

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

### 1.1 Product identifier

**Product name**

Lemon Kick

**Product code**

[v.1.3], A33482, A31126, A31042, A31472

**UFI:**

GHY9-ECV0-W00N-EG33

<https://my.chemius.net/p/0cV9NI/en/pd/en>

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

**Relevant identified uses**

Acidity regulator.

**Uses advised against**

Do not use for purposes other than those prescribed.

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

**Supplier**

Bertels B.V.

Ommelpad 2

6035 PC Ospel, The Netherlands

31 (0)495 63 15 59

info@bertelsholland.com

### 1.4 Emergency Telephone Number

**Emergency**

111

**Supplier**

31 (0)495 63 15 59

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 (CLP)**

Eye Irrit. 2; H319 Causes serious eye irritation.

STOT SE 3; H335 May cause respiratory irritation.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP)****Signal word: WARNING**

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

P102 Keep out of reach of children.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container in accordance with national regulation.

**Contains:**  
citric acid

2.3 Other hazards

**PBT/vPvB**  
The substances in the product are not classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

**Endocrine disrupting properties**

The mixture does not contain substance(s) included in the list established in accordance with Article 59 of REACH for having endocrine disrupting properties, or substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

**Additional information**  
No information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  
For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
citric acid	77-92-9 201-069-1 607-750-00-3	20-25	Eye Irrit. 2; H319 STOT SE 3; H335	/	/

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures  
**General notes**

When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. When it is suspected, that there may still be harmful vapours/fumes present in the air, respiratory protection (mask; self contained breathing apparatus) must be used. Wash contaminated clothing with water before removing or use gloves.

**Following inhalation**  
Remove patient to fresh air - move out of dangerous area. In case of unconsciousness bring patient into stable side position and seek medical attention. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Keep at rest in a position comfortable for breathing. Seek medical help immediately.

**Following skin contact**  
Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. If symptoms develop and persist, seek medical attention.

**Following eye contact**  
Immediately flush eyes with running water, keeping eyelids apart. After 5 minutes of rinsing, remove contact lenses, if present, and continue rinsing. Consult a physician immediately!

**Following ingestion**  
Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Immediately consult a doctor. Show the physician the safety data sheet or label.

- 4.2 Most important symptoms and effects, both acute and delayed
- Following inhalation**  
Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.
- Following skin contact**  
Contact with skin may cause irritation (redness, itching).
- Following eye contact**  
Strongly irritates the eyes.
- Following ingestion**  
May cause nausea/vomiting and diarrhea. May cause abdominal discomfort.

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

SECTION 5: FIREFIGHTING MEASURES

- 5.1 Extinguishing media
- Suitable extinguishing media**  
Product itself is not flammable. Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.
- Unsuitable extinguishing media**  
Full water jet.
- 5.2 Special hazards arising from the substance or mixture
- Hazardous combustion products**  
Closed container may rupture if strongly heated. In case of a fire toxic gases can be generated; do not inhale gases/smoke.
- 5.3 Advice for firefighters
- Protective actions**  
In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. Cool containers at risk with water spray. If possible remove containers from endangered area.
- Special protective equipment for fire-fighters**  
Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (BS EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (BS EN 137).
- Additional information**  
Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures
- For non-emergency personnel**
- Protective equipment**  
Use personal protective equipment (Section 8).
- Precautionary measures**  
Ensure adequate ventilation.
- Emergency procedures**  
No action shall be taken involving any personal risk or without suitable training. Prevent access to unprotected personnel. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.
- For emergency responders**  
Use personal protective equipment.
- 6.2 Environmental precautions  
Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

6.3 Methods and material for containment and cleaning up

- For containment**  
Stem the spill if this does not pose risks.
- For cleaning up**  
Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Prevent release into the sewer, water, basements or confined areas. Ventilate the premises. Clean contaminated area with plenty of water.
- Other information**  
No information.

6.4 Reference to other sections  
See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

- Protective measures**
- Measures to prevent fire**  
Ensure adequate ventilation.
- Measures to prevent aerosol and dust generation**  
Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.
- Measures to protect the environment**  
Do not discharge into drains, surface water and soil. After use immediately close container tightly.
- Other measures**  
No information.
- Advice on general occupational hygiene**  
Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Avoid contact with skin, eyes and clothes. Remove contaminated clothes and wash them before reuse. Wear suitable protective equipment; see Section 8.

7.2 Conditions for safe storage, including any incompatibilities

- Technical measures and storage conditions**  
Keep in a cool, dry and well ventilated place. Keep away from food, drink and animal feeding stuffs.
- Packaging materials**  
Store only in original container.
- Requirements for storage rooms and vessels**  
Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.
- Storage temperature**  
0 - 35 °C
- Storage class**  
No information.
- Further information on storage conditions**  
No information.

7.3 Specific end use(s)

- Recommendations**  
See identified uses in Section 1.2.
- Industrial sector specific solutions**  
No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

Name	mg/m <sup>3</sup>	ml/m <sup>3</sup>	Short-term value mg/m <sup>3</sup>	Short-term value ml/m <sup>3</sup>	Remark	Biological Tolerance Values
Nickel and its inorganic compounds (except nickel tetracarbonyl): water-soluble nickel compounds (as Ni)	0.1	/	/	/	Sk, Carc (nickel oxides and sulphides) Sen (nickel sulphate)	/
Sulphuric acid (mist) (7664-93-9)	0.05	/	/	/	The mist is defined as the thoracic fraction	/

**Information on monitoring procedures**  
BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

**DNEL/DMEL values**

**For product**  
No information.

**For components**  
No information.

**PNEC values**

**For product**  
No information.

**For components**  
No information.

8.2 Exposure controls

Appropriate engineering control

**Substance/mixture related measures to prevent exposure during identified uses**  
Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols.

**Structural measures to prevent exposure**  
No information.

**Organisational measures to prevent exposure**  
Remove all contaminated clothes immediately and wash them before reuse. Keep eyewash bottles or personal eyewash units and emergency showers available.

**Technical measures to prevent exposure**  
Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

**Personal protective equipment**

**Eye and face protection**  
If there is risk of splashing into eyes, wear safety glasses with side shields (BS EN ISO 16321-1:2022).

**Hand protection**  
In case of prolonged exposure, wear protective gloves (BS EN ISO 374).

**Appropriate materials**

**Skin protection**  
Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2022). At high risk of skin exposure chemical suits (BS EN 13034:2005+A1:2009) and boots may be required (BS EN ISO 20345:2022+A1:2024).

- Respiratory protection**  
In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).
- Thermal hazards**  
None under normal use conditions.
- Environmental exposure controls**
- Substance/mixture related measures to prevent exposure**  
No information.
- Instruction measures to prevent exposure**  
No information.
- Organisational measures to prevent exposure**  
No information.
- Technical measures to prevent exposure**  
Do not allow product to reach drains, sewage systems or ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties  
Important health, safety and environmental information

Physical state	liquid
Shape	No information.
Colour	yellow
Odour	odourless
Odour threshold	No information.
Melting/freezing point or softening point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	1 — 1.4 at 20 °C, conc. 100 %
Viscosity	No information.
Solubility (Water)	Completely soluble
Partition coefficient n-octanol/water (log value)	No information.
Vapour pressure	No information.
Density	1.09 — 1.11 kg/L
Relative vapour/gas density	No information.
Particle characteristics	No information.

9.2 Other information  
Information with regard to physical hazard classes  
No information.  
Other safety characteristics  
No information.

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity  
The product is not reactive under normal conditions of use, storage and transport.
- 10.2 Chemical stability  
Product is stable under normal conditions of use, recommended handling and storage conditions.
- 10.3 Possibility of hazardous reactions  
No information.
- 10.4 Conditions to avoid  
Protect from heat, direct sunlight, open fire, sparks.
- 10.5 Incompatible materials  
  
Strong bases.  
Metals.
- 10.6 Hazardous decomposition products  
Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- (a) Acute toxicity

For components

Name	Exposure route	Type	Species	Time	Value	Method	Remark
citric acid	oral	LD <sub>50</sub>	rat	/	11700 mg/kg	/	/
citric acid	dermal	LD <sub>50</sub>	rat	/	> 2000 mg/kg	/	/

- Additional information  
The product is not classified as acutely toxic.

(b) Skin corrosion/irritation

No information.

- Additional information  
May cause skin irritation.

(c) Serious eye damage/irritation

No information.

- Additional information  
Causes serious eye irritation.

(d) Respiratory or skin sensitisation

No information.

- Additional information  
The product is not classified as sensitising.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

**Summary of evaluation of the CMR properties**

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

**(h) STOT-single exposure**

No information.

**Additional information**

May cause respiratory irritation.

**(i) STOT-repeated exposure**

No information.

**Additional information**

STOT RE (repeated exposure): Not classified.

**(j) Aspiration hazard**

No information.

**Additional information**

Aspiration hazard: Not classified.

**Symptoms related to the physical, chemical and toxicological characteristics**

No information.

**Interactive effects**

No information.

11.2 Information on other hazards

**Endocrine disrupting properties**

**For product**

The substance is not included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation. The substance is not identified as a substance with endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

**Other information**

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

**Acute (short-term) toxicity**

No information.

**Chronic (long-term) toxicity**

No information.

12.2 Persistence and degradability

**Abiotic degradation, physical- and photo-chemical elimination**

No information.

**Biodegradation**

No information.

**Additional information**

Biodegradable.

12.3 Bioaccumulative potential

**Partition coefficient n-octanol/water (log value)**

No information.

**Bioconcentration factor (BCF)**



No information.

12.4 Mobility in soil  
**Known or predicted distribution to environmental compartments**

No information.

**Surface tension**

No information.

**Adsorption/Desorption**

No information.

**Additional information**

Soluble in water.

12.5 Results of PBT and vPvB assessment  
The substances in the product are not classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.6 Endocrine disrupting properties  
**For product**  
The substance is not included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation. The substance is not identified as a substance with endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7 Other adverse effects  
No information.

12.8 Additional information  
**For product**  
Product is not classified as hazardous for environment.

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods  
**Product / Packaging disposal**  
**Waste chemical**  
Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.  
**Waste codes / waste designations according to LoW**  
06 01 06\* - other acids  
**Packaging**  
Deliver completely emptied containers to approved waste disposal authorities. Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents.  
**Waste codes / waste designations according to LoW**  
15 01 02 - plastic packaging  
**Waste treatment-relevant information**  
No information.  
**Sewage disposal-relevant information**  
Do not discharge into drains.  
**Other disposal recommendations**  
Comply with the applicable legislation.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.
14.2 UN proper shipping name			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.3 Transport hazard class(es)			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.4 Packing group			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			
Limited quantities Not given/not applicable	Limited quantities Not given/not applicable		Limited quantities Not given/not applicable
14.7 Maritime transport in bulk according to IMO instruments			
	Not given/not applicable		

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

**Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)**  
not applicable

**Ingredients according to Regulation (EC) No 648/2004 on detergents**  
No information.

**Special instructions**  
Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

15.2 Chemical Safety Assessment  
A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

**Indication of changes**  
No information.

**Key literature references and sources for data**  
No information.

**Abbreviations and acronyms**  
ATE - Acute Toxicity Estimate  
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation  
C&L - Classification and Labelling  
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  
CAS# - Chemical Abstracts Service number  
CMR - Carcinogen, Mutagen, or Reproductive Toxicant  
CSA - Chemical Safety Assessment  
CSR - Chemical Safety Report  
DMEL - Derived Minimal Effect Level  
DNEL - Derived No Effect Level  
DPD - Dangerous Preparations Directive 1999/45/EC  
DSD - Dangerous Substances Directive 67/548/EEC  
DU - Downstream User  
EC - European Community  
ECHA - European Chemicals Agency  
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)  
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)  
EEC - European Economic Community  
EINECS - European Inventory of Existing Commercial Substances  
ELINCS - European List of notified Chemical Substances  
EN - European Standard  
EQS - Environmental Quality Standard  
EU - European Union  
Euphrac - European Phrase Catalogue  
EWC - European Waste Catalogue (replaced by LoW – see below)  
GES - Generic Exposure Scenario  
GHS - Globally Harmonized System  
IATA - International Air Transport Association  
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG - International Maritime Dangerous Goods  
IMSBC - International Maritime Solid Bulk Cargoes  
IT - Information Technology  
IUCLID - International Uniform Chemical Information Database  
IUPAC - International Union for Pure Applied Chemistry  
JRC - Joint Research Centre  
Kow - octanol-water partition coefficient  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
LE - Legal Entity  
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
LR - Lead Registrant  
M/I - Manufacturer / Importer  
MS - Member States  
MSDS - Material Safety Data Sheet  
OC - Operational Conditions  
OECD - Organization for Economic Co-operation and Development  
OEL - Occupational Exposure Limit  
OJ - Official Journal  
OR - Only Representative  
OSHA - European Agency for Safety and Health at work  
PBT - Persistent, Bioaccumulative and Toxic substance  
PEC - Predicted Effect Concentration  
PNEC(s) - Predicted No Effect Concentration(s)  
PPE - Personal Protection Equipment  
(Q)SAR - Qualitative Structure Activity Relationship  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006)  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
RIP - REACH Implementation Project  
RMM - Risk Management Measure  
SCBA - Self-Contained Breathing Apparatus  
SDS - Safety data sheet  
SIEF - Substance Information Exchange Forum  
SME - Small and Medium sized Enterprises  
STOT - Specific Target Organ Toxicity

(STOT) RE - Repeated Exposure  
(STOT) SE - Single Exposure  
SVHC - Substances of Very High Concern  
UN - United Nations  
vPvB - Very Persistent and Very Bioaccumulative

**List of relevant H phrases**

H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.