

Printing date 12/16/2005

Reviewed on 12/16/2005

* 1 Identification of substance

- Product details
- Trade name: **Graffiti Remover**
- Article number: 10880, 10881
- Application of the substance / the preparation Paint remover
- Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg
Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de
- Information department: Laboratory

* 2 Composition/Data on components

- Chemical characterization
 - Description: Mixture of the substances listed below with nonhazardous additions.
 - Dangerous components:
- | | | |
|-------------------------|------------------------|---------|
| CAS: 872-50-4 | N-methyl-2-pyrrolidone | 50-100% |
| EINECS: 212-828-1 | Xi; R 36/38 | |
| EU Number: 606-021-00-7 | | |
| CAS: 96-48-0 | gamma-butyrolactone | <12.5% |
| EINECS: 202-509-5 | Xn; R 22-36 | |
- Additional information: For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- Hazard description: Xi Irritant
- Information pertaining to particular dangers for man and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. Irritating to eyes and skin.
- Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- NFPA ratings (scale 0 - 4) Health = 1
Fire = 1
Reactivity = 0
- HMIS-ratings (scale 0 - 4) Health = 1
Fire = 1
Reactivity = 0

4 First aid measures

- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or 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: During heating or in case of fire poisonous gases are produced.

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- Protective equipment: Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
Mount respiratory protective device.
- Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
- Measures for cleaning/collecting: Pick up mechanically.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- Handling:
- Information for safe handling: Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
- Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Do not store together with oxidizing and acidic materials.
- Further information about storage conditions: Protect from heat and direct sunlight.
Store in cool, dry conditions in well sealed receptacles.

* 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:
- 872-50-4 N-methyl-2-pyrrolidone**
WEEL 10 ppm
- Additional information: The lists that were valid during the creation were used as basis.
 - Personal protective equipment:
 - General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
 - Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
Filter AX
 - Protection of hands: Protective gloves
 - Material of gloves Butyl rubber, BR
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.
 - 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

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9 Physical and chemical properties

General Information

Form: Pasty
 Color: Opaque
 Odor: Characteristic

Change in condition

Melting point/Melting range: Undetermined.
 Boiling point/Boiling range: Undetermined.

Flash point: 93°C (199°F)

Ignition temperature: 270°C (518°F)

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: 1.3 Vol %
 Upper: 15.6 Vol %

Density at 20°C (68°F): ~ 1.00 g/cm³

Solubility in / Miscibility with

Water: Fully miscible.

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Dangerous reactions

Reacts with strong acids and oxidizing agents.

Dangerous products of decomposition:

Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin:

Irritant to skin and mucous membranes.

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:
 Irritant

12 Ecological information

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 Water hazard class 1 (Self-assessment): slightly hazardous for water

13 Disposal considerations

Product:

Recommendation:

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

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.
 Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

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14 Transport information

- DOT regulations:
- Hazard class: -
- Land transport ADR/RID (cross-border):
- ADR/RID class: -
- Maritime transport IMDG:
- IMDG Class: -
- Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -

15 Regulations

- Sara
- Section 355 (extremely hazardous substances):
None of the ingredient is listed.
- Section 313 (Specific toxic chemical listings):
872-50-4 N-methyl-2-pyrrolidone
- TSCA (Toxic Substances Control Act):
All ingredients are listed.
- 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:
872-50-4 N-methyl-2-pyrrolidone
- Cancerogenity categories
- EPA (Environmental Protection Agency)
None of the ingredients is listed.
- IARC (International Agency for Research on Cancer)
96-48-0 gamma-butyrolactone: 3

7631-86-9 silicon dioxide, chemically prepared: 3
- NTP (National Toxicology Program)
None of the ingredients is listed.
- TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.
- MAK (German Maximum Workplace Concentration)
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.
- Product related hazard informations: The product has been classified and marked in accordance with directives on hazardous materials.
- Hazard symbols: Xi Irritant
- Risk phrases: Irritating to eyes and skin.
- Safety phrases: Keep out of the reach of children.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point

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Wear suitable gloves and eye/face protection.

If swallowed, seek medical advice immediately and show this container or label.

· National regulations:· Water hazard class:· VOC USA

Water hazard class 1 (Self-assessment): slightly hazardous for water.

920.0 g/l / 7.68 lb/gl

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:

Laboratory

· Contact:

Dieter Zimmermann

· * Data compared to the previous version altered.

USA