



AMMO SAFETY DATA SHEET (MSDS)

According to regulation (EC) N° 1907/2006

PUTTY SURFACER

English

Revision date: 25/08/2022

Version: 2

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

PUTTY SURFACER: A.MIG-2047, A.MIG-2048, A.MIG-2049

1.2. Relevant identified uses of the substance or mixture and uses advised against

Putty for plastic models.

1.3. Details of the supplier of the safety data sheet

Company	AMMO of Mig Jimenez, S.L.
Address	C/ Mauriain 3. 31132 Villatuerta, Navarra (Spain)
Email	info@ammo.es
Website	https://www.ammo.es
Phone Number	+34 948 552 882

1.4. Emergency telephone number

Phone Number	+34 948 552 882 (working hours)
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UFI NUMBER: Q55V-DVQ1-U506-YM0X

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In accordance with Regulation (EU) No 1272/2008:

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

Eye Irrit. 2: Causes serious eye irritation. H319

STOT SE 3: May cause drowsiness or dizziness. H336

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictograms:



GHS02

GHS07



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Signal word: **DANGER**

H statements:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

P statements:

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

P240: Ground/bond container and receiving equipment.

P243: Take precautionary measures against static discharge.

P370+P378 In case of fire: Use appropriate media for extinction.

P403+P235 Store in a well-ventilated place. Keep cool.

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.

Country-specific hazard statement:

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Chemical Nature: Mixture of solvents with pigments.

20%-60% ETHYL ACETATE

N. Indice: 607-022-00-5

N. CAS: 141-78-6

N. CE: 205-500-4

N. registro: 01-2119475103-46-XXXX

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20-25% Titanium dioxide

CAS: 13463-67-7

EC: 236-675-5

In accordance with Regulation (EU) CLP No 1272/2008: N/A

15-20% Calcium Carbonate

Número de registro (REACH) 01-2119486795-18-xxxx

Número CE 207-439-9

Número CAS 471-34-1

In accordance with Regulation (EU) CLP No 1272/2008: N/A

10-15% Iron Oxide

N° REACH: 01-2119457554-33

N° CAS : 51274-00-1

n° EINECS: 257-098-5

In accordance with Regulation (EU) CLP No 1272/2008: N/A

1%-3% DIACETONE ALCOHOL

N. Índice: 603-016-00-1

N. CAS: 123-42-2

N. CE: 204-626-7

N. registro: 01-2119473975-21-XXXX

Eye Irrit. 2; H319: C ≥ 10 %

1%-3% ACETONE

Número CAS: 67-64-1

Número EINECS: 200-662-2

Número de clasificación: 606-001-00-8

Número de registro 01-2119471330-49-XXXX

Eye Irrit. 2: Causes serious eye irritation. H319

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4. FIRST AID MEASURES



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4.1. Description of first aid measures

GENERAL INDICATIONS: In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Ingestion: If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

Inhalation: Place the casualty in the open air, keep him warm and at rest. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact: If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up and seek medical assistance.

Skin contact: Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

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4.3. Most important symptoms and effects, acute and delayed

Irritant product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate. Can cause allergic reactions.

4.4. Indication of any immediate medical attention and special treatment needed

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5. FIREFIGHTING MEASURES

The product is highly inflammable, it can cause or considerably worsen a fire, the necessary prevention measures should be taken and risks avoided. In case of fire, the following measures are recommended:

5.1. Extinguishing media

Recommended extinguishing methods: Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

5.2. Special hazards arising from the substance or mixture

Special risks: Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3. Advices for firefighters

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, protective goggles or facemasks, and gloves.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and emergency procedures

Eliminate possible ignition points and ventilate the area. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

6.2. Environmental precautions

Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3. Methods and material for containment and cleaning up

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator.

Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4. Reference to other sections

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.



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7. HANDLING AND STORAGE

7.1. Precautions for safe handling

The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated.

Electrical equipment has to be protected according to applicable standards. The product can be electrostatically charged: always use earth grounds when transferring the product.

Operators must use antistatic footwear and clothing, and floors must be conductors. Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks. For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers. In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety. Keep the product in containers made of a material identical to the original.

7.2. Conditions for safe storage, including any incompatibilities

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorized persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills. Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III).

Code	Description	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5.000	50.000

7.3. Specific end uses

No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parametres

Work exposure limit for:

	VLA-ED *		VLA-EC *	
	ppm	mg/m3	ppm	mg/m3
ETIL ACETATE	400	1460	400	1468



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8.2. Exposure controls

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Breathing protection:

PPE: Filter mask for protection against gases and particles.

Characteristics: «CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight. CEN standards: EN 136, EN 140, EN 405.

Maintenance:

Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.

Observations:

Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer. Filter Type needed: A2.

Hand protection:

PPE: Protective gloves against chemicals.

Characteristics: «CE» marking, category III. CEN standards: EN 374-1, En 374-2, EN 374-3, EN 420.

Maintenance:

Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.

Observations:

Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands. Material: PVC (polyvinyl chloride)

Breakthrough time (min.): > 480

Material thickness (mm): 0,35.

Eye protection:

PPE: Face shield.

Characteristics: «CE» marking, category II. Face and eye protector against splashing liquid.

CEN standards: EN 165, EN 166, EN 167, EN 168

Maintenance:

Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily.

Protectors should be disinfected periodically following the manufacturer's instructions. Make sure that mobile parts move smoothly.

Observations:

Face shields should offer a field of vision with a dimension in the central line of, at least, 150 mm vertically once attached to the frame.

Skin protection:

PPE: Anti-static protective clothing.

Characteristics: «CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements. CEN standards: EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5



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Maintenance:

In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.

Observations:

The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.

PPE: Anti-static safety footwear.

Characteristics: «CE» marking, category II.

CEN standards: EN ISO 13287, EN ISO 20344, EN ISO 20346

Maintenance: The footwear should be checked regularly

Observations:

The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: liquid with characteristic odour

Colour: characteristic

Odour: characteristic, like fruit.

pH: It is not available test data

Boiling point/boiling range: 77,1°C (etil acetate)

Flash point: -4°C (etil acetate)

Melting point: -83°C (etil acetate)

Flammability (solid, gas): Not applicable.

Explosive properties: Based on its chemical structure there is no indication of explosive properties.

Oxidising properties: Based on its chemical structure there is no indication of oxidising properties.

Vapour pressure: 98.3 hPa (20°C) (etil acetate)

Relative density: 0.902 gr/cm³

Water solubility: 3.4 % m/m at 20°C (Water in product) / 7.29 % m/m (Product in water)

Partition coefficient (n-octanol/water): 0.68 (measured)

Viscosity: 0.4508 mPa-s at 20°C

Vapour density: 3.04 at 20°C (air=1) (etil acetate)

Evaporation rate: 4.5 (A. Butyl=1) (etil acetate)

Solubility parameter: 9,1

Latent heat of evaporation: 367 kJ/kg

Heat of combustion: 25429 kJ/kg

Dielectric constant: 6.4 at 20 °C

Olfactory threshold: 0.006 - 0.686 mg/l (gas in air)

Lower explosion limit: 2,5 %.

Upper explosion limit: 9.0 %.

9.2. Other information

No data available.

10. STABILITY AND REACTIVITY



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10.1.Reactivity

The product does not present hazards by their reactivity.

10.2.Chemical stability

Unstable in contact with:

- Acids.
- Bases.
- Oxidizing agents.

10.3.Possibility of hazardous reactions

Possible hazardous reaction with oxidising agents and acids.

10.4.Conditions to avoid

Avoid heat, sparks, flames or other sources of ignition. Avoid conditions of extreme humidity and incidence of sunlight.

10.5.Incompatible materials

Strong oxidizing agents, strong acids, alkalis, bases and oxidizing materials.

10.6.Hazardous decomposition products

None under normal storage conditions.

11. TOXICOLOGICAL INFORMATION

IRRITANT PREPARATION. Splatters in the eyes can cause irritation.

11.1.Information on toxicological effects

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin. Splatters in the eyes can cause irritation and reversible damage

Acute toxicity			
Type			Result
Oral	LD50	Rat	5620 (mg/kg)
Dermal	LD50	Rabbit	>18000 (mg/kg)
Inhal	LD50	Rat	>44000 (mg/m3)



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a) acute toxicity;

Not conclusive data for classification.

b) skin corrosion/irritation;

Not conclusive data for classification.

c) serious eye damage/irritation;

Product classified: Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Not conclusive data for classification.

h) STOT-single exposure;

Product classified:

Specific target organ toxicity following a single exposure, Category 3:

i) STOT-repeated exposure;

Not conclusive data for classification.

j) aspiration hazard;

Not conclusive data for classification.

11.2. Information on other hazards

Other hazards: not known.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Acute toxicity			
Fish	LC/EC/IC 50	Pimephales promelas	230 mg/L (96h)
Aquatic invertebrates	CE50	Daphnia magna	717 mg/l (24h)
Aquatic plants	EC50	Desmodesmus subspicatus	>1000 mg/L (48h)



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12.2. Persistence and degradability

Easily biodegradable. DQO: 1540mgO₂/g.
Biodegradability 28-days period: 94% biodegradable

12.3. Bioaccumulation potential

Significative bioaccumulation is not expected: (Log Pow = 0,29) BCF: 3,2 L/Kg

12.4. Soil mobility

Log Koc: 1,26
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5. Results of PBT and VPVB assesment

No information is available about the results of PBT and vPvB assessment of the product.

12.6. Endocrine disrupting properties

Not classified as CMR, no endocrine disrupting potential.

12.7. Other adverse effects

Not potentially hazardous to the ozone layer.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

14. TRANSPORT INFORMATION

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions.

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading.

Air: Transport by plane: ICAO/IATA.

Transport document: Airway Bill.

14.1. UN NUMBER: UN1866

14.2. UN PROPER SHIPPING NAME: RESIN SOLUTIONS

14.3. TRANSPORT HAZARD CLASS(ES): Class(es): 3

14.4. PACKAGING GROUP: Packing group: II

14.5. HAZARDS FOR THE ENVIRONMENT: NO

14.6. SPECIAL PRECAUTIONS FOR USERS

EXCEPTED QUANTITIES: E2 (less packaging of 30g/30mL and maximum amount of packaging 500g/500mL).

LIMITED QUANTITIES (PACKAGING INSTRUCTIONS Y341).

Interior packaging: PLASTIC.

Maximum amount of every packaging: 0,5L.

Maximum net amount of packaging: 1L.



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Packaging Instruccions Y341: (other requirements) according the regulation n° 5.0.2.7 and 5.0.2.9 and the point 2.7 of the Regulation IATA DGR 54.

14.7. Sea transport in bulk according to IMO instruments

Not relevant.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulation/legislation specific for the substance or mixture

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

See annex I of the Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances and the Regulation (EC) No 689/2008 of the european parliament and of the council of 17 June 2008 concerning the export and import of dangerous chemicals and its subsequent updates.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): P5c.

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2. Chemical safety assessment

There has been no evaluation a chemical safety assessment of the product.

16. Other information

Key literature references and sources for data: Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Other information: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any ther materials or in any process, unless specified in the text. Restricted to professional users.

Attention – Avoid exposure - obtain special instructions before use.