



CHEMNOVATIC

SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) with further changes]

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

1.1. Product identifier.

TRADE NAME: NICSALT-P

Description: Nicotine Pyruvate.

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

Relevant identified uses: production of mixtures.

Uses advised against: not determined

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

Supplier: CHEMNOVATIC Sp. z o.o. Sp. k.

Address: Ludwika Spiessa 9, 20-270 Lublin, POLAND

Phone: +48 814754442

E-mail address of the person responsible for the information card: office@chemnovatic.com

1.4. Emergency telephone number.

112 (general emergency phone number)

Section 2: Hazards Identification

2.1. Classification of the substance or mixture.

Classification according to 1272/2008/EC

Acute Tox. 2 (oral) - Acute toxicity, category 2; H300

Acute Tox. 1 (skin) - Acute toxicity, category 1; H310

Acute Tox. 2 (inhalation) - Acute toxicity, category 2; H330

Aquatic Chronic Toxicity, category 2: H411

This mixture is not classified for its physical hazards under CLP.

2.2. Label elements

Hazard symbols and signal words



DANGER

Hazard statements

H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

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.

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

P361 Remove/Take off immediately all contaminated clothing

P405 Store locked up.

P501 Dispose of contents/container to container for waste.



SAFETY DATA SHEET

2.3. Other hazards

This mixture does not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. Product does not have endocrine disrupting properties. This mixture does not contain "Substances of Very High Concern" on the list published by the European Chemicals Agency (ECHA) pursuant to Art. 57 of the REACH regulation.

Section 3: Composition/Information on ingredients

3.1 Substances

No.	Chemical name	Percentage	CAS	EC (EINECS)	Index No./ REACH Registration No.	Classification according to 1272/2008/EC
1.	nicotine pyruvate	~100,0 %	Not applicable	948-583-9	614-002-00-X/ not applicable	Acute Tox. 1 H310; Acute Tox. 2 H300; Acute Tox. 2 H330; Aquatic Chronic 2 H411 inhalation: ATE = 0,05 mg/L (dusts or mists); dermal: ATE = 5 mg/kg bw; oral: ATE = 5 mg/kg bw

Full text of H - phrases in section 16.

3.2 Mixtures

Not applicable

Section 4: First aid measures

4.1. Description of first aid measures.

As a general rule, in case of doubt, or when symptoms persist, always call a physician. NEVER make an unconscious person vomit.

Skin contact: immediately take off contaminated clothing. Wash out skin with plenty of water with soap. Consult a doctor immediately.

Eye contact: wash out with plenty of water with the eyelid hold wide open, for 15 min. Remove any contact lenses. Avoid strong stream of water-risk of cornea damage. Seek medical advice if necessary.

Ingestion: do not induce vomiting. Rinse mouth with water. Do not give anything to drink to an unconscious person. Consult a doctor - show the container or label.

Inhalation: remove to fresh air. Keep warm and calm. Consult a doctor, if symptoms persist.

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

Eye contact: redness, tearing, mild irritation.

Skin contact: can cause irritation, breathing problems, dizziness, cramps, nausea, vomiting. It can be absorbed through the skin. At sensitive individuals may experience an allergic reaction.

Ingestion: nausea, vomiting. In extreme cases, after swallowing very large quantities of product, may appear breathing problems, dizziness, disorders of the respiratory tract.

Inhalation: following exposure to doses above permissible limits include: stimulation of breath, nausea, vomiting, headache, dizziness, diarrhea, tachycardia, increased blood pressure, sweating, salivation, burning sensation in the mouth, throat and stomach.

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

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured.



SAFETY DATA SHEET

Section 5: Firefighting measures

5.1. Extinguishing media.

Suitable extinguishing media: foam, extinguishing powder, water spray, carbon dioxide.

Unsuitable extinguishing media: water jet - risk of the propagation of the flame.

5.2. Special hazards arising from the substance or mixture.

In case of fire, carbon oxides may be formed: nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂). An acrolein may be released in anaerobic conditions.

5.3. Advice for firefighters.

In case of fire, wear self-contained breathing apparatus pressure-demand, and full protective gear.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures.

Evacuate workers to a safe place. Ensure adequate ventilation. Avoid inhaling vapor, mist, spray. Use complete suit protecting against chemicals. In case of the possibility of uncontrolled release, use breathing apparatus.

6.2. Environmental precautions.

Avoid release to the environment, groundwater. Collect spillage if it safe. Should not be released into environment. Prevent from reaching into drains, sewer, or waterway.

6.3. Methods and material for containment and cleaning up.

Wear personal protective equipment refer to Section 8. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

6.4. References to other sections.

Appropriate conduct with waste product - see section 13. Personal protective equipment - see section 8.

Section 7: Handling and storage

7.1. Precautions for safe handling.

For personal protection refer Section 8. Avoid contact with skin, eyes and clothing. Avoid inhaling vapor, mist, spray. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. In case of inadequate ventilation, use individual respiratory protection. After handling wash hands with plenty of soap and water.

7.2. Conditions for safe storage, including any incompatibilities.

Keep containers tightly closed in a dry and well-ventilated place. Store at 0-10 °C. Keep away from light and air/oxygen. Keep under inert gas. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Substance is

hygroscopic. Upon exposure to air and/or light, the salt may change the colour to amber or brown.

7.3. Specific end use(s).

No information about the applications other than those listed in subsection 1.2.

Section 8: Exposure control/personal protection



SAFETY DATA SHEET

8.1. Control parameters.

Specification	STEL 15 min	TWA 8 hour
nicotine pyruvate [EC 948-583-9]	-	—

Please check any national occupational exposure limit values in your country for substance contained in this product.

8.2. Exposure controls.

Use the product in accordance with good occupational hygiene and safety practices. Ensure adequate ventilation. When handling do not eat, drink or smoke. Before break and after work carefully wash hands. In the vicinity of the work should be installed safety showers and separate washer eyewash. At the exit of the room in which you are working with toxic materials should be at least one sink with brought to the warm water - for every twenty employees.

Hand and body protection

Wear the protective gloves (long-term exposure - butyl rubber, thickness: 0,3 mm, penetration time: >480 min., short-term exposure: nitrile rubber, thickness: 0,4 mm, penetration time: >30 min.) and protective clothing.

The material that the gloves are made of must be impenetrable and resistant to the product's effects. The selection of material must be performed with consideration of breakthrough time, penetration speed and degradation. Moreover, the selection of proper gloves depends not only on the material, but also on other quality features and changes depending on the manufacturer. The producer should provide detailed information regarding the exact breakthrough time. This information should be followed.



Eye/face protection

Wear tight safety glasses when there is a danger of possible eye contamination.

Respiratory protection

In case of normal and as intended use, with proper ventilation, no respirator is needed. If exposure limits are exceeded, apply face mask with appropriate organic vapour cartridge.

Environmental exposure controls

Do not allow the mixture to contaminate surface water/ground water.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties.

a) Physical state	liquid
b) Colour	yellow
c) Odour	not determined
d) Melting point/freezing point	not determined
e) Boiling point or initial boiling point and boiling range	not determined
f) Flammability	not determined
g) Lower and upper explosion limit	not determined
h) Flash point	not determined
i) Auto-ignition temperature	not determined
j) Decomposition temperature	not determined
k) pH	not determined
l) Kinematic viscosity	not determined
m) Solubility	not determined
n) Partition coefficient n-octanol/water (log value)	not determined
o) Vapour pressure	not determined
p) Density and/or relative density	not determined



SAFETY DATA SHEET

q) Relative vapour density

not determined

r) Particle characteristics

not applicable

9.2. Other information.

No additional test results.

Section 10: Stability and reactivity

10.1. Reactivity.

Product may react with incompatible materials to release other hazardous substances. See subsection 10.3-10.5.

10.2. Chemical stability.

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions.

None under normal processing.

10.4. Circumstances to avoid.

Avoid heating closed containers with a substance above 95 °C.

10.5. Incompatible materials.

Strong oxidizers.

10.6. Hazardous decomposition products.

Nitrogen oxides (NO_x). Carbon monoxide (CO). Carbon dioxide (CO₂).

Section 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

a) Acute toxicity

Acute toxicity, skin, category 1

Acute toxicity, oral, category 2

Acute toxicity, inhalation category 2

According to harmonized CLP classification for nicotine salts: index no. 614-002-00-X.

b) Skin corrosion/irritation

Based on available data, the classification criteria are not met.

c) Serious eye damage/irritation

Based on available data, the classification criteria are not met.

d) Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

e) Germ cell mutagenicity

Based on available data, the classification criteria are not met.

f) Carcinogenicity

Based on available data, the classification criteria are not met.

g) Reproductive toxicity

Based on available data, the classification criteria are not met.

h) STOT-single exposure

Based on available data, the classification criteria are not met.

i) STOT-repeated exposure



SAFETY DATA SHEET

Based on available data, the classification criteria are not met.

j) Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

No data available.

Section 12: Ecological Information

12.1. Toxicity.

The criteria for environmental toxicity are met. Aquatic Chronic toxicity, category 2.
According to harmonized CLP classification for nicotine salts: index no. 614-002-00-X.

12.2. Persistence and degradability.

Not available.

12.3. Bioaccumulative potential.

Do not expect to significantly bioaccumulate.

12.4. Mobility in soil.

Product mobile in soil and in water. Mobility of components in the mixture depends on the hydrophilic and hydrophobic properties and conditions of biotic and abiotic soil, including its structure, climatic conditions, seasons and soil organisms.

12.5. Results of PBT and vPvB assessment.

The product does not meet the criteria for PBT or vPvB in accordance with the criteria in Annex XIII of Regulation 1907/2006.

12.6. Endocrine disrupting properties

Does not possess any endocrine disrupting properties.

12.7. Other adverse effects.

This product has no influence on the global warming or the ozone layer depletion. Consider other harmful effects of the individual components of the mixture on the environment (eg impact on the growth of global warming).

Section 13: Disposal considerations

13.1. Waste treatment methods.

Disposal methods for the product: disposal in accordance with the local legislation. Store remainings in original containers. Do not empty into drains. Submit to neutralization by a licensed waste processing company.

Disposal methods for used packing: reuse/recycling/liquidation of empty containers, dispose in accordance with the local legislation. Do not dispose empty packing with regular household waste. Do not mix with other waste. Submit to neutralization by a licensed waste processing company.

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

Section 14: Transport Information



SAFETY DATA SHEET

14.1 UN number or ID number

3144

14.2 UN proper shipping name

NICOTINE COMPOUND, LIQUID, N.O.S. (contains nicotine pyruvate)

14.3 Transport hazard class(es)

6.1

14.4 Packing group

II

14.5 Environmental hazards

The mixture is classified as dangerous for the environment.

14.6 Special precautions for user

Use protective measures according to section 8

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Other information

limited number of LQ: 100 ml

EQ: E4 (1 g for inner packaging, 500 ml outer packaging)

hazard identification number: 60

special provision: 43, 274

transport category: 2

code tunnel restriction: D / E



Section 15: Regulatory Information.

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance).

Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment.

Chemical safety assessment was not performed.

Section 16: Other Information.

a) revised safety data sheet- changes

First version.

b) legend to abbreviations and acronyms used in the safety data sheet



SAFETY DATA SHEET

TWA	Time Weighted Average
PEL	Permissible exposure limit
TLV-C	Threshold limit value- Ceiling Limit
STEL	Short-term exposure limit
PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
CAS	Chemical Abstract Service
EC No.	is a unique seven-digit identifier that is assigned to chemical substances for regulatory purposes within the European Union by the regulatory authorities.
LD50	lethal dose, the point where 50% of test subjects exposed would die
LC50	lethal concentration, the point where 50% of test subjects exposed would die
EC50	half maximal effective concentration
UN number	is four-digit number that identify hazardous substances
ATEmix	Acute Toxicity Estimates for mixture
PEB	permitted exposure for a biological material

c) list of relevant H phrases, hazard statements, safety phrases and/or precautionary statements- full text

H300 Fatal if swallowed

H310 Fatal in contact with skin

H330 Fatal if inhaled

H411 Toxic to aquatic life with long lasting effects

d) trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

e) other data

Classification was made on the basis of data on hazardous substances calculation method based on the guidelines of Regulation 1272/2008/EC (CLP).

The above information is prepared on the basis of current state of knowledge and relates to the product in the form in which it is used. Data relating to the product are presented in order to include safety requirements, and not to guarantee their particular properties.

In the event when conditions of application of the product are beyond control of the manufacturer, responsibility for safe use of the product is borne by the user.

The Employer is obligated to inform all employees who have contact with the product, about hazards and personal protection equipment specified in this material safety data sheet.

This material safety data sheet has been prepared on the basis of MSDS provided by the manufacturer and/or web databases and the binding regulations regarding hazardous substances and chemical agents.

The product is classified as hazardous. EXPOSURE SCENARIOS are not required.