

Material Safety Data Sheet

According to 91/155 EC

1 Identification of the substance/preparation and of the company/undertaking

Product details

- Trade name: AL54 Signwriting Enamel (Lead Free)
- Article number: AL54
- Application of the substance / the preparation Coating compound/ Surface coating/ paint








Further information obtainable from: LABORATORY

2 Composition/information on ingredients

Chemical characterization

Description: Mixture of substances listed below with nonhazardous additions.

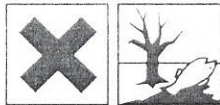
Dangerous components:

CAS: 64742-82-1 EINECS: 265-185-4	White Spirit	 Xn,  N; R 22-51/53-65-66	25-50%
CAS: 1330-20-7 EINECS: 215-535-7	Xylene (mix)	 Xn; R 10-20/21-38	≤ 2.5%
	HF White Spirit	 Xn,  N; R 10-51/53-65-66	≤ 2.5%
CAS: 138-86-3 EINECS: 205-341-0	p-mentha-1,8(9)-diene	 Xi,  N; R 10-38-43-50/53	≤ 2.5%

Additional information: For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

Hazard description:



Xn Harmful
N Dangerous for the environment

Information concerning particular hazards for human 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.

R 10 Flammable.

R 22 Harmful if swallowed.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

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· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First-aid measures

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:** *Generally the product does not irritate the skin.*
- **After eye contact:** *Rinse opened eye for several minutes under running water.*
- **After swallowing:** *Call for a doctor immediately.*

5 Fire-fighting measures

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
- **Protective equipment:** *Put on breathing apparatus*

6 Accidental release measures

- **Person-related safety precautions:** *Wear protective equipment. Keep unprotected persons away.*

· **Measures for environmental protection:**

*Inform respective authorities in case of seepage into water course or sewage system.
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.*

7 Handling and storage

· **Handling:**

· **Information for safe handling:**

*Keep receptacles tightly sealed.
Ensure good ventilation/extraction at the workplace.
Prevent formation of aerosols.*

· **Information about fire - and explosion protection:**

*Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.*

· **Storage:**

- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep receptacle tightly sealed.*

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8 Exposure controls/personal protection

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

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

1330-20-7 Xylene (mix)

OES	Short-term value: 441 mg/m ³ , 100 ppm
	Long-term value: 220 mg/m ³ , 50 ppm
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· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

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

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 150°C

· **Flash point:** 38°C

· **Ignition temperature:** 230.0°C

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Density at 20°C:	1.073 g/cm ³
· Solubility in / Miscibility with water:	NOT MISCIBLE
· Solvent content:	
Organic solvents:	2.3 %
Water:	0.1 %
· Solids content:	51.4 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful

12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information· **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 30
- **UN-Number:** 1263
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1263 PAINT (not viscous)

· **Maritime transport IMDG:**

- **IMDG Class:** 3
- **UN Number:** 1263
- **Label:** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-E
- **Marine pollutant:** Yes
- **Proper shipping name:** PAINT

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label:** 3
- **Packaging group:** III
- **Proper shipping name:** PAINT

15 Regulatory information

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**
Xn Harmful
N Dangerous for the environment

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

White Spirit

· **Risk phrases:**

10 *Flammable.*

22 *Harmful if swallowed.*

51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

65 *Harmful: may cause lung damage if swallowed.*

· **Safety phrases:**

23 *Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).*

25 *Avoid contact with eyes.*

36 *Wear suitable protective clothing.*

43 *In case of fire, use water or powdered extinguishing agent.*

57 *Use appropriate container to avoid environmental contamination.*

60 *This material and its container must be disposed of as hazardous waste.*

· **Special labelling of certain preparations:**

Contains 2-butanone oxime, p-mentha-1,8(9)-diene. May produce an allergic reaction.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
II	1.5
III	1.2

· **Waterhazard class:** *Water hazard class 2 (Self-assessment): hazardous for water.*

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 R-phrases**

10 *Flammable.*

20/21 *Harmful by inhalation and in contact with skin.*

22 *Harmful if swallowed.*

38 *Irritating to skin.*

43 *May cause sensitisation by skin contact.*

50/53 *Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

65 *Harmful: may cause lung damage if swallowed.*

66 *Repeated exposure may cause skin dryness or cracking.*

· **Department issuing MSDS:** *Product safety department: LABORATORY*

· **Contact:** *Health & Safety Officer*