Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 08/31/2006 Reviewed on 05/29/2006

1 Identification of substance

· **Product details**

· **Trade name:** JECTRON

· **Article number:** 2007
· **Application of the substance / the preparation** Cleaning material/ Detergent

· **Manufacturer/Supplier:**
LIQUI MOLY GmbH
Jerg-Wieland-Strasse 4
89081 Ulm-Lehr
Germany

Tel.: +49/(0)731/ 1420-0
Fax: +49/(0)731/ 1420-88

· **Information department:** see: chapter 16 (contact)
· **Emergency information:**
see manufacturer/supplier
see manufacturer/supplier or call INFOTRAC 1-800-535-5053

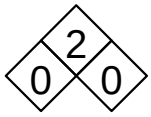
2 Composition/Data on components

· **Chemical characterization**
· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**		
	Naphtha (petroleum), hydrodesulfurized heavy	50-100%
68784-56-5	Benzene, Mono-C4-9-alkylderivatives	≤ 2.5%
	polyethyleneamines	≤ 2.5%
	Alkarylpolyether	≤ 2.5%
64742-94-5	Solvent naphtha (petroleum), heavy arom.	≤ 2.5%

3 Hazards identification

· **Information pertaining to particular dangers for man and environment:**
Heightened risk of fire and danger of explosion at accumulation in lower-lying or closed rooms
The product has to be labelled due to the calculation procedure of international guidelines.
At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.
Harmful: may cause lung damage if swallowed.
Repeated exposure may cause skin dryness or cracking.
· **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 2
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

HEALTH	0
FIRE	2
REACTIVITY	0

Health = 0
Fire = 2
Reactivity = 0

4 First aid measures

· **After inhalation:**
Take affected persons into fresh air and keep quiet.
Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

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· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards caused by the material, its products of combustion or resulting gases:**
Carbon monoxide (CO)
Nitrogen oxides (NOx)
In certain fire conditions, traces of other toxic gases cannot be excluded.
· **Protective equipment:**
Wear self-contained respiatory protective device.
Wear fully protective suit.
· **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Cool endangered receptacles with water spray.

6 Accidental release measures

· **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
· **Measures for environmental protection:**
Prevent from spreading (e.g. by damming-in or oil barriers).
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.
· **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Additional information:** See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Information for safe handling:**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.

· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Provide solvent resistant, sealed floor.
· **Information about storage in one common storage facility:** Store away from oxidizing agents.
· **Further information about storage conditions:** None.
· **Storage class:** -

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8 Exposure controls and personal protection

· **Additional information about design of technical systems:** *No further data; see item 7.*

· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** *The lists that were valid during the creation were used as basis.*

· **Personal protective equipment:**
· **General protective and hygienic measures:**
Do not carry product impregnated cleaning cloths in trouser pockets.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
· **Breathing equipment:**
Use suitable respiratory protective device only when aerosol or mist is formed.
Filter A/P2
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self contained breathing apparatus (SCBA).
· **Protection of hands:**
Solvent resistant gloves
Preventive skin protection by use of skin-protecting agents is recommended.

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

· **Body protection:** *Protective work clothing*

9 Physical and chemical properties

· **General Information**	
Form:	*Fluid*
Color:	*Yellow*
Odor:	*Characteristic*
· **Change in condition**	
Melting point/Melting range:	*Undetermined.*
Boiling point/Boiling range:	*Undetermined.*
· **Flash point:**	*63°C (145°F)*
· **Auto igniting:**	*Product is not selfigniting.*

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· **Danger of explosion:**	In use, may form flammable/explosive vapour-air mixture.
· **Explosion limits:**	
Lower:	0.6 Vol %
Upper:	7.0 Vol %
· **Oxidizing properties**	-
· **Density at 15°C (59°F):**	0.802 g/cm³
· **Solubility in / Miscibility with Water:**	Insoluble.
· **Viscosity:**	
Kinematic at 40°C (104°F):	< 7 mm²/s

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
To avoid thermal decomposition do not overheat.
· **Materials to be avoided:** Oxidizing agents
· **Dangerous reactions** No dangerous reactions known.
· **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
Naphtha (petroleum), hydrodesulfurized heavy		
Oral	LD50	> 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** Irritant to skin
· **on the eye:** Irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful

12 Ecological information

· **Information about elimination (persistence and degradability):** A part of the components are biodegradable
· **Ecotoxical effects:**

· **Acquatic toxicity:**	
Naphtha (petroleum), hydrodesulfurized heavy	
EC50	> 100 mg/l (daphnia)
IC50	> 10 - < 100 mg/l (algae)
	> 10 - < 100 mg/l (bacteria)
LC50	> 10 - < 100 mg/l (fish)

· **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system.

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Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

· **Product:**
· **Recommendation:**
Must be specially treated adhering to official regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:**
Non contaminated packagings can be reused.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

· **DOT regulations:**	
· **Hazard class:**	3
· **Identification number:**	NA1993
· **Packing group:**	III
· **Proper shipping name (technical name):**	COMBUSTIBLE LIQUID, N.O.S (Naphtha (petroleum), hydrodesulfurized heavy)
· **Land transport ADR/RID (cross-border):**	
· **ADR/RID class:**	-
· **Maritime transport IMDG:**	

· **IMDG Class:**	9
· **UN Number:**	3082
· **Label**	9
· **Packaging group:**	III
· **EMS Number:**	F-A.S-F
· **Marine pollutant:**	Yes
· **Propper shipping name:**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzol, Mono-C4-9-alkylderivate)
· **Air transport ICAO-TI and IATA-DGR:**	

· **ICAO/IATA Class:**	9
· **UN/ID Number:**	3082
· **Label**	9
· **Packaging group:**	III
· **Propper shipping name:**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzol, Mono-C4-9-alkylderivate)

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15 Regulations

· **SARA Title III**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

· **TSCA Section 12(b)Export Notification (40 CFR 707, Subpart D):**
None of the ingredients is listed.

· **California Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**
All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**
None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**
None of the ingredients is listed.

· **Product related hazard informations:**
Observe the general safety regulations when handling chemicals.
The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**
Xn Harmful

· **Hazard-determining components of labelling:**
Naphtha (petroleum), hydrodesulfurized heavy

· **Risk phrases:**
Harmful: may cause lung damage if swallowed.

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Repeated exposure may cause skin dryness or cracking.

· ***Safety phrases:***
Keep out of the reach of children.
Do not breathe fumes/aerosol.
Avoid contact with skin.
This material and its container must be disposed of in a safe way.
If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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.

· ***Department issuing MSDS:*** *Chemical Check Hungary Kft.*
· ***Contact:*** *Dr. Zsusza Zilahy* *Tel.: +36/(06)24 540 610*