

Material Safety Data Sheet according to Regulation (EU) 2015/830

Issued: 18/04/2019 Version 1.0 87077 / 82110

THE HOBBY COMPANY LTD, 1 GARFORTH PLACE, KNOWLHILL, MILTON KEYNES, MK5 8PG TEL 01908 209 482 E MAIL enquiries@hobbyco.net

TAMIYA EUROPE GMBH, WERKSTRASSE 1, FURTH. D 90765, GERMANY

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

1.1 Product identifier 87077 TAMIYA LACQUER Thinner 250 ml

82110 TAMIYA LACQUER THINNER 10 ml

- 1.2 Relevant identified uses of the substance or mixture and uses advised against Paint thinner.
- 1.3 Details of the supplier of the safety data sheet Manufacturer / Supplier

The Hobby Company Ltd, 1 Garforth Place, Knowlhill, Milton Keynes. MK5 8PG UK

Email enquiries@hobbyco.net Phone +449 (0) 1908 605 686 Fax +44 (0) 1908 605 666

Data sheet creation info@chemieberatung.com

1.4 Emergency telephone number Giftnotruf München +49 (0) 89 19240

In an emergency, members of the public should always contact their general practitioners, NHS non urgent Help lines - NHS 24 (Scotland) or NHS 111 (England and Wales) or local A&E department. If the patient has collapsed or is not breathing properly, call 999.

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, Hazard category 2 (H225)

Serious eye damage / irritation,

Hazard category 2 H319)

Acute toxicity (inhalation), Hazard category 4 (H332)

Specific target organ toxicity (single exposure), Hazard category 3,

Respiratory tract irritation (H335)

Specific target organ toxicity (single exposure), Hazard category 3, narcotic effects (H336)



Signal word Danger Hazard statements

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H332 Harmful by inhalation.

H335 May cause respiratory irritation.

H336 May cause drowsiness and dizziness. Special rules for supplemental label elements for certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P102 Keep out of the reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. Do not smoke.

P241 Use explosion-proof electrical equipment / ventilation / lighting systems.

P243 Take precautionary measures against electrostatic discharges.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P271 Use only outdoors or in well-ventilated areas. 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. Wash skin with water / shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove any existing contact lenses if possible. Continue rinsing.

P312 Call a POISON CENTER / doctor if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice / attention.

Hazardous component (s) for labeling

propan-2-ol, 4-methylpentan-2-one. # 2.3 Other hazards Not known.

SECTION 3 Composition / information on ingredients

- 3.1 Substances This product is a mixture.
- 3.2 mixtures solvent mixture. Hazardous ingredients

Propan-2-ol EC no. 200-661-7 CAS no. 67-63-0 content> 50%

classification codes Flam. Liq. 2; H225 - Eye Irrit. 2; H319 - STOT SE 3; H336

4-methylpentan-2-one EC no. 203-550-1

CAS no. 108-10-1 Content 25 - <30%

Classification Codes Flam. Liq. 2; H225 - Eye Irrit. 2; H319 - Acute Tox. 4; H332 - STOT SE 3; H335 EUH066 For this substance there are Union workplace exposure limits (see section 8).

2-butoxyethanol EC no. 203-905-0

CAS no. 111-76-2 Content 5 - <10%

Classification Codes Acute Tox. 4; H302 - Acute Tox. 4; H312 - Skin Irrit. 2; H315 - Eye Irrit. 2; H319 Acute Tox. 4;

H332 For this substance there are Union workplace exposure limits (see section 8). The wording of the classification codes can be found in section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures General advice Consult a physician. Show this safety data sheet to the attending physician.

After inhalation Remove person to fresh air, consult doctor if feeling unwell.

In case of skin contact Remove contaminated clothing, remove lacquer mechanically, rub off residues with mineral spirits and then rinse off with plenty of water and soap.

Consult doctor if feeling unwell.

After eye contact If the eyelids are spread out, rinse thoroughly under running water.

Consult the ophthalmologist immediately.

After swallowing, rinse mouth and allow water to drink with the addition of medicated charcoal, allow to vomit, call a doctor.

- 4.2 Most important symptoms and effects, both acute and delayed No data available.
- 4.3 Indication of any immediate medical attention and special treatment needed No data available.

SECTION 5 Firefighting measures

5.1 Extinguishing media Suitable extinguishing media Water spray, extinguishing powder, CO2, alcohol-resistant foam

Unsuitable extinguishing media Water in full jet.

- 5.2 Special hazards arising from the substance or mixture Thermal decomposition to carbon monoxide and organic fission products.
- 5.3 Advice for firefighters Tight-fitting fire suit with self-contained breathing apparatus. Do not inhale explosion or combustion gases.

SECTION 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected people away.
- 6.2 Environmental precautions Do not empty into drains or the aquatic environment. Inform respective authorities when entering in waters or the sewerage.
- 6.3 Methods and material for containment and cleaning up Provide adequate ventilation. Do not wash away with water or aqueous cleaning agents. Absorb with inert binder and dispose of according to local regulations, unless otherwise applicable.
- 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 Protect from heat and direct sunlight. Ensure good ventilation / exhaustion at the workplace. Use and open container with care. Advice on protection against fire and explosion Keep ignition sources away Do not smoke. Take precautionary measures against electrostatic charging.
- 7.2 Conditions for safe storage, including any incompatibilities Store in a cool and dry place. Protect from heat and direct sunlight. Cool endangered containers with water spray.
- 7.3 Specific end use (s) No data available.

SECTION 8 Exposure controls / personal protection

8.1 Control parameters Components with limit values according to 2000/39

/ EC 4-methylpentan-2-one EC-No. 203-550-1 CAS no. 108-10-1

Limit value (8 h) 83 mg / m3 - 20 ppm

Limit value (15 min) 208 mg/m3 - 50 ppm Note No information given.

2-butoxyethanol EC no. 203-905-0

CAS no. 111-76-2

Limit value (8 h) 98 mg / m3 - 20 ppm

Limit value (15 min) 246 mg / m3 - 50 ppm

Warning Risk of absorption through the skin.

Ingredients with limit values according to TRGS 900 (Germany)

Propan-2-ol EC no. 200-661-7

CAS no. 67-63-0

AGW 200 ml / m3 (ppm) - 500 mg / m3

Peak limitation Exceeding factor 2 (II)

Remarks DFG, Y 4-methylpentan-2-one EC-No. 203-550-1 CAS no. 108-10-1 AGW 20 ml / m3 (ppm) -

83 mg / m3

Peak limitation Exceeding factor 2 (I)

Remarks DFG, EU, H, Y

2-Butoxyethanol EC-No. 203-905-0

CAS no. 111-76-2

AGW 10 ml / m3 (ppm) - 49 mg / m3

peak limitation exceedance factor 2 (I) # remarks EU, DFG, H, Y # constituents with limit values according to TRGS 903 (Germany)

propan-2-ol EG- No. 200-661-7

CAS no. 67-63-0

Parameter Acetone BGW 25 mg / I

Test material Whole blood Sampling time Exposure end or end of shift.

Test material Urine Sampling time Exposure end or end of shift.

4-methylpentan-2-one EC no. 203-550-1

CAS no. 108-10-1

Parameter 4-Methylpentan-2-one BGW 0.7 mg / I #

Test material Urine Sampling time End of exposure or end of shift.

2-butoxyethanol EC no. 203-905-0

CAS no. 111-76-2

Parameter butoxyacetic acid (after hydrolysis) # BGW 150 mg / g creatinine #

Test material Urine Sampling time Exposure end or end of shift, in case of long-term exposure: after several previous layers. # 8.2

Exposure controls Appropriate engineering controls

Do not eat, drink or smoke when working.

Preventive skin protection. Wash hands before breaks and at the end of work.

Do not inhale gases / vapors / aerosols.

Avoid skin and eye contact.

Personal protective equipment Respiratory protection If the workplace limit value in enclosed areas is exceeded, a self-contained breathing apparatus must be used.

Eye protection Use tightly fitting goggles with side shields.

Hand protection Use protective gloves according to EN-374-2 made of butyl rubber. As the product is a mixture of several substances, the resistance of glove materials can not be predicted and must therefore be checked before use. The exact break-through time must be found out and adhered to by the manufacturer of the protective gloves. Skin protection Use anti-static safety shoes and flame retardant protective clothing.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so.

Do not allow to enter waters. An entry in the environment is to be avoided.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Physical state liquid

Color colorless

Odor of solvents

Melting point / Melting range - Not available.

Initial boiling point / boiling range 80 ° C

Flash point 14 $^{\circ}$ C pH (at T = 20 $^{\circ}$ C) - Not applicable.

Flammability Highly flammable.

Ignition temperature - Not available.

Self-igniting - Not applicable.

Oxidizing properties - Not applicable.

Explosion hazard Applies to vapor-air mixtures.

Explosive limits lower 1.2 vol.% (Solvent) upper 12.0 vol.% (Solvent) Density (at $T = 20 \,^{\circ}$ C) - Not available.

Solubility in water (at T = 20 ° C) Product is partially soluble.

Vapor pressure (at T = 20 ° C) - Not available.

Vapor density (air = 1) - Not available.

Partition coefficient (n-octanol / water) - Not available.

Viscosity (at $T = 20 \degree C$) - Not available.

Solvent separation test - Not applicable. Solvent content 100%

Evaporation rate - Not available.

9.2 Other information - No data available.

SECTION 10 Stability and reactivity

- 10.1 Reactivity No data available.
- 10.2 Chemical stability The product is stable.
- 10.3 Possibility of hazardous reactions Under normal use, no hazardous reactions are known.
- 10.4 Conditions to avoid Heat.
- 10.5 Incompatible materials Concentrated mineral acids and strong oxidizing agents.
- 10.6 Hazardous decomposition products Only in case of fire, see section 5.2.

SECTION 11 Toxicological information

11.1 Information on toxicological effects Acute toxicity to propan-2-ol # LD50 oral () 5,045 mg / kg LD50 dermal () 12,800 mg / kg LD50 inhalation oral () 2,17 mg / l / 4 h for 4-methylpentan-2-one LD50 oral () 2,080 mg / kg

for 2-butoxyethanol # LD50 oral () 470 mg / kg LD50 dermal () 220 mg / kg Skin corrosion / irritation - No data available.

Serious eye damage / irritation The product causes serious eye irritation.

Respiratory or skin sensitization - No data available.

Germ cell mutagenicity - No data available.

Carcinogenicity - No data available.

Reproductive toxicity - No data available.

Specific target organ toxicity - single exposure

The product is harmful if inhaled, may cause respiratory irritation and drowsiness and dizziness.

Specific target organ toxicity - repeated exposure Repeated exposure may cause skin dryness or cracking.

Aspiration hazard - No data available.

Other information - No data available.

SECTION 12 Ecological information

12.1 Toxicity to Propan-2-ol #
LC50 Fish 9,640 mg / I / 96 h
LC50 Crustaceans 1,400 mg / I / 48 h for 4-methylpentan-2-one #
LC550 Fish 537 mg / I / 96 h for 2-butoxyethanol #
LC50 fish 1.370 mg / I / 96 h
LC50 crustaceans 800 mg / I / 48 h 12.2

Persistence and degradability - No data available.

- 12.3 Bioaccumulative potential No data available.
- 12.4 Mobility in soil No data available.
- 12.5 Results of PBT and vPvB assessment According to the available data, the criteria for classification as PBT or vPvB are not met.
- 12.6 Other adverse effects Leaking product damages waters through oxygen depletion and general pollution.

SECTION 13 Disposal considerations

13.1 Waste treatment methods Hazardous waste according to European waste catalog (2008/98 / EC). If recovery is not possible, waste must be disposed of in compliance with local regulatory requirements. Do not dispose of wastewater. EU waste code 20 01 13 * Solvents. 15 01 10 * Packaging containing residues of hazardous substances or contaminated by hazardous substances.

SECTION 14 Transport information

- 14.1 UN number 1263 14.2 UN proper shipping name ADR / RID COLOR ACCESSORIES Tunnel restriction code (Road) (D / E) IMDG / IATA PAINT RELATED MATERIAL (14 $^{\circ}$ C cc)
- 14.3 Transport hazard class (es) 3 (flammable liquids)
- 14.4 Packing Group II (Substances presenting a medium hazard)
- 14.5 Environmental hazards Indicates environmentally hazardous substances Not applicable.
- 14.6 Special precautions for user See sections 6 8.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable.

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture EU legislation Listing in Annex I to Directive 2012/18 / EU on the control of major-accident hazards involving dangerous substances Quantitative thresholds for substance group P5c. Regulation (EU) No 528/2012 on the placing of biocidal products on the market Not applicable. Regulation (EC) No 648/2004 (Detergents Regulation) Not applicable. Directive 1999/13 / EC on the limitation of emissions of volatile organic compounds Applicable.

Directive 92/85 / EEC on the introduction of measures to encourage improvements in the safety and health of pregnant workers, workers who have recently given birth or who are breastfeeding.

Directive 98/24 / EC on the protection of the health and safety of workers from the risks related to chemical agents at work Applicable.

Directive 94/33 / EC on the protection of young people at work Applicable.

German regulations Technical instructions for air Observe limit values for organic substances according to 5.2.5.

Water hazard class WGK 1 (slightly water endangering) Storage class according to TRGS 510 LGK 3 (flammable liquids)

Other regulations, limitations and prohibitive regulations Observe fact sheets M 004, M 017 and M 050 of the German General Trade Association for Raw Materials and Chemicals.

15.2 Chemical Safety Assessment

The mixture has not been subjected to a safety assessment.

SECTION 16 Other information

Full text of hazard statements according to section 3

Flam. Liq. 2; H225 Flammable liquids, hazard category 2; Highly flammable liquid and vapor.

Acute Tox. 4; H302 Acute toxicity (oral), hazard category 4; Harmful if swallowed.

Acute Tox. 4; H312 Acute toxicity (dermal), hazard category 4; Harmful in contact with skin. Skin.

Irrit. 2; H315 Skin corrosion / irritation, hazard category 2; Causes skin irritation.

Eye Irrit. 2; H319 Serious eye damage / eye irritation, hazard category 2; Causes serious eye irritation.

Acute Tox. 4; H332 Acute toxicity (inhalation), hazard category 4; Harmful if inhaled. STOT SE 3; H335 Specific target organ toxicity - single exposure, hazard category 3, respiratory tract irritation; May irritate the respiratory system.

STOT SE 3; H336 Specific Target Organ Toxicity - Single Exposure, Hazard Category 3,

Narcotic Effects; May cause drowsiness and dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

Notes The classification codes apply to the pure ingredients and do not necessarily indicate the classification of the mixture. The classification and labeling of the mixture are listed in Section 2. This safety data sheet is compiled on the basis of the applicable EU regulations and UK regulations. It reflects the current state of knowledge and is not a contractual assurance of quality characteristics of the product.

Abbreviations # Indicates changed information compared to the previous version.

AGS Committee on Hazardous Substances.

AGW workplace limit. BGW biological limit at the workplace.

DFG German Research Foundation (MAK-Kommission).

EU European Union.

H Risk of absorption through the skin.

LGK storage class.

PBT Persistent, bioaccumulating and toxic. vPvB Very persistent and very bioaccumulative. TRGS Technical Rules for Hazardous Substances. WGK water hazard class.

Y A risk of foetal damage does not need to be feared if AGW and BGW are complied with.