



# Material Safety Data Sheet

- NeemAzal-T/S -

*Trifolio-M* GmbH

## 5. FIRE FIGHTING MEASURES

Extinguishing agents                      CO<sub>2</sub> or polymer foam  
Fire and explosion hazards              CO, CO<sub>2</sub>

## 6. ACCIDENTAL RELEASE MEASURES

- *PERSON RELATED SAFETY PRECAUTIONS*  
Wear safety glasses and rubber gloves.
- *MEASURES FOR ENVIRONMENTAL PROTECTION*  
Do not allow to enter the ground/soil and the ground water.
- *MEASURES FOR CLEANING / COLLECTING*  
Collect material, flush leftovers with water.

## 7. HANDLING AND STORAGE

- *HANDLING*  
No further requirements.
- *STORAGE*  
Keep cool and dry. Avoid direct sunlight.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- *CRITICAL VALUES*  
TLV (threshold limit value):              not established
- *GENERAL PROTECTIVE AND HYGIENICS MEASURES*  
Keep away from food, feed and beverages. Wash hands after usage.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form    viscous liquid
- Colour     brown
- Smell    characteristic Neem odour
- Boiling point                                    not established
- Flash point                                      = 171°C
- Self-inflammability                          NeemAzal-T/S is not self igniting (own estimation)
- Danger of explosion                          NeemAzal-T/S is not explosive (own estimation)
- Vapour pressure                                3.6·10<sup>-11</sup> hPa (estimated for Azadirachtin A)
- Density    0.98 g/ml
  
- Solubility in water                            emulsifiable in water

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- pH-value 7.00 ± 0.02
- Viscosity 281.4 mm<sup>2</sup>/s (20°C)

## 10. STABILITY AND REACTIVITY

- *CONDITIONS TO AVOID*  
High temperature, sunlight.
- *MATERIALS TO AVOID*  
Acids, alkalis and oxidizing agents.
- *DANGEROUS PRODUCTS OF DECOMPOSITION*  
None.

## 11. TOXICOLOGICAL INFORMATION

- *ACUTE TOXICITY*  
Oral - rat: LD<sub>50</sub> > 5000 mg/kg  
Dermal - rat LD<sub>50</sub> > 2000 mg/kg  
Inhalation - rat LC<sub>50</sub> > 5.4 mg/l/4 h
- *PRIMARY IRRITANT EFFECT*  
Eye - rabbit may cause mild irritations  
Skin - rabbit may cause mild irritations  
Sensitization - guinea-pig no sensitizing effect
- *CHRONIC TOXICITY*  
Micronucleus test - mouse negative  
Mutagenic effects not observed
- *REPRODUCTIVE TOXICITY*  
NeemAzal-F (5% Azadirachtin A) NOAEL = 5000 mg/kg diet
- *CARCINOGENICITY*  
NeemAzal-F(5% Az.A) - mouse 80 weeks- not induced

## 12. ECOLOGICAL INFORMATION

- Effect on honeybees harmless
- Effect on earthworms harmless (> 1000 mg/kg)
- Effect on predators harmless
- Hazard to soil microflora not hazardous
- Acute daphnia immobilization EC<sub>50</sub> > 50 mg/l
- Acute fish toxicity (rainbow trout) LC<sub>50</sub> = 160 mg/l (96 hrs)
  
- Algal inhibition test non inhibitory, non stimulant
  
- Metabolism in soil rapid decomposition in soil

