

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

· **1.1 Product identifier**

· **Trade name:** *DexClean*

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
*No further relevant information available.*

· **Application of the substance / the mixture** *Cleaner*

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

**TAG Chemicals GmbH**  
**An der Steinlach 15**  
**D-65474 BISCHOFSSHEIM**  
**DEUTSCHLAND**

· **Further information obtainable from:**

**Abteilung Produktsicherheit**  
**jochen.bauer@tag-chemicals.com**

· **1.4 Emergency telephone number:**  
**0173 394 7023**

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



*GHS02 flame*

*Flam. Liq. 2 H225      Highly flammable liquid and vapour.*



*GHS08 health hazard*

*Repr. 1B    H360D      May damage the unborn child.*



*GHS07*

*Skin Irrit. 2 H315      Causes skin irritation.*

*Eye Irrit. 2 H319      Causes serious eye irritation.*

*STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.*

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

*The product is classified and labelled according to the CLP regulation.*

· **Hazard pictograms**



**GHS02**



**GHS07**



**GHS08**

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*N-methyl-2-pyrrolidone*  
*acetone*

· **Hazard statements**

*H225      Highly flammable liquid and vapour.*

*H315      Causes skin irritation.*

*H319      Causes serious eye irritation.*

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H360D May damage the unborn child.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

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

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

· **3.2 Chemical characterisation: Mixtures**

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

· **Dangerous components:**

CAS: 872-50-4 EINECS: 212-828-1	N-methyl-2-pyrrolidone ⚠ Repr. 1B, H360D; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	25-50%
CAS: 67-64-1 EINECS: 200-662-2	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	25-50%

· **SVHC**

872-50-4 | N-methyl-2-pyrrolidone

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

· **4.1 Description of first aid measures**

· **After inhalation:** 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:** If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures**

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:** No special measures required.

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**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

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

· **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**872-50-4 N-methyl-2-pyrrolidone**

WEL	Short-term value: 80 mg/m <sup>3</sup> , 20 ppm
	Long-term value: 40 mg/m <sup>3</sup> , 10 ppm
	Sk

**67-64-1 acetone**

WEL	Short-term value: 3620 mg/m <sup>3</sup> , 1500 ppm
	Long-term value: 1210 mg/m <sup>3</sup> , 500 ppm

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing

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Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

**SECTION 9: Physical and chemical properties**

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Clear

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 55 °C

· **Flash point:** -19 °C

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 270 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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· <b>Explosion limits:</b>	
Lower:	1.3 Vol %
Upper:	13 Vol %
· <b>Vapour pressure at 20 °C:</b> 233 hPa	
· <b>Density at 20 °C:</b> 0.908 g/cm <sup>3</sup>	
· <b>Relative density</b> Not determined.	
· <b>Vapour density</b> Not determined.	
· <b>Evaporation rate</b> Not determined.	
· <b>Solubility in / Miscibility with water:</b> Fully miscible.	
· <b>Partition coefficient: n-octanol/water:</b> Not determined.	
· <b>Viscosity:</b>	
Dynamic:	Not determined.
Kinematic:	Not determined.
· <b>9.2 Other information</b> No further relevant information available.	

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

#### · LD/LC50 values relevant for classification:

##### 872-50-4 N-methyl-2-pyrrolidone

Oral	LD50	3,914 mg/kg (rat)
Dermal	LD50	8,000 mg/kg (rabbit)

##### 67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**  
May damage the unborn child.
- **STOT-single exposure**  
May cause respiratory irritation. May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

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· **Aspiration hazard** Based on available data, the classification criteria are not met.


### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- |   |  |
|---|--|
| · <b>14.1 UN-Number</b>   | UN1993                                 |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>14.2 UN proper shipping name</b>   | 1993 FLAMMABLE LIQUID, N.O.S. solution |
| · <b>ADR</b>  | FLAMMABLE LIQUID, N.O.S. solution      |
| · <b>IMDG, IATA</b>   |  |
| · <b>14.3 Transport hazard class(es)</b>  |  |
| · <b>ADR, IMDG, IATA</b>  |  |
|  |  |
| · <b>Class</b>  | 3 Flammable liquids.                   |
| · <b>Label</b>  | 3                                      |
| · <b>14.4 Packing group</b>   | II                                     |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>14.5 Environmental hazards:</b>  | Not applicable.                        |
| · <b>14.6 Special precautions for user</b>  | Warning: Flammable liquids.            |
| · <b>Danger code (Kemler):</b>  | 33                                     |
| · <b>EMS Number:</b>  | F-E,S-D                                |

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· <b>Stowage Category</b>	<b>B</b>
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	<i>Not applicable.</i>
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	<i>1L</i>
· <b>Excepted quantities (EQ)</b>	<i>Code: E2</i> <i>Maximum net quantity per inner packaging: 30 ml</i> <i>Maximum net quantity per outer packaging: 500 ml</i>
· <b>Transport category</b>	<i>2</i>
· <b>Tunnel restriction code</b>	<i>D/E</i>
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	<i>1L</i>
· <b>Excepted quantities (EQ)</b>	<i>Code: E2</i> <i>Maximum net quantity per inner packaging: 30 ml</i> <i>Maximum net quantity per outer packaging: 500 ml</i>
· <b>UN "Model Regulation":</b>	<i>UN 1993 FLAMMABLE LIQUID, N.O.S. SOLUTION, 3, II</i>

### **SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*
- **Seveso category P5c** *FLAMMABLE LIQUIDS*
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** *5,000 t*
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** *50,000 t*
- **REGULATION (EC) No 1907/2006 ANNEX XVII** *Conditions of restriction: 3, 30, 71*
- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

872-50-4 | *N-methyl-2-pyrrolidone*

· **15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

### **SECTION 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.*

· **Relevant phrases**

- H225 Highly flammable liquid and vapour.*
- H315 Causes skin irritation.*
- H319 Causes serious eye irritation.*
- H335 May cause respiratory irritation.*
- H336 May cause drowsiness or dizziness.*
- H360D May damage the unborn child.*

· **Contact:** *Fr. Kemper*

· **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)*
- IMDG: International Maritime Code for Dangerous Goods*
- IATA: International Air Transport Association*
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals*
- EINECS: European Inventory of Existing Commercial Chemical Substances*
- ELINCS: European List of Notified Chemical Substances*

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**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 15.01.2019

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**Trade name: DexClean**

CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
SVHC: Substances of Very High Concern  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 2: Flammable liquids – Category 2  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Repr. 1B: Reproductive toxicity – Category 1B  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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