



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

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

1.1. Product identifier

Product Identity Candle, chlorate with match, ignition
Alternate Names Not Applicable
Unique Formula Identifier X200-U0CW-600V-QUE5

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

Intended Uses and Uses Advised Against A source of oxygen for life support or industrial applications.

1.3. Details of the supplier of the safety data sheet

Company Name O.C. Lugo, Co. Inc. (A subsidiary of Molecular Products Inc)
633 CTC Boulevard Suite 200,
Louisville CO 80027, USA

Customer Service: 1-303-666-4400.

EU Representative Only: assesso AG
Ottostraße 1
63741 Aschaffenburg
Germany
+49 6021 15086-0

EU Importer Name: Heartfil BV
De Trompet 1766
1967 DB HEEMSKERK
The Netherlands
+31 (0)251 76 00 52

1.4. Emergency telephone number

Emergency
24 hour Emergency Telephone No. 1-888-665-7763 (US)
+44 (0) 1865 407333 (UK)
+47 2103 4452 (NO)



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Section 2. Hazard identification of the product

2.1. Classification of the substance or mixture

REGULATIONS (EU) 2024/2865 , (EU) 2023/707, (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). REGULATION (EC) 1272/2008 on the classification, labeling and packaging of substances and mixtures (CLP).

Oxidizing solid, category 1;H271

May cause fire or explosion; strong oxidizer.

Acute toxicity(oral), category 3;H301

Toxic if swallowed.

Aquatic toxicity (chronic), category 2;H411

Toxic to aquatic life with long lasting effects.

2.2. Label elements



Danger

H271 May cause fire or explosion; strong oxidizer.

H301 Toxic if swallowed.

H411 Toxic to aquatic life with long lasting effects.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking.

P220 Keep away from clothing and other combustible materials.

P273 Avoid release to the environment.

P301+310 IF SWALLOWED: Immediately call a POISON CENTER, doctor or physician.

P391 Collect spillage.

P280 Wear protective gloves, eye protection, and face protection.

2.3. Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

3.2. Mixtures



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

If the product contains substances that present a hazard according to Regulation (EC) No. 1272/2008 [CLP/GHS], they are listed below.

Ingredient/Chemical Designations	Weight %	EC No. 1272/2008 Classification	Notes
Chloric acid, sodium salt CAS Number: 7775-09-9 EC No. 231-887-4 Index No.: 017-005-00-9 REACH #: 01-2119474389-23	90 - 95	Oxidizing solid, category 1;H271 Aquatic toxicity (chronic), category 2;H411 Acute toxicity(oral), category 3;H301	oral: ATE = 100 mg/kg bw ^{CLP 3.1}
Barium peroxide CAS Number: 1304-29-6 EC No. 215-128-4 Index No.: 056-001-00-1	1 - 4	Oxidizing solid, category 2;H272 Acute toxicity(inhalation), category 4;H332 Acute toxicity(oral), category 4;H302	---

^{CLP 3.1} Reference EC No. 1272/2008 1.1.3.1. Notes relating to the identification, classification and labelling of substances (Table 3.1).

*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Section 4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eye	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview	No specific symptom data available. No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.
Ingestion	Toxic if swallowed.

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

Notes to physician	Treat symptomatically. IF SWALLOWED: Immediately call a POISON CENTER, doctor or physician. Rinse mouth.
---------------------------	--

Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable Fire Extinguishing Materials: To suit local surroundings (e.g. chemical powder, carbon dioxide and dry sand)
Unsuitable media: Water jet

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Chlorine and chlorine dioxide can be evolved following contact with strong acids.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking.

Keep away from clothing and other combustible materials.

Take any precaution to avoid mixing with combustibles.

5.3. Advice for fire-fighters

Non-flammable, strong oxidizer that enhances combustion of other substances (esp. organic materials.)
Avoid inhalation of combustion products.

Wear full protective equipment and self-contained breathing apparatus (SCBA). If containers are exposed to high temperatures cool with water and if possible, remove from area. Take up mechanically. Keep out of drains, surface



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

water and soil. Place water waste in containers and dispose of contents/container to authorized recipient of hazardous waste.

In case of major fire and large quantities: Use alcohol resistant foam, CO₂, powder, water spray for extinction. Do not use water jet.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Avoid release to the environment. Collect spillage. Dispose of contents or container in accordance with local and national regulations.

6.3. Methods and material for containment and cleaning up

In the event of spillage, take up large and small fragments mechanically (e.g. sweep or vacuum up small fragments being first treated with damp sand) into tightly closed containers. Adhere to personal protective measures. Label contained and dispose of as prescribed. Do NOT sweep up dry dust (possibility of explosion).

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Handle in accordance with good chemical hygiene and safety practice. Avoid the raising and deposition of dust.

Wear protective gloves, eye protection, and face protection. Wear fire resistant or flame retardant clothing.

7.2. Conditions for safe storage, including any incompatibilities

Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry, avoiding direct sunlight and away from organic, oxidizing combustible materials and strong acids.

Incompatible materials: Organic material

Store locked up. Store separately.

7.3. Specific end use(s)

No data available.



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Section 8. Exposure controls / personal protection

8.1. Control parameters

Exposure Limits

CAS No.	Ingredient	Source	Value
1304-29-6	Barium peroxide	ACGIH	No Established Limit
		DNEL Local Exposure	No Established Limit
		DNEL Systematic Exposure	No Established Limit
		National	No Established Limit
7775-09-9	Chloric acid, sodium salt	ACGIH	No Established Limit
		DNEL Local Exposure	No Established Limit
		DNEL Systematic Exposure	0.6 mg/m ³
		National	No Established Limit

8.2. Exposure controls

Respiratory	Wear approved dust mask or respirator with filter APF 10/APF 20.
Eyes	Wear suitable protective glasses/goggles e.g. Polycarbonate (EN 166)
Skin	Protective gloves recommended.
Engineering Controls	Mandatory general regulations on occupational health. For hazardous constituents, do not allow the environmental and workplace concentration limits to exceed values stated above. Ensure that exposed skin is washed and contaminated clothing is disposed of/cleaned if reused. Do not eat, drink, or smoke. Avoid skin and eye contact, wash hands and face before and after working with the product. Avoid inhalation of dust and provide adequate local and general ventilation.
Other Work Practices	Protective overalls. Concentrations of hazardous substances should be monitored in accordance with recognized test methods. Mode, method, type and frequency of testing (measurement of harmful factors) should meet the requirements of local/regional/national laws Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Solid
Color	Grey
Odor	Odourless



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Odor threshold	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Approx. 200°C
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Flash Point	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	300° C
pH	Not Measured
Viscosity (cSt)	Not Measured
Solubility in Water	Partial
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Vapor pressure (Pa)	Not Measured
Relative Density	2.0 g/cm ³
Vapor Density	Not Measured
Particle Characteristics	Not Measured
Evaporation rate (Ether = 1)	Not Measured
VOC Content	Not Measured
Oxidizing Properties	Strong oxidizer
9.2. Other information	No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

Decomposes to form oxygen on heating or ignition (friction or impact can cause ignition).

10.4. Conditions to avoid

Contact with water and organic materials.

10.5. Incompatible materials

Organic material

10.6. Hazardous decomposition products

Chlorine and chlorine dioxide can be evolved following contact with strong acids.



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Section 11. Toxicological information

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

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Barium peroxide - (1304-29-6)	No data available.	No data available.	No data available.	No data available.	No data available.
Chloric acid, sodium salt - (7775-09-9)	100.00, Rat - Category: 3	> 2,000.00, Rabbit - Category: NA	No data available.	No data available.	No data available.

Classification	Category	Hazard Description
Acute toxicity (oral)	3	Toxic if swallowed.
Acute toxicity (dermal)	---	---
Acute toxicity (inhalation)	---	---
Skin corrosion/irritation	---	---
Serious eye damage/irritation	---	---
Respiratory sensitization	---	---
Skin sensitization	---	---
Germ cell mutagenicity	---	---
Carcinogenicity	---	---
Reproductive toxicity	---	---
STOT-single exposure	---	---
STOT-repeated exposure	---	---
Aspiration hazard	---	---

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Section 12. Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L	3hr IC50 Bacteria mg/L	Biodegradability %
Barium peroxide - (1304-29-6)	No data available.	No data available.	No data available.	---	---
Chloric acid, sodium salt - (7775-09-9)	>1,000.00, Fish	>1,000.00, Daphnia magna	>1,000.00, Algae	>1,000.00	100.00

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

12.6 Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

12.7. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Section 14. Transport information



	ADR/RID	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN3356	UN3356	UN3356
14.2. UN proper shipping name	Oxygen generator, chemical	Oxygen generator, chemical	Oxygen generator, chemical
14.3. Transport hazard class(es)	Class: 5.1 Sub Class:	Class: 5.1 Sub Class:	Class: 5.1 Sub Class:
14.4. Packing group	II	II	II
14.5. Environmental hazards	IMDG Marine Pollutant: (Chloric acid, sodium salt)		
14.6. Special precautions for user	Not Applicable		
14.7. Transport in bulk according to Annex II of MARPOL73/78 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

REGULATIONS (EU) 2024/2865 , (EU) 2023/707, (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). REGULATION (EC) 1272/2008 on the classification, labeling and packaging of substances and mixtures (CLP).

Candidate List of SVHC for Authorisation: Not Applicable

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Barium peroxide (Use restricted. See item 3. (liquid))

Chloric acid, sodium salt (Use restricted. See item 3. (liquid))

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Section 16. Other information

Revision Date 26 June 2026

Revision Number 1

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H271 May cause fire or explosion; strong oxidizer.

H272 May intensify fire; oxidizer.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

ACGIH - American Conference of Governmental Industrial Hygienists

ADR - International Carriage of Dangerous Goods by Road (Accord Dangereux Routier)

CAS - Chemical Abstracts Service

CLP - Classification Labeling and Packaging

DOT - Department of Transportation

EC - European Commission

EC50 - Half maximal effective concentration

ErC50 - EC50 in terms of reduction of growth rate

GHS - Globally Harmonized System

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IC50 - Half Maximal Inhibitory Concentration

ICAO - International Civil Aviation Organization

IMDG - International Maritime Dangerous Goods Code

IMO - International Maritime Organization

LC50 - Lethal Concentration of a substance at which 50% of test animals die

LD50 - Lethal Dose at which 50% of the animals will be expected to die

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety and Health Administration

PBT - Persistent, Bioaccumulative and Toxic Chemicals

PEL - Permissible Exposure Limit

REACH - Registration, Evaluation, Authorization and Restriction of Chemicals

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL - Short Term Exposure Limit

TWA - Time Weighted Average

vPvB - Very Persistent and very Bio-accumulative

WGK - Water Hazard Class



Safety Data Sheet

Candle, Chlorate with Match, Ignition

Revision Date: 06/26/2026

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification

Oxidizing solid, category 1;H271

Acute toxicity(oral), category 3;H301

Aquatic toxicity (chronic), category 2;H411

Justification

On basis of test data

On basis of test data

Calculation method

Calculation method

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

End of Document