

SAFETY DATA SHEET

Finished Product



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ECG Butane Fuel RX7000

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Brand Name	RX7000
Product Description:	ECG Professional Quality Butane Fuel w/Non-Clogging Tip
Product Code	RX401-16
Marketer Contact Information:	NTE Electronics, Inc. 44 Farrand Street Bloomfield, NJ 07003 (973) 748-5089
Emergency Phone:	1-800-631-1250 8:00 am – 5:00 pm EST

SECTION 2. HAZARDS IDENTIFICATION

OSHA/HCS Status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910)
Classification of the Substance or Mixture	PHYSICAL, FLAMMABLE GASES – Category 1 HEALTH, SKIN SENSITIZATION – Category 1 PHYSICAL, GASES UNDER PRESSURE, LIQUEFIED GAS

GHS Label Elements, Including Precautionary Statements

Hazard Pictograms	Three red diamond-shaped hazard pictograms are shown side-by-side. The first contains a black flame symbol. The second contains a black gas cylinder symbol. The third contains a black exclamation mark symbol.
Single Word	Danger
Hazard Statements	H222 – Extremely flammable gas H317 – May cause an allergic skin reaction H280 – Contains gas under pressure; may explode if heated
Precautionary Statements	P102 – Keep out of reach of children. P103 – Read label before use. P202 – Do not handle until all safety precautions have been read and understood. P101 – If medical advice is needed, have product container or label at hand. P210 – Keep away from heat/sparks/open flames/hot surfaces. No smoking. P235 + 410 – Keep cool. Protect from sunlight. P251 – Pressurized container: Do not pierce or burn, even after use. P377 – Leakage gas fire: Do not extinguish unless leak can be stopped safely. P381 – Eliminate all ignition sources if safe to do so. P410 + 403 – Protect from sunlight. Store in a well ventilated place. P403 + 235 – Store in a well ventilated place. Keep cool.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

Ingredients

CAS Number	%	Chemical name
106-97-8	99.98%	Liquefied Petroleum Gases
	.02%	Tip Cleaner

SECTION 4. FIRST-AID MEASURES

Description of Necessary First Aid Measures

Ingestion	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe. Ingestion of liquid can cause burns similar to frostbite. If frostbite occurs, get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. As this product rapidly becomes a gas when released, refer to the inhalation section.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband.
Skin Contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if systems occur. In case of contact with liquid, warm frozen tissues slowly with lukewarm water and get medical attention. Do not rub affected area. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Effects and Symptoms, both Acute and Delayed

Eye Contact	Liquid can cause burns similar to frostbite.
Inhalation	Asphyxiant gas.
Skin Contact	Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
Ingestion	Ingestion is an unlikely route of exposure for a gas.

Overexposure Signs/Symptoms

Eye Contact	Adverse symptoms may include frostbite.
Inhalation	No specific data.
Skin Contact	Adverse symptoms may include frostbite.
Ingestion	Adverse symptoms may include frostbite.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable Extinguishing Media:	None known.
Specific Hazards Arising from the Chemical:	Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion.
Special Protective Actions for Firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

SECTION 5. FIRE FIGHTING MEASURES (Cont'd)

Extinguishing Media (Cont'd)

Special Protective Equipment or Firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.
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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel	Accidental releases pose a serious for or explosion hazard. No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For Emergency Responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For Non-Emergency Personnel".
Environmental Precautions	Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and Materials for Containment and Cleaning Up

Small Spill	Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.
Large Spill	Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Protective Measures	Put on appropriate personal protective equipment (See Section 8). Contains gas under pressure. Do not get in yes or on skin o clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide or drop.
Advice on General Occupational Hygiene	Eating, drinking, and smoking should be prohibited in area where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
Conditions for Safe Storage, Including any Incompatibilities	Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool, and well ventilated area, away from incompatible materials. Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright. Cylinder temperature should not exceed +52°C (+125°F).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate Engineering Controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentration below any lower explosive limits. Use explosion-proof ventilation equipment.
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Personal Protective Equipment, Liquefied Petroleum Gases (106-97-8) (99.98%)

Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand Protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Immersion Protection material: Fluorinated rubber Minimum layer thickness: 0.7mm Break through time: > 480 min Material tested: Vitoject (Aldrich Z677698, Size M)
Splash Protection	Material: Nitrile rubber Minimum layer thickness: 0.4mm Break through time: > 30 min Material tested: Camatril (Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
Eye Protection	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin and Body Protection	Impervious clothing. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration an amount of the dangerous substance at the specific workplace.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment, Tip Cleaner (0.02%)

Eye/Face Protection	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin Protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Full Contact	Material: Nitrile rubber Minimum layer thickness: 0.4mm Break through time: > 480 min Material tested: Camatril (KCL 730/Aldrich Z677442, Size M)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont'd)**Personal Protective Equipment, Tip Cleaner (0.02%) (Cont'd)**

Splash Contact	Material: Nitrile rubber Minimum layer thickness: 0.11mm Break through time: > 30 min Material tested: Dermatril (KCL 740 / Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
Body Protection	Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of Environmental Exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Liquefied Petroleum Gases (106-97-8) (99.98%)**Component with Workplace Control Parameters**

TWA	800ppm 1,900mg/m ³	USA. OSHA – TABLE Z-1 Limits for Air Contaminants-1910.1000
TWA	1,000ppm	USA. ACGIH Threshold Limit Values (TLV)
TWA	1,000ppm	USA. ACGIH Threshold Limit Values (TLV)

Central Nervous System Impairment Cardiac Sensitization

TWA	800ppm Limits 1,900mg/g ³	USA. NIOSH recommended Exposure
Also see specific listing for Isobutane		

Tip Cleaner (0.02%)**Component with Workplace Control Parameters**

TWA	30ppm	USA. Workplace Environmental Exposure Levels (WEEL)
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless
Physical State	Gas
Odor	Rotten Egg Smell
Boiling Point	-37.8°C (36.1°F)
Freezing/Melting Point	-176.67°C (286°F)
Vapor Pressure	586.05kPa (85 psi) at 21.1°C (70°F).
Flash Point	-60°C (-76°F).
Evaporation Rate	Rapid
Auto-Ignition Temperature	674.44°C (1246°F)
Lower and Upper Explosive (Flammable) Limits	9% / 2.6%

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Contains gas under pressure; may explode if heated. Reacts with oxidants causing fire and explosion hazard.
Chemical Stability	Stable under recommended handling and storage conditions.
Conditions to Avoid	Direct sunlight, extreme high or low temperatures, open flame, heat, and sparks
Materials to Avoid	Heat and strong oxidizing agents.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous Polymerization	Will not occur.

**SECTION 11. TOXICOLOGICAL INFORMATION
INFORMATION ON TOXICOLOGICAL EFFECTS****Acute Toxicity**

Product/Ingredient Name	Result	Species	Dose	Exposure
Liquefied Petroleum Gases (106-97-8) (99.98%)	LC50 Inhalation Gas	Rat	658,000mg/m ³	4 hours
	LD50 Dermal	Other information on acute toxicity		
	LD50 Oral	No data available		

Skin Corrosion/Irritation

Conclusion/Summary	No data available
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Serious Eye Damage/Eye Irritation

Conclusion/Summary	No data available
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Respiratory or Skin Sensitivity

Conclusion/Summary	No data available
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Germ Cell Mutagenicity

Conclusion/Summary	No data available
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Carcinogenicity

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity

Conclusion/Summary	No data available
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Teratogenicity

Conclusion/Summary	No data available
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Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System)

Conclusion/Summary	No data available
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Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System)

Conclusion/Summary	No data available
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SECTION 11. TOXICOLOGICAL INFORMATION (Cont'd)
INFORMATION ON TOXICOLOGICAL EFFECTS (Cont'd)

Aspiration Hazard

Conclusion/Summary	No data available
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Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin Contact	May be harmful if absorbed through the skin. May cause skin irritation.
Ingestion	May be harmful if swallowed.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure

Conclusion/Summary	Central nervous system depression, giddiness, Shortness of breath, narcosis, Dermal contact with rapidly evaporating liquid could result in freezing o the tissues or frostbite. Exposure can cause numbness, tingling, and weakness in extremities, Cyanosis, Pulmonary edema. Effects may be delayed. Abdominal pain, Nausea, Vomiting.
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Synergistic Effects

Conclusion/Summary	No data available
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Additional Information

Conclusion/Summary	RTECS: EJ4200000
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Potential Chronic Health Effects

Conclusion/Summary	Not Available
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Acute Toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure	Result
Tip Cleaner (0.02%)	LC50 Oral	Rat	5,300mg/kg	-	-
	Skin	Rabbit	-	24 hours	Irritation
	Dermal	No data available			
	Inhalation	No data available			

Serious Eye Damage/Eye Irritation

Conclusion/Summary	No data available
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Respiratory or Skin Sensitivity

Conclusion/Summary	No data available
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Germ Cell Mutagenicity

Conclusion/Summary	No data available
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Carcinogenicity

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SECTION 11. TOXICOLOGICAL INFORMATION (Cont'd)
INFORMATION ON TOXICOLOGICAL EFFECTS (Cont'd)

Reproductive Toxicity

Conclusion/Summary	No data available
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Specific Target Organ Toxicity - Single Exposure)

Conclusion/Summary	No data available
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Specific Target Organ Toxicity - Repeated Exposure

Conclusion/Summary	No data available
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Aspiration Hazard

Conclusion/Summary	No data available
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Additional Information

Conclusion/Summary	RTECS: OS8100000
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To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

Conclusion/Summary	RTECS: EJ4200000
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SECTION 12. ECOLOGICAL INFORMATION




Information on Ecological Effects

Product/Ingredient Name	Ecological Effect	Conclusion/Summary
Liquefied Petroleum Gases (106-97-8) (99.98%)	Toxicity	No data available
	Persistence and Degradability	No data available
	Bioaccumulative Potential	No data available
	Mobility in Soil	No data available
	PBT and vPvB Assessment	No data available
	Other Adverse Effects	No data available
Tip Cleaner (0.02%)	Toxicity to Fish LC50 – <i>Oncorhynchus Mykiss</i>	80mg/l, 96 hours
	Toxicity to daphnia and EC50 – <i>Daphnia Magna</i>	17mg/l, 48 hours
	Persistence and Degradability	No data available
	Bioaccumulative Potential	No data available
	Mobility in Soil	No data available
	PBT and vPvB Assessment	Not available as chemical safety assessment not required/not conducted
	Other Adverse Effects	An environmental hazard cannot be excluded in the event of unprofessional handling o disposal. Very toxic to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Liquefied Petroleum Gases (106-97-8) (99.98%)	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose the contaminated packaging as unused product.
Tip Cleaner (0.02%)	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose the contaminated packaging as unused product.

SECTION 14. TRANSPORT INFORMATION

	DOT Classification	IMDG	IATA
UN Number	-	UN1075	UN1075
UN Proper Shipping Name	Consumer Commodity ORM-D	Petroleum Gases, Liquefied	Petroleum Gases, Liquefied
Transport Hazard Class(es)	ORM-D 	2.1 	2.1 
EmS-No (Fire)	-	F-D	-
EmS-No (Spillage)	-	S-U	-
ERG Code (IATA)	-	-	10L
Marine Pollutant	-	No	No

SECTION 15. REGULATORY INFORMATION

Component (CAS#) [%] – CODES

Liquefied Petroleum Gas (106-97-8) [99.98%] MASS, NJHS, OSHAWAC, PA, TSCA, TXAIR

Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substance List
NJHS = NJ Right-to-Know Hazardous Substances
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-to-Know List of Hazardous Substances
TSCA = Toxic Substance Control Act
TXAIR = TX Air Contaminants with health Effects Screening Level**SECTION 16. OTHER INFORMATION****Further Information**

This information above is believed to be accurate and represents the best information currently available to us. However, neither NTE nor any of its subsidiaries make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.