

Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date: 02.11.2010

Version: 2

Revision: 02.11.2010

1 Identification of the substance/mixture and of the company/undertaking**· Product details:****· Trade name: 401B-140G, 401B-340G Nutrol Control Cleaner with Lubrication****· Application of the substance / the preparation:**Cleaning agent/ Cleaner
Fat liquor**· Manufacturer:**MG Chemicals
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Burlington, Ontario L7L 5R6
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sales@mgchemicals.com**· Information department:**

E-MAIL (Competent Person): sds@mgchemicals.com

· For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
UK: Call CHEMTREC: +(44)-870-8200418 or international: +(1) 703-527-3887For updates on this SDS please download from www.mgchemicals.com**2 Hazards identification****· Classification of the substance or mixture****· Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

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Classification according to Directive 67/548/EEC or Directive 1999/45/EC
 Xi; Irritant

R38: Irritating to skin.

 F; Highly flammable

R11: Highly flammable.

 N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67: Vapours may cause drowsiness and dizziness.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EC" in the latest valid version.

Warning! Pressurized container.

Has a narcotizing effect.

Classification system:

The classification was made according to the latest editions of the EC-lists and expanded using company data and specialized literature.

Label elements
Labelling according to Regulation (EC) No 1272/2008
Hazard pictograms


GHS02 GHS07 GHS09

Signal word Danger

Hazard statements

H222 Extremely flammable aerosol.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

30.0 % by mass of the contents are flammable

Keep out of the reach of children.

Precautionary statements

P260 Do not breathe vapours.

P273 Avoid release to the environment.

P271 Use only outdoors or in a well-ventilated area.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EC Directives / Ordinance on Hazardous Materials

Code letter and hazard designation of product:


Xi Irritant

F Highly flammable

N Dangerous for the environment

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· Risk phrases:

- 11 Highly flammable.
- 38 Irritating to skin.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

- 23 Do not breathe aerosol.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

· Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

30.0 % by mass of the contents are flammable

Keep out of the reach of children

· Additional information:






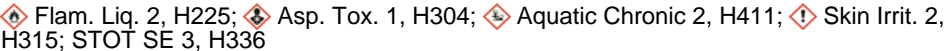

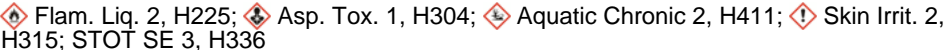

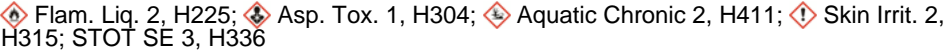


Upon strong heating, flammable vapour/air mixtures are formed which are heavier than air and spread on the ground.

3 Composition/information on ingredients

· Chemical characterization:

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 811-97-2 EINECS: 212-377-0	1,1,1,2-tetrafluoroethane  F+ R12  Flam. Liq. 1, H224	25-27%
CAS: 107-83-5 EINECS: 203-523-4 Index number: 601-007-00-7	2-methylpentane  Xn R65; Xi R38; F R11; N R51/53 R67  Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	20-28%
CAS: 96-14-0 EINECS: 202-481-4 Index number: 601-007-00-7	3-methylpentane  Xn R65; Xi R38; F R11; N R51/53 R67  Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	7-10%
CAS: 79-29-8 EINECS: 201-193-6 Index number: 601-007-00-7	2,3-dimethylbutane  Xn R65; Xi R38; F R11; N R51/53 R67  Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	5-8%
CAS: 75-83-2 EINECS: 200-906-8 Index number: 601-007-00-7	2,2-dimethylbutane  Xn R65; Xi R38; F R11; N R51/53 R67  Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	8-12%
CAS: 110-54-3 EINECS: 203-777-6 Index number: 601-037-00-0	n-hexane  Xn R48/20-62-65; Xi R38; F R11; N R51/53 R67 Repr. Cat. 3  Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	1-2%

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- **Additional information:** For the wording of the listed risk phrases refer to section 16.
-

4 First aid measures

- **General information:**
Remove affected persons from danger area and lay them down.
Immediately remove any clothing soiled by the product.
 - **After inhalation:**
Supply fresh air.
Remove victim from contaminated area. 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.
In case of unconsciousness, place patients on their side in a stable position for transportation.
 - **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
 - **After eye contact:**
Rinse the eyes with open eyelids for 10 - 15 minutes with water.
If symptoms persist, consult a doctor.
 - **After swallowing:**
Make the person drink a lot of water. Do not induce vomiting because of the danger of aspiration.
Never give anything by mouth to an unconscious person.
If vomiting occurs spontaneously:
Hold the head of the vomiting person low with the body in a prone position in order to avoid aspiration.
Seek medical treatment.
 - **Information for doctor:**
 - **The following symptoms may occur:**
After inhalation:
Irritation of mucuous membranes
irritant effect on the respiratory tract
Headache
Stupor
Unconsciousness
Agitation
weakness
After swallowing:
Gastric or intestinal disorders.
 - **Treatment:** Symptomatic treatment
-

5 Firefighting measures

- **Suitable extinguishing agents:**
Water jet spray
Extinguishing powder
Carbon dioxide (CO₂)
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Direct jet water
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Vapours spread on the ground to a distant ignition source and flash back.
Dangerous decomposition products see chapter 10: stability and reactivity
- **Protective equipment:**
Do not inhale combustion vapours.
Wear self-contained respiratory protective device.

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- **Additional information:**

Heating leads to pressure increase entailing danger of bursting and explosion. Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone

6 Accidental release measures

- **Person-related safety precautions:**



Wear protective equipment. Keep unprotected persons away.

Do not smoke - keep ignition sources away
Ensure adequate ventilation.

- **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to penetrate the ground/soil.
In case of seepage into the ground inform responsible authorities.

- **Measures for cleaning/collecting:**

Ensure adequate ventilation.
Absorb with non-combustible material like sand, soil or diatomite.
Make sure to recycle or dispose of in suitable receptacles.
Wash spill area with soap and water.
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling:**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Avoid contact with eyes and skin.
Avoid inhalation of vapours.

- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray on flames or any incandescent material.

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Store cool and dry in a well ventilated area.
Observe official regulations on storing packagings with pressurized containers.
Pay attention to special rules for the storage of flammable liquids.

Suitable material: metal

Suitable material for receptacles: plastic

- **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from feed.

Store away from oxidizing agents.

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- **Odour:** Mild
like hydrocarbons
 - **Change in condition:**
 - Melting point/Melting range:** not determined
 - Boiling point/Boiling range:** 60°C
 - **Flash point:** -29°C
 - **Flammability (solid, gaseous):**
 - Heat of Combustion:** 18,29 kjoule/g
 - **Ignition temperature:** 307.2°C
 - **Self ignition temperature:** Self igniting possible
 - **Danger of explosion:** Aerosol.
Pressurized container.
Do not pierce.
 - **Vapour pressure at 21°C:** 3310 hPa
 - **Density:** 0.89 g/cm³
 - **Solubility in / Miscibility with**
 - Water:** Insoluble
 - **pH-value:** 7
-

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
Avoid temperatures >50°C.
No decomposition if used and stored according to specifications.
 - **Materials to be avoided:**
Alkali metals
Alkaline-earth metals
Aluminium powder
Zinc powder
Magnesium
Beryllium powder
Strong oxidants
 - **Dangerous reactions:** Reactions with above-mentioned substances
 - **Dangerous products of decomposition:**
In case of fire or at high temperatures the formation of following decomposition products is possible.
Carbon monoxide and carbon dioxide
Halogens
Halogen acids
carbonyl halides
-

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

64741-44-2 Distillates (petroleum), straight-run middle
 Oral LD₅₀ 5000 mg/kg (rat)
 Inhalative LC₅₀/4 h 1.72 mg/l (rat)

811-97-2 1,1,1,2-tetrafluorethane
 Inhalative LC₅₀/4h 48000 ppm (rat)

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110-54-3 n-hexaneOral LD₅₀ > 5000 mg/kg (rat)Dermal LD₅₀ > 2000 mg/kg (rabbit)Inhalative LC_{01/4h} > 3367 mg/l (rat)LC_{50/4 h} 1500 mg/l (rat)

- **Primary irritant effect:**

- **on the skin:**

Irritant to skin and mucous membranes.

Continuing or repeated contact with the skin may cause dermatitis.

- **on the eye:** Light irritation possible

- **Sensitization:** No sensitizing effects known.

- **Other information (about experimental toxicology):**

- **Carcinogenic effects:** Presently available data show no carcinogenic, mutagenic or teratogenic effects.

- **Subacute to chronic toxicity:**

Continuous exposure may cause a slight fibrosis in the lung. Persons with existing respiratory problems (for example asthma, chronic obstructive pulmonary disease) maybe react more strongly to the product.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Irritant

After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

12 Ecological information

- **Ecotoxic effects:**

- **Aquatic toxicity:**

110-54-3 n-hexaneLC_{50/24h} >50 mg/l (daphnia magna)

4 mg/l (fish)

- **Remark:** Toxic to fish.

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous to water.

According to appendix 4 of VwVwS dated 27.7.2005 (German regulation)

Also poisonous for fish and plankton in water bodies.

Toxic to aquatic organisms

13 Disposal considerations

- **Product:**

- **Recommendation:**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal according to instructions of local authorities.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· Land transport ADR/RID (cross-border)



- ADR/RID class: 2 5F Gases.
- Danger code (Kemler): -
- UN-Number: 1950
- Packaging group: -
- Label: 2.1
- Special marking: Symbol (fish and tree)
- Description of goods: 1993 FLAMMABLE LIQUID, N.O.S. (HEXANES, HEXANES)
- Limited quantities (LQ): LQ2
- Transport category: 2
- Tunnel restriction code: D
- Remarks: Limited Quantity: 1 kg inner packing, 30 kg packaging unit

· Maritime transport IMDG:



- IMDG Class: 2.1
- UN Number: 1950
- Label: 2.1
- Packaging group: -
- EMS Number: F-E,S-E
- Marine pollutant: No
- Proper shipping name: AEROSOLS
- Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 2.1
- UN/ID Number: 1950
- Label: 2.1
- Packaging group: -
- Proper shipping name: AEROSOLS, flammable
- Remarks: Packing Instructions:
For Limited Quantities: Y203(Max Net Qty/Pkg: 30 kg G)
Passenger and Cargo Aircraft: 203 (Max Net Qty/Pkg: 75 kg)
Cargo Aircraft only: 203 (Max Net Qty/Pkg: 150 kg)
- UN "Model Regulation": UN1993, FLAMMABLE LIQUID, N.O.S., 3, II
- Environmental hazards: Product contains environmentally hazardous substances: 2,2-dimethylbutane

15 Regulatory information

- Chemical safety assessment A Chemical Safety Assessment has not been carried out.

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- **National regulations**
 - **Technical guidance (air):**
 - **Class Share in %:**
 - | | |
|----|-----|
| I | 1.1 |
| NK | 4.9 |
 - **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
-

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Reasons for amendments:**
 - Change of trade name
 - Safety phrases
 - EC Regulation 453/2010
- **Replaces version dated:** 25.11.2009
- **Relevant phrases**
 - H224 Extremely flammable liquid and vapour.
 - H225 Highly flammable liquid and vapour.
 - H304 May be fatal if swallowed and enters airways.
 - H315 Causes skin irritation.
 - H336 May cause drowsiness or dizziness.
 - H361f Suspected of damaging fertility.
 - H373 May cause damage to organs through prolonged or repeated exposure.
 - H411 Toxic to aquatic life with long lasting effects.
- | | |
|--------|---|
| R11 | Highly flammable. |
| R12 | Extremely flammable. |
| R38 | Irritating to skin. |
| R48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R62 | Possible risk of impaired fertility. |
| R65 | Harmful: may cause lung damage if swallowed. |
| R67 | Vapours may cause drowsiness and dizziness. |
- **Department issuing MSDS:**
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 - Postfach 1451 D-64345 Griesheim
- Phone: +49 6155 86829-0 Fax: +49 6155 86829-25
Safety Data Sheet Service: +49 6155 86829-22
- **Contact:** Dr. Sonja Fischer
- **Abbreviations and acronyms:**
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 - ICAO: International Civil Aviation Organization
 - ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
- **Sources:**
 - MSDS of the supplier
 - Information provided by the manufacturer