SAFETY DATA SHEET

Finished Product



Date-Revised: 11/8/2017 Date-Issued: 5/16/2005 SDS Ref. No: RX7000 Revision No: 002

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	RX7000
Marketer Contact Information:	NTE Electronics, Inc.
	44 Farrand Street
	Bloomfield, NJ 07003
	973-748-5089
Emergency Phone:	CHEMTREC 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

BECTION 2. IMPERIOR 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	
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 I 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 t 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 an 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

2110000 4114 2 /111000112 7 2 0 111 110440 41	
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
	an 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)

Exemplify in team (Cont a)	
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.

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
Tot from Emergency reasonner	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

THE PROPERTY OF THE PROPERTY O	
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	Store in accordance with local regulations. Store in a segregated and
Incompatibilities	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.

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	USA. OSHA – TABLE Z-1 Limits for Air Contaminants-
	$1,900 \text{mg/m}^3$	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

5		
TWA	800ppm	USA. NIOSH recommended Exposure
	Limits 1,900mg/g ³	
Also see specific listi	ing for Isobutane	

Tip Cleaner (0.02%)

Component with Workplace Control Parameters

L		
	• •	
$TW\Delta$	20nnm	USA. Workplace Environmental Exposure Levels (WEEL)
1 VV /\	3Uppm	USA. Workplace Environmental Exposure Levels (WEEL)

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

A4-	Tr	4
Acute	I OXI	icity

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

Skin Corrosion/Irritation

Conclusion/Summary	No data available
--------------------	-------------------

Serious Eye Damage/Eye Irritation

Conclusion/Summary	No data available

Respiratory or Skin Sensitivity

Conclusion/Summary	No data available
Conclusion/Summary	No data available

Germ Cell Mutagenicity

Conclusion/Summary	No data available

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
--------------------	-------------------

Teratogenicity

Conclusion/Summary	No data available

Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System)

Conclusion/Summary	No data available
--------------------	-------------------

Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System)

Conclusion/Summary No data available
--

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

As	pira	ation	Hazaı	ď

Conclusion/Summary	No data available

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

Signs with Symptoms of Emposerie	
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.

Synergistic Effects

Conclusion/Summary	No data available

Additional Information

Conclusion/Summary	RTECS: EJ4200000
--------------------	------------------

Potential Chronic Health Effects

Conclusion/Summary	Not Available
--------------------	---------------

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 avai	ilable		
	Inhalation	No data available			

Serious Eye Damage/Eye Irritation

Conclusion/Summary No data available

Respiratory or Skin Sensitivity

Co	nclusion/Summary	No data available

Germ Cell Mutagenicity

Conclusion/Summary No data	available
----------------------------	-----------

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
--------------------	-------------------

Specific Target Organ Toxicity - Single Exposure)

ļ	Conclusion/Summary	No data available

Specific Target Organ Toxicity - Repeated Exposure

Conclusion/Summary	No data available

Aspiration Hazard

Conclusion/Summary	No data available	

Additional Information

Ī	Conclusion/Summary	RTECS: OS8100000
	Conclusion/Summary	KIECS. US6100000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

Conclusion/Summary	RTECS: EJ4200000
--------------------	------------------

SECTION 12. ECOLOGICAL INFORMATION

Information on Ecological Effects

Product/Ingredient Name	Ecological Effect	Conclusion/Summary	
Liquefied Petroleum Gases	Toxicity	No data available	
(106-97-8) (99.98%)	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 – Oncorhychus Mykiss	80mg/l, 96 hours	
	Toxicity to daphnia and EC50 – Daphnia Magna	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 dispos	
	service to dispose of this material. Dispose the contaminated packaging as unused produ	
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	Consumer Commodity	Petroleum Gases,	Petroleum Gases,
Shipping Name	ORM-D	Liquefied	Liquefied
Transport Hazard	ORM-D	2.1	2.1
Class(es)	\Diamond		
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.