

**Tammermatic BRUSH**

Date 20.1.2017

Previous date: 30.4.2015

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**1.1 Product identifier**
**1.1.1 Commercial Product Name**

Tammermatic BRUSH

**1.2 Relevant identified uses of the substance or mixture and uses advised against**
**1.2.1 Recommended use**

Washing agent for vehicle.

**1.3 Details of the supplier of the safety data sheet**
**1.3.1 Supplier**

Tammermatic Oy

**Street address**

Tesomanvaltatie 28

**Postcode and post office**

33300 Tampere

**P.O.Box**

PB 206

**Postcode and post office**

33101 Tampere

**Telephone**

+358-20 1373 403

**Telefax**

+358-20 1373 409

**Business ID**

1043549-7

**Email**

service@tammermatic.com

**1.4 Emergency telephone number**
**1.4.1 Telephone number, name and address**

Poison centrum in Finland +358-9-4711

Local emergency phone (in Finland 112)

**2. HAZARDS IDENTIFICATION**
**2.1 Classification of the substance or mixture**

Risk of serious damage to eyes, irritating to skin.

**1272/2008 (CLP)**

Skin Irrit. 2, H315

Eye Dam. 1, H318

**2.2 Label elements**
**1272/2008 (CLP)**

GHS05

Signal word

**Danger**
**Hazard Statements**

H315

Causes skin irritation.

H318

Causes serious eye damage.

**Precautionary Statements**

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353

IF ON SKIN (or hair): Remove/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.

P337+P313

If eye irritation persists: Get medical advice/attention.

**2.3 Other hazards**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**
**Hazardous components**

**Tammermatic BRUSH**

Date 20.1.2017

Previous date: 30.4.2015

CAS/EC and Reg. number	Chemical name of the substance	Concentration	Classification
26836-07-7	Monoethanolamine dodecyl benzene sulphonate	10-20 %	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1; H302 H315 H318
64-17-5 01-2119457610-43	Ethanol	2-5 %	Flam. Liq. 2; H225
67-63-0 01-2119457558-25	2-Propanol	1-3 %	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336

**3.3 Other information**  
does not exist

#### 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**4.1.2 Inhalation**

Fresh air, rest.

**4.1.3 Skin contact**

Remove contaminated clothing and rinse the skin with plenty of water.

**4.1.4 Eye contact**

Rinse under running water 10-15 min. Seek medical help immediately and keep rinsing.

**4.1.5 Ingestion**

Wash out mouth thoroughly with water and give plenty of water or milk to drink. Seek medical help.

**4.2 Most important symptoms and effects, both acute and delayed**

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

nursing according to symptoms

#### 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**5.1.1 Suitable extinguishing media**

Foam, powder, CO2

**5.1.2 Extinguishing media which must not be used for safety reasons**

not known

**5.2 Special hazards arising from the substance or mixture**

Product can degrade in the fire and may involve toxic nitrogen and sulphur compounds.

**5.3 Advice for firefighters**

In the case of large fire use full protective clothing and self-contained breathing apparatus with over pressure.

**5.4 Specific methods**

does not exist

#### 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

Use safety goggles and safety gloves (e.g. neoprene, nitrile or laminated PE/EVOH). Wear appropriate protective clothing if necessary .

**6.2 Environmental precautions**

Do not allow to enter drinking water supplies, waste water or soil without diluting with plenty of water.

**6.3 Methods and materials for containment and cleaning up**

Absorb on an inert absorbent and transfer carefully to sealed container. Arrange for removal by disposal company. Rinse residues with plenty of water. Use protective equipment mentioned in 6.1.

**6.4 Reference to other sections**

does not exist

**Tammermatic BRUSH**

Date 20.1.2017

Previous date: 30.4.2015

**7. HANDLING AND STORAGE**

- 7.1 Precautions for safe handling**  
Usual hygienic measures are necessary allowing for the risk of serious damage to eyes and irritating to skin.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Storing tight sealed in original packages in a warm place.
- 7.3 Specific end use(s)**

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- 8.1 Control parameters**  
Good general ventilation should be sufficient.
- 8.1.1 Threshold limits**
- |            |                              |                                 |
|------------|------------------------------|---------------------------------|
| Ethanol    | 1000 ppm (8 h)               | 1300 ppm (15 min)               |
|            | 1900 mg/m <sup>3</sup> (8 h) | 2500 mg/m <sup>3</sup> (15 min) |
| 2-Propanol | 200 ppm (8 h)                | 250 ppm (15 min)                |
|            | 500 mg/m <sup>3</sup> (8 h)  | 620 mg/m <sup>3</sup> (15 min)  |
- 8.1.2 Other information on limit values**  
not known
- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls**  
Good general ventilation should be sufficient.
- 8.2.2 Individual protection measures**
- 8.2.2.1 Respiratory protection**  
nomally not needed
- 8.2.2.2 Hand protection**  
Use safety gloves mentioned in item 6.1. if necessary.
- 8.2.2.3 Eye/face protection**  
Use safety goggles if there is possibilities for splashing.
- 8.2.2.4 Skin protection**  
use properly protecting clothes to avoid skin contact

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 Important Health Safety and Environmental Information**
- 9.1.1 Appearance**  
Yellow brown liquid.
- 9.1.2 Odour**  
Mild odour.
- 9.1.4 pH**  
9,5 ± 0,5
- 9.1.6 Initial boiling point and boiling range**  
78 - °C
- 9.1.7 Flash point**  
> 61 °C
- 9.1.9 Flammability (solid, gas)**  
not measured
- 9.1.10 Explosive properties**
- 9.1.10.1 Lower explosion limit**  
not measured
- 9.1.10.2 Upper explosion limit**  
not measured
- 9.1.11 Vapour pressure**  
not measured
- 9.1.13 Relative density**  
c. 1
- 9.1.14 Solubility(ies)**
- 9.1.14.1 Water solubility**  
miscible in all proportions
- 9.1.14.2 Fat solubility (solvent - oil to be specified)**  
not measured

**Tammermatic BRUSH**

Date 20.1.2017

Previous date: 30.4.2015

<b>9.1.15</b>	<b>Partition coefficient: n-octanol/water</b>	not measured
<b>9.1.18</b>	<b>Viscosity</b>	not measured
<b>9.1.20</b>	<b>Oxidising properties</b>	does not exist
<b>9.2</b>	<b>Other information</b>	does not exist

**10. STABILITY AND REACTIVITY**

<b>10.1</b>	<b>Reactivity</b>	
<b>10.2</b>	<b>Chemical stability</b>	Product is stable at normal temperature
<b>10.3</b>	<b>Possibility of hazardous reactions</b>	
<b>10.4</b>	<b>Conditions to avoid</b>	not known
<b>10.5</b>	<b>Incompatible materials</b>	Strong acids.
<b>10.6</b>	<b>Hazardous decomposition products</b>	Nitrogen, sulphur and carbon oxides, ammonia.

**11. TOXICOLOGICAL INFORMATION**

<b>11.1</b>	<b>Information on toxicological effects</b>	
<b>11.1.1</b>	<b>Acute toxicity</b>	Ethanol: LD50=7500 mg/kg (oral, rat), LDLo=1400 mg/kg (oral, man), LC50=20000 ppm/10 h (ihl, rat); 2-Propanol: LD50=5045 mg/kg (oral, rat), LDLo=2770 mg/kg (man), LC50=12800 ppm/3 h (ihl, mouse), LD50=12,8 g/kg (skn, rabbit)
<b>11.1.2</b>	<b>Irritation and corrosion</b>	Product can cause serious damage to eyes and irritates the skin. Long termed and/or repeated skin contact can cause irritation dermatitis.
<b>11.1.3</b>	<b>Sensitisation</b>	not known
<b>11.1.4</b>	<b>Subacute, subchronic and prolonged toxicity</b>	not known
<b>11.1.5</b>	<b>STOT-single exposure</b>	Swallowing can irritate alimentary canal and cause nausea and vomiting.
<b>11.1.8</b>	<b>Other information on acute toxicity</b>	not known

**12. ECOLOGICAL INFORMATION**

<b>12.1</b>	<b>Toxicity</b>	
<b>12.1.1</b>	<b>Aquatic toxicity</b>	not known
<b>12.1.2</b>	<b>Toxicity to other organisms</b>	not known
<b>12.2</b>	<b>Persistence and degradability</b>	
<b>12.2.1</b>	<b>Biodegradation</b>	Product is easily biologically degradable.
<b>12.2.2</b>	<b>Chemical degradation</b>	not known

**Tammermatic BRUSH**

Date 20.1.2017

Previous date: 30.4.2015

- 12.3 Bioaccumulative potential**  
no bioaccumulation
- 12.4 Mobility in soil**  
with water
- 12.5 Results of PBT and vPvB assessment**
- 12.6 Other adverse effects**  
not known

**13. DISPOSAL CONSIDERATIONS**

- 13.1 Waste treatment methods**  
Contact your local waste disposal authority for advise.

**14. TRANSPORT INFORMATION**

- 14.1 UN number**
- 14.2 UN proper shipping name**
- 14.3 Transport hazard class(es)** Transport regulations are not applied to this product
- 14.4 Packing group**
- 14.5 Environmental hazards**
- 14.6 Special precautions for users**
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**15. REGULATORY INFORMATION**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
-
- 15.2 Chemical safety assessment**  
Chemical safety assesment has not be done.

**16. OTHER INFORMATION**

- 16.3 Key literature references and sources for data**  
MSDS from the manufacturer. SAX: Dangerous Properties of Industrial Materials (11. edition).
- 16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements**
- |      |                                     |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed.               |
| H319 | Causes serious eye irritation.      |
| H336 | May cause drowsiness or dizziness.  |
- 16.8 Additional information available from:**  
Tammermatic Oy tel. +358-20-1373 403
- Date** 20.1.2017