/CLP/EN

Hazardous constituents:

Chemical Name % (w/w) CAS No Classification according to Regulation 1272/2008

BENZOPHENONE ≥50 119-61-9 STOT RE 2 - H373 204-337-6 Aguatic Chronic 2 - H411

See the full text of the hazard statements in section 16.

#### 3.2. Mixtures

Not applicable.

#### **SECTION 4. FIRST-AID MEASURES**

#### 4.1. Description of necessary first aid measures

Ingestion: Rinse mouth with water.

Obtain medical advice.

Keep at rest. Do not induce vomiting.

Eye contact: In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes and seek medical advice.

Inhalation: Remove person to fresh air and keep at rest.

Seek immediate medical advice.

Skin contact: Take off immediately all contaminated clothing.

Thoroughly wash affected skin with soap and water. Seek medical attention if symptoms persist.

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

No information available.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No information available.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

#### 5.1. Extinguishing Media

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

For safety reasons do not use full water jet.

# 5.2. Special hazards arising from the substance or mixture

Known or Anticipated Hazardous Products of Combustion: Emits toxic fumes under fire conditions.

# 5.3. Advice for firefighters

High temperatures can lead to high pressures inside closed containers.

Avoid inhalation of vapors that are created. Use appropriate respiratory protection.

Do not allow spillage of fire to be poured into drains or watercourses.

Wear self-contained breathing apparatus and protective clothing.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate surronding areas. Ensure adequate ventilation. Keep unnecessary and unprotected personnel from entering. Do not breathe vapor/spray. Avoid contact with skin and eyes. Information regarding personal protective measures: see section 8.

#### 6.2. Environmental precautions

To avoid possible contamination of the environment, do not discharge into any drains, surface waters or groundwaters.

# 6.3. Methods and materials for containment and cleaning up

Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash).

Place in covered containers using non-sparking tools and transport outdoors.

Avoid open flames or sources of ignition (e.g. pilot lights on gas hot water heater).

Ventilate area and wash spill site after material pickup is complete.

# 6.4. Reference to other sections

Information regarding exposure controls, personal protection and disposal considerations can be found in sections 8 and 13.



#### BENZOPHENONE CRYST.

Revision date: 05-08-2016 Version: 3.0/CLP/EN

#### **SECTION 7. HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Do not store or handle this material near food or drinking water. Do not smoke.

Avoid contact with the eyes, skin and clothing. Wear protective clothing and use glasses.

Observe the rules of safety and hygiene at work.

Keep in the original container or an alternative made from a compatible material.

# 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed and preferably full containers in a cool, dry and ventilated area, protected from light. Keep away from sources of ignition (e.g. hot surfaces, sparks, flame and static discharges). Keep away from incompatible materials (see section 10).

### 7.3. Specific end use(s)

No information available.

#### **SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

#### 8.1. Control parameters

Components with occupational exposure limits: None known.

#### 8.2. Exposure controls

Appropriate engineering controls: Measures should be taken to prevent materials from being splashed into the body.

Provide adequate ventilation, according to the conditions of use. Use a mechanical exhaust if required.

Eye/Face protection: Chemical safety goggles are recommended. Wash contaminated goggles before reuse. Hand Protection: Chemical-resistant gloves are recommended. Wash contaminated gloves before reuse.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks

involved.

Respiratory Protection: In case of insufficient ventilation, use suitable respiratory equipment.

Environmental exposure controls: Emissions from ventilation or process equipment should be checked to ensure they comply with environmental

protection legislation.

In some cases, filters or engineering modifications to the process equipment will be necessary to reduce emissions to

acceptable levels.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on basic physical and chemical properties

Appearance: Solid
Colour: Conforms to standard
Odour: Conforms to standard
Odour theshold: Not determined
pH: Not determined

Melting point/freezing point: 47
Boling point/boiling range: 306
Flash point: 145 °C

Not determined **Evaporation rate:** Flammability: Not determined Lower flammability/Explosive limit: Not determined Upper flammability/Explosive limit: Not determined Vapour pressure: < 0.1 mbar to 20°C Vapour Density: Not determined Density: Not determined Relative density: Not determined Water solubility: **INSOLUBLE IN WATER** Solubility in other solvents: SOLUBLE IN ETHANOL Not determined Partition coefficient n-octanol/water: Auto-ignition temperature: Not determined Decomposition temperature: Not determined Viscosity, dynamic: Not determined Viscosity, kinematic: Not determined **Explosive properties:** Not determined Oxidising properties: Not determined



#### BENZOPHENONE CRYST.

Revision date: 05-08-2016 Version: 3.0/CLP/EN

#### 9.2. Additional information

No information available.

#### **SECTION 10. STABILITY AND REACTIVITY**

#### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

#### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

#### 10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

#### 10.4. Conditions to Avoid

Conditions to Avoid: Excessive heat, flame or other ignition sources.

#### 10.5. Incompatible materials

Avoid contact with strong acids and bases and oxidizing agents.

## 10.6. Hazardous decomposition products

During combustion may form carbon monoxide and unidentified organic compounds.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

## 11.1. Information on toxicological effects

**Acute toxicity** Based on the data available, the criteria for classification are not met. Skin corrosion/irritation Based on the data available, the criteria for classification are not met. Serious eye damage/irritation Based on the data available, the criteria for classification are not met. Respiratory or skin sensitisation Based on the data available, the criteria for classification are not met. Germ cell mutagenicity Based on the data available, the criteria for classification are not met. Carcinogenicity Based on the data available, the criteria for classification are not met. Reproductive toxicity Based on the data available, the criteria for classification are not met. STOT-single exposure Based on the data available, the criteria for classification are not met. STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure. **Aspiration hazard** Based on the data available, the criteria for classification are not met.

## **SECTION 12. ECOOLOGICAL INFORMATION**

#### 12.1. Toxicity

#### Assessment:

Toxic to aquatic life with long lasting effects.

# Experimental/calculated data:

No information available.

#### 12.2. Degradability

No information available.

# 12.3. Bioaccumulative potential

No information available.

#### 12.4. Soil mobility

No information available.

#### 12.5. Results of PBT and vPvB assessment

No information available.

#### 12.6. Other adverse effects

See also sections 6, 7, 13 and 15

Do not allow to get into waste water or waterways.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Dispose of in accordance with national and local environmental regulations.



#### **BENZOPHENONE CRYST.**

Revision date: 05-08-2016 Version: 3.0/CLP/EN

#### **SECTION 14: TRANSPORT INFORMATION**

	ADR/RID/ADN	IMDG	IATA-ICAO
14.1. UN Number	UN3077	UN3077	UN3077
14.2. UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENZOPHENONE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENZOPHENONE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENZOPHENONE)
14.3. Transport Hazard Class(es)	9	9	9
14.4. Packing Group	III	III	III
14.5. Environmental hazards Additional information	Yes	Yes	Yes

# 14.6 Special precautions for user

None known

# 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

#### **SECTION 15: REGULATORY INFORMATION**

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

No information available

# 15.2. Chemical safety assessment

No information available

## **SECTION 16: OTHER INFORMATION**

Full text of the R-phrases, hazard statements and precautionary statements mentioned in section 3:

H373 - May cause damage to organs through prolonged or repeated exposure.

H411 – Toxic to aquatic life with long lasting effects.

The information included in this safety data sheet is based on the available data at the moment this document is issued. It is meant to be a description of safety requirements for our product and does not stand for a guarantee of its properties. The user is responsible for taking all necessary steps leading to compliance with local rules and legislation.



# **SPECIFICATION SHEET**

**VERSION** 4,00 **VERSION DATE** 05/12/06 **PRINT DATE** 07/04/21

**PRODUCT** BENZOPHENONE CRYST.

**APPLICATIONS**Raw material for industrial use intended for the manufacture of flavours and/or fragrances.

IUPAC NAME METHANONE, DIPHENYL-

SYNONYMS DIFENIL METANONA/BENZOYLBENZENE/PHENYLKETONE

 FORMULA
 C13 H10 O

 MOLECULAR WEIGHT
 182,00

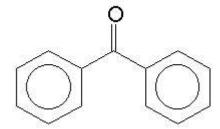
 CAS
 119-61-9

**EINECS** 204-337-6

**FEMA** 2134

**TARIFF NUMBER** 2914390030

REACH REGISTRATION NO. 01-2119488052-40



## **SPECIFICATIONS**

ASPECT AT 20° C CRYSTALLINE SOLID (POWDER)

COLOUR WHITE TO PALE YELLOW
ODOUR SWEET, ROSY, SLIGHTLY HERBAL

TASTE SLIGHTLY CITRIC, FRUITY

DENSITY A 20° C (g / ml)

DENSITY 25/25

REFRACTIVE INDEX nD20
REFRACTIVE INDEX nD25

OPTICAL ROTATION (°)

BOILING POINT (°C) 306

MELTING POINT (°C) 47

FLASH POINT (°C) 145,00

ASSAY (% GC) > 99.5

ASSAY (% GC) >
ACID VALUE (mg KOH/g) -

SOLUBILITY INSOLUBLE IN WATER
VAPOUR PRESSURE < 0,1 mbar to 20°C
OTHER SOLUBILITIES SOLUBLE IN ETHANOL

**OTHER TECHNICAL DATA** 

## STABILITY AND STORAGE

KEEP IN TIGHTLY CLOSED CONTAINER IN A COOL AND DRY PLACE, PROTECTED FROM LIGHT. WHEN STORED FOR MORE THAN 24 MONTHS, QUALITY SHOULD BE CHECKED BEFORE USE.

WE BELIEVE THE ABOVE INFORMATION TO BE CORRECT BUT WE DO NOT PRESENT IT AS ALL INCLUSIVE AND AS SUCH SHOULD BE USED AS A GUIDE. IT IS THE SOLE RESPONSIBILITY OF THE RECEIVER OF OUR PRODUCT TO COMPLY WITH EXISTING REGULATIONS AND INSTRUCTIONS.

THIS PRODUCT HAS NOT BEEN FILTERED DUE TO TECHNOLOGICAL REASONS. WE RECOMMEND NOT TO USE IT UNLESS FILTERED WHEN USED AS A RAW MATERIAL IN FOOD INTENDED FOR FINAL CONSUMERS.