

Material Safety Data Sheet

Revision Date November 9, 2010	Prepared by Patti Rogers	Technical Information 1-800-201-8822 or support@mgchemicals.com
Head Office 9347 - 193 Street, Surrey, B.C., V4N 4E7		Emergency Phone Canutech (613) 996-6666 Collect 24 hrs

For updates please download from www.mgchemicals.com or fax requests to 1-800-708-9888

Section 1: Product Identification

MSDS Code: 401B - aerosol Name: Nutrol Control Cleaner with Lubrication

Related Part Numbers: 401B-140G; 401B-340G

Use: Cleans and lubricates controls and contacts.

Hazard Overview: Product is extremely flammable. Do not use on live circuits. Keep away from cigarettes, open flames, and other sources of ignition. Vapors are mildly irritating. Use in a well ventilated area. Repeated skin contact can cause dermatitis.

Section 2: Hazardous Ingredients

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
75-83-2	2,2 Dimethyl butane	8 - 12	500ppm	500ppm	N/E
96-14-0	3-methyl pentane	7 - 10	500ppm	500ppm	N/E
79-29-8	2,3 Dimethyl butane	5 - 8	500ppm	500ppm	N/E
64741-44-2	Mineral oil (hydro treated)	32-36.5	5 mg/m ³	N/E	N/E
107-83-5	2 - methyl pentane	20 - 28	500ppm	500ppm	N/E
811-97-2	1,1,1,2 tetrafluoroethane	25-27	1000ppm	N/E	N/E
110-54-3	n-hexane	1 - 2	50ppm	500ppm	N/E

Section 3: Hazards Identification

Eyes: May cause mild eye irritation.

Skin: May cause mild skin irritation.

Inhalation: Vapors may be mildly irritating to the mucous membranes of the respiratory tract. High vapor concentrations may result in dizziness, headache, excitation, weakness, and drowsiness.

Ingestion: Aspiration Hazard. May cause weakness and gastrointestinal tract irritation.

Chronic: Repeated skin contact will cause dermatitis. Long-term intensive exposure to vapors could cause benign lung fibrosis.

Section 4: First Aid Measure

Eyes: Remove contact lenses. Flush with water. Get medical aid if symptoms persist.

Skin: Wash skin with soap and water. Get medical aid if symptoms persist.

Inhalation: Immediately remove from exposure to fresh air. If breathing is difficult, give oxygen. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Get medical aid immediately.

Ingestion: Do not induce vomiting. If conscious, give 1-2 glasses of water. Guard against aspiration into the lungs by having the individual turn onto their left side. Get medical aid.

Section 5: Fire Fighting Measures

Autoignition Temperature: 307.2°C (585°F) **Flash Point:** -29°C (-20°F) **LEL / UEL:** 1 / 7

Extinguishing Media: Use dry chemical, carbon dioxide, or chemical foam.

General Information: Will burn if involved in a fire. Containers may explode in the heat of a fire. Highly flammable vapors are heavier than air and may accumulate in low areas. Flash back along vapor trail is possible.

Section 6: Accidental Release Measures

Spill Procedure: Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection. Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water.

Section 7: Handling and Storage

Handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area.

Section 8: Exposure Controls

Routes of entry: Eyes, ingestion, inhalation, and skin.

Ventilation: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

Personal Protection: Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

Section 9: Physical and Chemical Properties

Physical State:	Aerosol	Odor:	Mild hydrocarbon	Solubility in water:	Insoluble	Evaporation Rate:	8.1 (ether = 1)
Boiling Point:	60°C (141°F)	Specific Gravity:	0.89	Vapor Pressure:	48 PSI @21°C	Vapor Density:	1.6 (Air=1)
						pH:	7

Section 10: Stability and Reactivity

Stability: Stable at normal temperatures and pressures.

Conditions to avoid: Temperatures over 40°C, ignition sources, and incompatible substances.

Incompatibilities: Alkali and alkaline earth metals, powdered aluminum, zinc, magnesium, and beryllium, strong oxidizing agents.

Polymerization: Will not occur.

Decomposition: Halogens, halogen acids, possibly carbonyl halides, carbon dioxide, and carbon monoxide.

Section 11: Toxicological Information

Sensitization: (effects of repeated exposure)

No

Carcinogenicity: (risk of cancer)

The ingredients of this product are not classified as being carcinogenic by ACGIH (American Conference of Governmental industrial Hygienists) or IARC (International Agency for Research on Cancer), not regulated as carcinogens by OSHA (Occupational Safety and Health Administration), and not listed as carcinogens by NTP (National Toxicology Program)

Teratogenicity: (risk of malformation in an unborn fetus)

No

Reproductive Toxicity: (risk of sterility)

No

Mutagenicity: (risk of heritable genetic effects) No

Lethal Exposure Concentrations:	Ingestion (LD50):	Inhalation (LC50):	Skin (LD50):	Inhalation (TCLo):
2,2 dimethylbutane	N/E	N/E	N/E	N/E
3-methyl pentane	N/E	N/E	N/E	N/E
2,3 dimethyl butane	N/E	N/E	N/E	N/E
2 - methyl pentane	N/E	N/E	N/E	N/E
1,1-Difluoroethane	N/E	977 gm/m ³ /2h Mouse	N/E	25 ppm/30m Rat
Mineral oil (hydro treated)	N/E	1700 mg/m ³ /4H Rat	N/E	N/E
n-hexane	25 gm/kg Rat	48000 ppm/4H Rat	N/E	5000 ppm/24H Rat

Section 12: Ecological Information

General Information:

Volatile Organic Compounds, % by weight: 76%
Volatile Organic Compounds, grams per litre: 653.60 g/l

Section 13: Disposal Information

General Information: Dispose of in accordance with all local, provincial, state, and federal regulations. Water runoff can cause environmental damage.

Section 14: Transportation Information

Ground:

Consumer Commodity, ORM-D

Air:

Shipper must be trained and certified. Refer to IATA Dangerous Goods regulations.
Shipping name: Consumer Commodity ORM-D, ID/UN Number: ID8000, Hazard Class: 9

Sea:

Shipper must be trained and certified. Refer to IMDG regulations.
Shipping name: Aerosols, flammable, in Limited Quantities, ID/UN Number: UN#1950, Hazard Class: 2.1

Section 15: Regulatory Information

CANADA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

DSL

All ingredients in this product are listed on the Domestic Substances List

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling regulations.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product is in compliance.

WHMIS

This product belongs to the following categories: **A, B5, D2B**

USA

CAA (Clean Air Act, USA)

This product does not contain any class 1-ozone depletors.

This product does not contain any class 2-ozone depletors.

This product does not contain any chemicals listed as hazardous air pollutants.

SARA (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

This product contains n-hexane 1.5% CAS# 110-54-3 a chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains n-hexane 1.5% CAS# 110-54-3 a chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals know to cause cancer or reproductive toxicity, May 1, 1997 revision, USA)

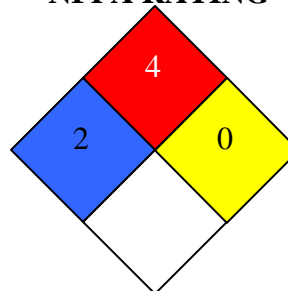
This product does not contain any chemicals known to the state to cause reproductive toxicity and/or cancer.

HMIS RATING

HEALTH:	2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0
PERSONAL PROTECTION (PPE):	H

Protection=H (Splash goggles, gloves, protective apron
And vapor respirator.)

NFPA RATING



EUROPE

RoHS

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

Definitions: N/a = not applicable, n/e = not established

Disclaimer: This material safety data sheet is provided as an information resource only. M.G. Chemicals believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.