



SAFETY DATA SHEET

SECTION 1. Identification of the hazardous chemical substance or mixture and of the supplier or manufacturer

Name of the hazardous chemical substance or mixture	Battery Cleaner with Acid Indicator - 311g	
Other means of identification		
Product Code	No. MX05023 (Item# 1008055)	
Recommended use of the hazardous chemical substance or mixture, and restrictions of use		
Recommended use	Battery cleaner	
Recommended restrictions	None known.	
Suppliers details		
Company name	CRC Industrias de Mexico S. de R. L. de C.V.	
Address	Cerrada Canadá 201-H Fraccionamiento Industrial Martel Santa Catarina, NL 66367 Mexico	
Telephone	General Information	81-2139-0572
Website	crc-mexico.com	
E-mail	SoporteTecnico@crcind.com	
Emergency phone number	24-Hour Emergency	800-681-9531

SECTION 2. Hazard identification

Classification of the substance or mixture		
Physical hazards	Aerosols	Category 3
Health hazards	Skin corrosion/irritation	Category 3
Environmental hazards	Not classified.	

Elements of labeling, including precautionary statements and warning pictograms

Hazard symbols	None.	
Signal word	Warning	
Hazard statement		
H229	Pressurized container: May burst if heated.	
H316	Causes mild skin irritation.	
Precautionary statement		
Prevention		
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.	
P251	Do not pierce or burn, even after use.	
Response		
P332 + P313	If skin irritation occurs: Get medical advice/attention.	
Storage		
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.	
Disposal		
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Other hazards which do not result in classification	None known.	
Supplemental information	None.	

SECTION 3. Composition/information on ingredients

Mixtures

Chemical identity	Common name(s), synonym(s)	CAS number and other unique identifiers	Concentration
water		7732-18-5	80 - 90
liquefied petroleum gas		68476-86-8	5 - 10
2-butoxyethanol		111-76-2	1 - 3

Composition comments Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

SECTION 4. First-aid measures

Description of necessary first-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.
Most important symptoms/effects, acute and delayed	Mild skin irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SECTION 5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective actions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Containers should be cooled with water to prevent vapor pressure build up.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6. Measures that must be taken in the event of accidental spillage or an accidental leak

Personal precautionary measures, protective equipment and emergency procedure

For non-emergency personnel	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
For emergency responders	Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containing and cleaning up spills or releases	Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

SECTION 7. Handling and storage

Precautions for safe handling	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
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Conditions for safe storage, including any incompatibilities Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Mexico. Occupational Exposure Limit Values

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	TWA	20 ppm

Constituents	Type	Value
propane (CAS 74-98-6)	TWA	1000 ppm
2-methylpropane (CAS 75-28-5)	TWA	1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	TWA	20 ppm

Constituents	Type	Value
2-methylpropane (CAS 75-28-5)	STEL	1000 ppm

Biological limit values

Mexico. Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-butoxyethanol (CAS 111-76-2)	200 mg/g	Acido butoxiacético (BAA), Con hidrólisis	Creatinine in urine	*

* - For sampling details, please see the source document.

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Control banding approach Not available.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Hazardous Chemicals (NOM-028-STPS-2012, System for administration of workplace safety in the process and critical equipment for handling hazardous chemicals, Appendix A, Table A.I, 9/6/2012)

propane (CAS 74-98-6) 4600 KG

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves such as: Polyvinyl alcohol (PVA). Viton/butyl.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Aerosol.
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
pH	8.5
Melting point/freezing point	-102.6 °F (-74.8 °C) estimated
Initial boiling point and boiling range	211.9 °F (100 °C) estimated
Flash point	None.
Evaporation rate	Slow.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	1.1 % estimated
Explosive limit - upper (%)	10.6 % estimated
Vapor pressure	151.7 hPa estimated
Vapor density	>1 (air = 1)
Relative density	1.01 estimated
Solubility(ies)	
Solubility (water)	Soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	460.4 °F (238 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Molecular weight	Not available.
Other information	
Percent volatile	92.8 % estimated

SECTION 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions that must be avoided	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Aldehydes. Carbon oxides. Ketones. Organic acids.

SECTION 11. Toxicological information

Information about likely routes of entry

Inhalation	Prolonged inhalation may be harmful.
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Skin contact	Causes mild skin irritation. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Based on available data, the classification criteria are not met.
Symptoms related to the physical, chemical and toxicological characteristics	Mild skin irritation.

Delayed and immediate effects and also chronic effects from short and long term exposure**Numerical measures of toxicity (such as acute toxicity estimates)**

Acute toxicity Not known.

Product	Species	Test Results
Battery Cleaner with Acid Indicator - 311g		
Acute		
Dermal		
LD50	Rabbit	34208 mg/kg
Inhalation		
LC50	Rat	1275 mg/l, 4 hours
Oral		
LD50	Rat	22207 mg/kg
Components	Species	Test Results

2-butoxyethanol (CAS 111-76-2)

Acute		
Dermal		
LD50	Rabbit	220 mg/kg
Oral		
LD50	Rat	470 mg/kg
Constituents	Species	Test Results

2-methylpropane (CAS 75-28-5)

Acute		
Inhalation		
LC50	Rat	142500 ppm, 4 hours

Skin corrosion/irritation	Causes mild skin irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.

ACGIH Carcinogens

2-butoxyethanol (CAS 111-76-2) A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

2-butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.

Aspiration hazard	Based on available data, the classification criteria are not met.
Other information	Not available.

SECTION 12. Ecotoxicological information

Toxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	
Partition coefficient n-octanol / water (log Kow)	
2-butoxyethanol	0.83
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13. Disposal considerations

Disposal methods	
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. Transport information

SCT

UN number	UN1950
Proper shipping name	AEROSOLS, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Bulk special provisions	63,190,277,327,344

DOT

UN number	UN1950
Proper shipping name	Aerosols, non-flammable, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Label(s)	2.2
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

IATA

UN number	UN1950
Proper shipping name	Aerosols, non-flammable, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Packing group	Not applicable.
ERG Code	2L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950

Proper shipping name AEROSOLS, Limited Quantity

Transport hazard class(es)

Class 2.2

Subsidiary risk -

Packing group Not applicable.

Environmental hazards

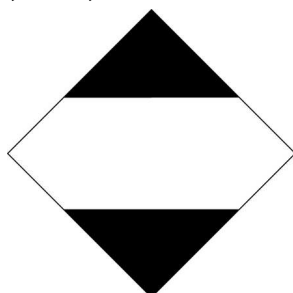
Marine pollutant No.

EmS F-D, S-U

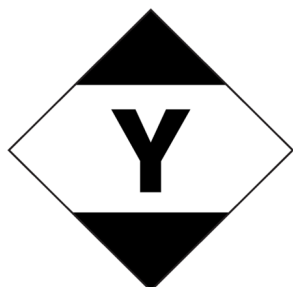
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT; IMDG; SCT



IATA



SECTION 15. Regulatory information

Safety, health and environmental regulations specific for the hazard chemical substance or mixture in question

This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2015).

Mexico. Substances subject to reporting for the pollutant release and transfer registry (PRTR)

Not listed.

International regulations

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16. Other included information relevant to the preparation and updating of safety data sheets**Issue date** 10-24-2023**Version #** 01**List of abbreviations**

ACGIH: American Conference of Governmental Industrial Hygienists.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
 ANTT: National Agency of Land Transport.
 CAS: Chemical Abstract Service.
 DOT: Department of Transportation.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IARC: International Agency for Research on Cancer.
 IATA: International Air Transport Association.
 IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
 IMDG: International Maritime Dangerous Goods.
 MARPOL: International Convention for the Prevention of Pollution from Ships.
 NFPA: National Fire Protection Association.
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
 SCT: Secretariat of Communications and Transportation (NOM-002-SCT/2011).
 STEL: Short term exposure limit.
 TWA: Time Weighted Average.

References

NMX-R-019-SCFI-2011 - Harmonized system of classification and communication of dangers of chemical products
 NOM-010-STPS-2014 (second revision) – Occupational Exposure Limits – becomes effective on April 28, 2016
 NOM-018-STPS-2015 - Harmonized system for the identification and communication of hazards and risks for hazardous chemicals in the workplace
 NOM-026-STPS-2008 - Colors and signals of safety and hygiene, and risk identification through fluids in pipes
 NOM-028-STPS-2012 – Work-Safety Management System for Processes and Critical Equipment Handling Hazardous Chemical Substances
 NOM-047-SSA1-2011 – Workplace Biological Exposure Indices (BEIs) to Chemical Substances
 Workplace Threshold Quantities of Hazardous Chemicals

Further information

CRC # 530C/1002544

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of our knowledge or obtained from sources believed to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industrias de Mexico S. de R. L. de C.V..

This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.