

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

- Product name : TANIMARK ORANGE

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

- Industrial Marking.

1.3. Details of the supplier of the safety data sheet

- Registered company name : LACO Industries Europe SAS..
- Address : PIPA - Allée des Combes.01550.BLYES.France.
- Telephone : +33 (0)4 74 46 23 23. Fax : +33 (0)4 74 46 23 29.
- Email : info@eu.laco.com
- <http://www.markal.com>

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

- Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

- Flammable liquid, Category 3 (Flam. Liq. 3, H226).
- Repeated exposure may cause skin dryness or cracking (EUH066).
- Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).
- This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

- Flammable (R 10).
- Repeated exposure may cause skin dryness or cracking (R 66).
- Vapours may cause drowsiness and dizziness (R 67).
- This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

- Hazard pictograms :



GHS07

GHS02

- Signal Word :
- WARNING
- Hazard statements :

H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

- Precautionary statements - Prevention :

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P261	Avoid breathing vapours.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

- Precautionary statements - Response :

P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.

- Precautionary statements - Storage :

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

- Precautionary statements - Disposal :

P501	Dispose of contents/container at a disposal facility in accordance with local regulations.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

- Hazard symbols :

Flammable

- Risk phrase :

R 10	Flammable.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.

2.3. Other hazards

- No data available.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

- No substances fulfil the criteria set forth in annexe II section A of the REACH regulation (EC) n° 1907/2006.

3.2. Mixtures

Composition :

Identification	Name	Classification	%
INDEX: 607-025-00-1 CAS: 123-86-4 EC: 204-658-1 REACH: 01-2119485493-29	N-BUTYL ACETATE	GHS02, GHS07, Wng H:226-336 EUH:066 R: 10-66-67	25 <= x % < 50
CAS: 471-34-1 EC: 207-439-9	CALCIUM CARBONATE		25 <= x % < 50
CAS: 13463-67-7 EC: 236-675-5 REACH: 01-2119489379-17	TITANIUM DIOXIDE		1 <= x % < 2.5

SECTION 4 : FIRST AID MEASURES

- As a general rule, in case of doubt or if symptoms persist, always call a doctor.
- NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

- In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.
- If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.
- If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes :

- Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

In the event of splashes or contact with skin :

- Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.
- Watch out for any remaining product between skin and clothing, watches, shoes, etc.
- If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

- In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.
- Keep the person exposed at rest. Do not force vomiting.
- Seek medical attention, showing the label.
- If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

- No data available.

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

- No data available.

SECTION 5 : FIREFIGHTING MEASURES

- Flammable.
- Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

- Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

- In the event of a fire, use :
 - - sprayed water or water mist
 - - water with AFFF (Aqueous Film Forming Foam) additive
- Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

- In the event of a fire, do not use :
 - - water jet

5.2. Special hazards arising from the substance or mixture

- A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.
- Do not breathe in smoke.
- In the event of a fire, the following may be formed :

- - carbon monoxide (CO)
- - carbon dioxide (CO₂)

5.3. Advice for firefighters

- Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- Consult the safety measures listed under headings 7 and 8.

For non fire-fighters

- Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.
- Avoid inhaling the vapors.
- Avoid any contact with the skin and eyes.
- If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For fire-fighters

- Fire-fighters will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

- Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
- Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

- Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

- No data available.

SECTION 7 : HANDLING AND STORAGE

- Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

- Always wash hands after handling.
- Remove and wash contaminated clothing before re-using.
- Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

- Handle in well-ventilated areas.
- Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.
- Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.
- Prevent the accumulation of electrostatic charges with connections to earth.
- The mixture can become electrostatically charged : always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.
- Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.
- Keep packages tightly closed and away from sources of heat, sparks and naked flames.
- Do not use tools which may produce sparks. Do not smoke.
- Prevent access by unauthorised personnel.

Recommended equipment and procedures :

- For personal protection, see section 8.
- Observe precautions stated on label and also industrial safety regulations.
- Avoid inhaling vapors.
- Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.
- Provide vapor extraction at the emission source and also general ventilation of the premises.
- Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
- In all cases, recover emissions at source.
- Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

- No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

- No data available.

Storage

- Keep the container tightly closed in a dry, well-ventilated place
- Keep away from all sources of ignition - do not smoke.
- Keep well away from all sources of ignition, heat and direct sunlight
- Avoid accumulation of electrostatic charges.
- The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

- Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

- No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
123-86-4	150 ppm	200 ppm	-	-	-
471-34-1	10 mg/m ³	-	-	-	-
13463-67-7	10 mg/m ³	-	-	-	-

- Belgium (Order of 19/05/2009, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
123-86-4	150 ppm	200 ppm	-	-	-
471-34-1	10 mg/m ³	-	-	-	-
13463-67-7	10 mg/m ³	-	-	-	-

- France (INRS - ED984 :2008) :

CAS	VME-ppm :	VME-mg/m ³ :	VLE-ppm :	VLE-mg/m ³ :	Notes :	TMP No :
123-86-4	150	710	200	940	-	84
13463-67-7	-	10	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
123-86-4	150 ppm	200 ppm	-	-	-
471-34-1	10 mg/m ³	-	-	-	TI
13463-67-7	10 mg/m ³	-	-	-	TI

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

- Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



- Use personal protective equipment that is clean and has been properly maintained.
- Store personal protective equipment in a clean place, away from the work area.
- Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

- Avoid contact with eyes.
- Use eye protectors designed to protect against liquid splashes
- Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

- Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.
- Gloves must be selected according to the application and duration of use at the workstation.
- Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.
- Type of gloves recommended :
- - PVA (Polyvinyl alcohol)
- - Butyl Rubber (Isobutylene-isoprene copolymer)
- Recommended properties :
- - Impervious gloves in accordance with standard EN374

- Body protection

- Avoid skin contact.
- Wear suitable protective clothing.
- Suitable type of protective clothing :
- In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.
- In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.
- Work clothing worn by personnel shall be laundered regularly.
- After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

- Avoid breathing vapours.
- If the ventilation is insufficient, wear appropriate breathing apparatus.
- When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.
- Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :
- - A1 (Brown)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	paste.

Important health, safety and environmental information

pH :	Not stated.
neutral.	
Flash Point Interval :	23°C <= PE <= 55°C
Vapour pressure :	Below 110 kPa (1.10 bar).

Density :	< 1
Water solubility :	Insoluble.

9.2. Other information

- No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

- No data available.

10.2. Chemical stability

- This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

- When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

- Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.
- Avoid :
 - - accumulation of electrostatic charges.
 - - heating
 - - heat
 - - flames and hot surfaces

10.5. Incompatible materials

- Keep away from :
 - - oxidising agents

10.6. Hazardous decomposition products

- The thermal decomposition may release/form :
 - - carbon monoxide (CO)
 - - carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

- Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.
- Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

- Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
- Splashes in the eyes may cause irritation and reversible damage
- Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.
- Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

11.1.1. Substances

- No toxicological data available for the substances.

11.1.2. Mixture

- No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

- CAS 13463-67-7 : IARC Group 2B : The agent is possibly carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

- No aquatic toxicity data available for the substances.

12.1.2. Mixtures

- No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

- No data available.

12.3. Bioaccumulative potential

- No data available.

12.4. Mobility in soil

- No data available.

12.5. Results of PBT and vPvB assessment

- No data available.

12.6. Other adverse effects

- No data available.

German regulations concerning the classification of hazards for water (WGK) :

- WGK 1 (VwVwS vom 27/07/2005, KBws) : Slightly hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

- Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

- Do not pour into drains or waterways.

Waste :

- Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.
- Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.
- Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

- Empty container completely. Keep label(s) on container.
- Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

- Exempt from transport classification and labelling.

SECTION 15 : REGULATORY INFORMATION

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

- The mixture is contained in packaging that does not exceed 125 ml.

- Particular provisions :

- No data available.

- German regulations concerning the classification of hazards for water (WGK) :

- Germany : WGK 1 (VwVwS vom 27/07/2005, KBws)

15.2. Chemical safety assessment

- No data available.

SECTION 16 : OTHER INFORMATION

- Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.
- The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.
- It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.
- The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Title for H, EUH and R indications mentioned in section 3 :

H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
R 10	Flammable.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.

Abbreviations :

- ADR : European agreement concerning the international carriage of dangerous goods by Road.
- IMDG : International Maritime Dangerous Goods.
- IATA : International Air Transport Association.
- ICAO : International Civil Aviation Organisation
- RID : Regulations concerning the International carriage of Dangerous goods by rail.
- WGK : Wassergefahrdungsklasse (Water Hazard Class).
- GHS02 : Flame
- GHS07 : Exclamation mark