

1. Designation of the mixtures and of the company**1.1. Product identifier:**

group 5; trade names: Branth's Edel-Firnis, Branth's Rostschutzgrund, Branth's Alu-Glasur, Branth's "3 in 1-Glanz-Additiv"

1.2. Intended use:

protective coating, paint, enamel, varnish, direct from can for brush and roller application; diluted for spraying, dipping, floating and pouring, interior and exterior; manual, semi-automatic or automatic application, for industrial-, commercial-workman like- and hobby-sector

1.3. Company/undertaking identification:

Branth-Chemie A.V. BRANTH * Telephone: +49 40-369740-0 * Telefax: +49 40-367148

Biedenkamp 23, D-21509 Glinde/Hamburg, Germany

e-Mail: Branth-Chemie@t-online.de

Information through: SALES /TECHNICAL SERVICE: +49 40-369740-0 (Mo.-Th. 8 a.m.-4 p.m., Fr. 8 a.m.-1 p.m.)

1.4. Emergency phone (in Germany): Giftnotrufzentrale Göttingen: +49 551-19240**2. Hazards identification (liquid product, not dry paint)****2.2. Labelling according to VO 1272/2008/EG (GHS, CLP)****Hazard pictograms:**

Product identifier: entarom. KW (see chapter 3.2.; Appendix "A")

Signal word: Attention

Hazard statements: H226 Flammable liquid and vapour. H336 May cause sleepiness or drowsiness.

Precautionary statement: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P404 Store in a closed container. P262 Do not get in eyes, on skin, or on clothing. P271 Use only outdoors or in well-ventilated area.

P102 Keep out of reach of children.

Other hazards: EUH 066 Repeated exposure may cause skin dryness or cracking. EUH 211 Do not breathe spray or mist. Hazardous respirable droplets may be formed when sprayed.

The pictogram "exclamation mark, STOT.SE 3" with the signal word "attention" and the H-statement H336

is not legally obligatory for several types and/or colours of paint in the MSDS.

It appears voluntarily, just to make aware to ventilate well during and after application.

2.3. Characterization: high-solids coating material; viscous; air drying

Flam. Liq 3 H226

STOT. SE 3 H336

3. Information on ingredients**3.2. Mixtures**

% share of substances classified as hazardous to health or environment

 entarom. KW; CAS 64742-48-9
 PM; CAS 107-98-2
 PMA; CAS 108-65-6
 n-Butylacetat; CAS 123-86-4
 Al-di-ph; CAS 13939-25-8

Appendix: Letter

Trade namesEdel-FirnisRostschutzgrundAlu-GlasurGlanz-Additiv

60-70

10-19

45

20-25

<5

5-10

3-4

10-15

<5

1-2

10-15

Continued on page 4: Detailed Information see appendix Material-Safety-Data-Sheet.Depending on colour, 0-25% titanium dioxide (TiO₂, white pigment, CAS 13463-67-7) is contained.**4. First Aid measures**

4.1. General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. **Inhalation:** Remove to fresh air, keep patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice immediately. **Eye contact:** Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice. **Skin contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleaner. Do not use solvents or thinners. **Ingestion:** Rinse mouth with water. Let water be drunk in little sips afterwards. Obtain immediate medical attention. Keep at rest. Do not induce vomiting.

4.2. Long term: Serious long term effects are not known for the substances used in this preparation.**4.3.** Please show Safety-Data-Sheet to the doctor. After ingestion and vomiting, possibly lung examination recommended.**5. Firefighting measures****5.1. Extinguishing media:** recommended: alcohol resistant foam, CO₂, powders, water spray/mist

not suitable: water-jet

5.2. Recommendations: fire will produce dense black smoke. Inhalation of decomposition products may cause a health hazard. **Additional protection:** when fire fighting appropriate breathing apparatus is required.**5.3 Advice for firefighters:** sealed containers in the proximity should be cooled with plenty of water. Disposed water should not be allowed entering drains.**6. Accidental release measures****6.1. Personal protection:** Refer to instructions listed in sections chapter 7 and 8**6.2. Environmental protection:** Do not allow entering drains or watercourses. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.**6.3. Cleaning/disposal:** Collect spillage with non-combustible absorbent materials or mechanically.

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7. Handling and storage

Handling

7.1. Recommendations for safe handling: Use only in areas from where naked lights and other ignition sources have been excluded. Electrical equipment should be protected to the appropriate standard. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid concentrations higher than the occupational exposure limits.

Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking should be prohibited in application area. For personal protection: see section 8. Comply with the local health and safety laws at work. Do not empty using pressure.

7.2. Storage

Requirements for storerooms and containers: Store in a cool place. Keep containers closed. Smoking prohibited.

No access for unauthorised persons. Containers that are opened must be resealed carefully and kept upright to prevent leakage. **Combined storage:** Keep away from oxidising agents, strong alkaline and strong acid materials.

Additional storage requirements: Store in original containers. Observe label precautions. Store in cool and dry areas. Away from sources of heat and direct sunlight. Keep away from sources of ignition.

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

storage category: UN test-fall-height for standard 5 ltr. cans: 1,2 m (in acc. with Appendix 4 to TRGS 510 (1/2013): Cl. 3)

8. Exposure controls / personal protection

8.1. Ingredients with occupational exposure limits: see 3.2 (page 1) and appendix (page 4)

8.2. Engineering measures: Provide adequate ventilation. Where reasonably practical this should be achieved by the use of local exhaust ventilation and good general extraction. If not sufficient, use respiratory equipment (see below).

8.2.1. Personal protection equipment

Protective and hygiene measurements: All parts of the body should be washed after contact. Smoking, eating and drinking is prohibited during working.

Respiratory protection: If exposed above the occupational exposure limits (o.e.l.) acc. 8.1 or when aerosols occur use appropriate certified respirators (e.g. A2P2 filter). Check application conditions and rules of the relevant association (rules for using respiratory equipment). During manual application outdoors (brush, roller) and single person application in large ventilated buildings the concentration is usually below the o.e.l. When spraying outdoors, respectively and single person application in a large, well ventilated building this is comparative; however, in these cases the possible risk of a fine aerosol should be considered when choosing the appropriate respirator (follow manufacturer's recommendations). An appropriate fresh air supply is required when applying these products in confined areas (vessels/tanks) or, in similar cases air-fed masks/respirators shall be used. At spray application the exposure due to aerosol depends on the spray-method; select respiratory protection according to manufacturer's recommendations and local situation. When ventilating please consider that solvent vapours are heavier than air.

Hand protection:

Wear gloves that are suitable for chemicals according EN 374. The gloves shall be certified for suitability for the exposure regarding resistance, anti-static properties etc. Please follow the recommendations of the manufacturer of the gloves. Protective gloves shall be replaced immediately when damaged or at first signs of wear and tear. Application should be planned in a way that it is not necessary to wear protective gloves during an extended period of time. Suitable materials are: Nitrile-rubber; material strength: > 0,4 mm, penetration time: > 480 minutes. At longer exposure with liquid paint or thinner a higher material strength or gloves with a barrier layer shall be used. Follow manufacturer's recommendations. Repeated or prolonged contact with the preparation causes removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin, especially when paint-stained skin is repeatedly cleaned with aggressive cleaners/solvents. If the application conditions are impeding that gloves are not worn, it is recommended to use barrier creams before and after. Barrier creams help to protect the exposed areas of skin.

Eye protection: In cases of possible splashes wear protective glasses according EN 166.

Skin protection: During normal application with brush and roller extra skin protection is not required. If, due to application conditions or method, the risk of contact cannot be avoided, electrostatic conduction (protective) clothing (cotton) can be worn. Follow manufacturer's recommendations.

8.2.2. Environmental Data: The preparations are **not** subject to "GHS09 aquatic hazard" labelling-requirements. Other data concerning particular ingredients can be seen in point 3 (page 1) and appendix (page 4).

9. Physical and chemical properties

Trade names	Edel-Firnis	Rostschutzgrund	Alu-Glasur	Glanz-Additiv
9.1. physical state	liquid	liquid - viscous	liquid	liquid
colour	opac	diverse	silver	yellowish
Smell	mild	aromatic-mild	aromatic	aromatic-mild
change of state	thickening due to evaporation of solvents in opened cans			
Flash point (DIN 53213)	27° C	26° C	27° C	appr. 25° C
Ignition temperature (DIN 51794)	> 200° C			> 240° C
Fire supporting properties/Auto ignition	no/no			
Explosion hazard due to	evaporation			
Explosion limits (Vol.%): lower/higher	LEL 0,5% vol., HEL 11% vol./ lead compound (arom. free hydrocarbons); LEL 0,6 % vol.(=35g/m³),HEL 6% vol.(=350 g/m³)			
Vapour pressure at 20° C	5-15 h Pa			
Density at 20° C (depends on colour)	appr. 0,85	1,3-1,5	appr. 0,95	appr. 0,96
Solubility in water at 20° C	< 1	< 10	< 1	partially soluble
Viscosity in sec. at 20° C 4 mm (DIN 53211) resp. 6 mm (ISO 2431)	appr. 20	> 100	appr. 20	appr. 70
Solvent content (% by weight)	68	30-40	50	appr. 53
9.2. Solvent separation test ADR/RID	< 1 %			
Solids content/ph value	32/-	60-70/-	50/-	appr- 47/-

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10. Stability and reactivity

10.1. Reactivity: see chapter 10.5.

10.2. Chemical stability: No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions: see chapter 10.2. and 10.5.

10.4. Conditions to avoid: see chapter 10.5.

10.5. Incompatible materials: Keep away from oxidising agents, strong alkaline and strong acid materials in order to avoid exothermic reactions.

10.6. Hazardous decomposing products: exposure to high temperatures may cause hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

11. Toxicological information: see chapter 3. (page 1) and appendix (page 4)

11.1. see chapter 2 for the mixture; see chapter 3 and appendix for composition of substances

11.2. General: There are no data available on the preparation itself; however the preparation is assessed according conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly.

Liquid splashed in the eyes may cause irritation and reversible damage. Generally the combination of solvent vapours and alcohol consumption is considered health endangering. Exposure to solvent vapours above the stated o.e.l. may lead to adverse health effects such as: irritation of the mucous membranes and respiratory organs, headache, dizziness, fatigue and adverse effects with long-term exposure to the kidneys and liver, central nervous system and, in extreme cases, loss of consciousness. **The preparations contain:** binders/resins (natural and synthetic-modified), organic and/or inorganic pigments (e.g. titanium dioxide, talcum, iron oxide) aromatic-free solvents (see 8.2.), lead-, zinc- and chromate free anti corrosive pigments, additives (< 1 %). Substances may cause allergic reactions. Upon request (e.g. in case of allergic suspicion) the preparation may be manufactured without the raw-material in question) as custom coating. When covering large areas with solvent containing coatings in confined spaces (buildings) it is recommended to properly ventilate during and after application. Also during the following days regular ventilation is recommended.

12. Ecological information

12.1.-12.6. see chapter 3 and appendix for composition of substances

12.7. There are no data available on the preparation itself. The product is not allowed to enter drains or watercourses.

13. Disposal considerations

13.1.1. Product: Waste material should be disposed of (see local directions).

Note regulations of law, waste identification number: 080111 or 080112.

For all products listed here, completely dried waste paint (including brushes, rollers, filler mats etc.) are no hazardous waste.

13.1.2. Containers: Empty containers entirely with a brush, do not wash. Fully emptied, dry containers can easily be recycled.

Containers not properly emptied are special waste (waste identification number: 150110).

13.1.3. Do not dispose of in wastewater.

13.1.4. Product should be used completely. Original-closed cans can be returned within the tenability date on the cans.

14. Transport information

14.1 UN number: 1263; **14.2.** UN proper shipping UN name: paint; **14.3.** Transport hazard class: 3; **14.4.** Packing group III;

14.5. not subject to hazardous classification, no marine pollutant; **14.6.** Special precautions for user; not known; **14.7.** no transport in bulk.

Additional transport information:

land transport in accordance with ADR/RID:

Rostschutzgrund, Glanz-Additiv: viscous product in registered packaging up to 450 ltr.. Not subject to hazardous classification (ADR 2.2.3.1.5.)

Edel-Firnis, Alu-Glasur: standard packaging (0,75 ltr., 5 ltr. cans) in a carton: composite packaging, not notable in the transport document

IMO-declaration required: "LQ" (limited quantity); larger packages: subject to hazardous goods CI 3/III/UN 1263-paint; tunnel restriction code: E

transport by sea in accordance with IMDG:

Rostschutzgrund, Glanz-Additiv: Not subject to hazardous classification; IMO-declaration required "viscous product see 2.3.2.5", packaging < 450 ltr.

Edel-Firnis, Alu-Glasur: standard packaging (0,75 ltr., 5 ltr. cans) in a carton: IMO-declaration required: "LQ" (limited quantity);

larger packages: UN 1263 (paint, flammable), CI 3/III, warning symbol 30, EMS 3-05, ;FAG FE, marine pollutant: no

transport by air in accordance with ICAO-TI und IATA-DGR:

Hazardous good (oaint 1263), 5 ltr.- cans with transport authorisation, no air-transport organised through manufacturer

15. Regulatory information

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

Trade name	Edel-Firnis	Rostschutzgrund	Alu-Glasur	Glanz-Additiv
TA-Luft (Gew. %): Kl. I / II / III	0/4/64	0/0/34-40	0/0/<50	0/0/53
Water polluting danger	1 = small potential			
VbF-label/class	no/All	no/no	no/All	no/no
VOC-value (g/l)	< 580	< 480	< 460	< 500
Product code by GISBAU	M-GP02 (M-KH02)	BS 40 (M-GP02)	BS 50	similar to BS 40 (M-GF02, M-LL01)

15.2. No Chemical Safety Assessment has been carried out for this mixture.

16. Other information

I. Indication of changes: MSDS-changes that represent a worsening/deterioration due to a change in our product composition are highlighted by vertical marks in the margin. Changes due to (once again) changed laws and regulations, editorial changes or facilitations/improvements are not marked.

II. Abbreviations and acronyms: You can require a list of all used abbreviations and acronyms separately in German language.

III. Important final informations: The information of this MSDS is based on the present state of our knowledge and on current EEC laws. Users working conditions are beyond our knowledge and control. The product is developed to meet the highest environmental standards, it should not to be used for other purposes than those specified under chapter one. It is always the responsibility of the user to take all necessary steps in order to fulfil the demands laid down in the local rules and legislation. The information herein is meant as a description of the safety requirements of our product: it is not to be considered as a guarantee of the products properties. The appendix ist part of the MSDS.

Appendix, part of the Safety-Data-Sheet chapters 3., 8., 11. und 12.

EU 1907/2006 Material Safety-Data-Sheet Brantho-Korrux and other Branth's 1K-paints/coatings

Last revision: 23.5.2022

Date: 23.5.2022

appendix 4/4 (page 4) (tentative translation)

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- A entaron. KW; CAS 64742-48-9**; aromate free hydrocarbons, Naphtha (petroleum, hydrotreated, heavy);
EINECS 265-150-3; INDEX 649-327-00-6; Reg.-No. 012119463258;
Flam.Liq.3 **H226**, Asp1 **H304**, Stot SE3 **H336**; EUH066; benzene-content<0,1%; AGW (TRGS 900) 300 mg/m³;
Ingestion: LD 50 rat > 2000 mg/kg; Skinabsorption: LD 50 rat > 2000 mg/kg; Inhalation: LD 50 rat > nearly saturated vapour concentration, 4 h;
Ecology: LC50 fish > 1000 mg/l; LC50 invertebrate < 1000 mg/l; LC50 algae > 1000 mg/l; LC50 microorganisms < = 10;
Readily biodegradable; WGK 1.
- B PM; CAS 107-98-2**; 1-Methoxy-2-propanol; EINECS 203-539-1; INDEX 603-064-00-3; Reg.-No. 012119457435;
Flam.Liq.3 **H226**, STOT SE3 **H336**;
AGW (TRGS 900) 370 mg/m³ 100 ppm sharp limit 2; IOELV (EU): TWA 375 mg/m³ 100 ppm; STEL 568 mg/m³ 150 ppm;
Ingestion: LD 50 rat 7.200 mg/kg; Inhalation: LC 50 rat 54,6 mg/l 4 h; Skinabsorption: LD 50 rabbit 14.000 mg/kg;
Readily biodegradable: (90 %, 28 d, OE CD 301 E); Fish toxicity: LCO Leuciscus idus melanotus > 4.600 mg/l 96 h; WGK 1
- C PMA; CAS 108-65-6**; 2-Methoxy-1-methylethylacetate; EINECS 203-603-9, INDEX 607-195-00-7; Reg.-No. 012119475791-29;
Flam.Liq.3 **H226**; AGW (TRGS 900) 270 mg/m³, sharp limit 1; IOELV (EU): TWA 275 mg/m³; STEL 550 mg/m³
Ingestion: LD 50 rat 8.532 mg/kg; Inhalation: LCO rat 23,8 mg/l 6 h; skinabsorption: LD 50 rat > 5.000 mg/kg;
Skin contact: no irritation; eye contact: irritated the eyes; not sensitising (guinea pig), (maximization test)
Readily biodegradable: 100 % 8 d (dental wellens test EG 88/302); Fish toxicity: LC 50 Quorhynchus mykiss
100-180 mg/l 96 h OECD TG 203;
Daphnia toxicity: EC 50 Daphnia magna > 500 mg/l 48 h (RL 67/548/EWG Anh. V. C2);
Bacterial toxicity: activated sludge > 1.000 mg/l 0,5 h, WGK 1
- D n-Butylacetate; CAS 123-86-4**; EINECS 204-658-1; INDEX 607-025-00-1; Reg.-No. 012119485493-29;
Flam.Liq.3 **H226**, EUH066;STOT SE **H336**; AGW (TRGS 900) 300 mg/m³ 62 ppm;
Ingestion: LD 50 rat 13.100 mg/kg; Inhalation: LC 50 rat > 21 mg/l 4 h; Skinabsorption: LD 50 rabbit > 17.600 mg/kg;
Readily biodegradable: 98 % 28 d (OECD 301 D); Fish toxicity: LC 50 Leuciscus idus melanotus 62 mg/l 96 h (DIN 38412);
Daphnia toxicity: EC 50 Daphnia magna 72,8 mg/l 24 h (DIN 38412); WGK 1
- H Al-di-ph; CAS 139-25-8**; Aluminiumdihydrogentriphosphat; Eg-Nr. 237-714-9; Reg-Nr. 01-2119970565-28
Eye Irrit. 2 **H319**; Dust AGW TRGS900(2/14) respirable fraction (AGS) 1,25 mg/m³, Dust AGW TRGS900(2/14)
inhalible fraction (AGS) 10 mg/m³, sharp limit 2(II); if nec. to supervise acc. TRGS903 Aluminium 200mg/l,
Ingestion: LD50 rat > 5000 mg/kg; Inhalation: LC50 rat > 3,46 mg/l; Irritant effect (not tested, acc. calculation method): Skin, no;
Eye contact, strong irritation; Inhalation, no; Sensibility, no; carcinogenicity, no; mutagenicity, no; reproductive toxicity, no; etching effect: no;
Specific target organ toxicity (once and/or repeated exposure), no; no aquatic toxicity acc. calculation method, no dangerous goods acc. ADR,
no dangerous goods acc. IMDG, no dangerous goods acc. IATA
- N TiO2; CAS 13463-67-7**; Pigment white Titanium dioxide; EG-Nr. 236-675-5; Reg.-Nr. 01-2119489379-17-xxxx. Carc. 2 **H351** (Inhalation);
non-flammable, no hazardous to water; no dangerous goods acc. ADR;
LC 50 > 1000 mg/l; NOEC > 10.000 mg/kg; no skin irritation, no sensitizing effect on skin/inhalation; no strong eye irritation /- damage, but possible
irritation through mechanical impact (dust): DNEL values 10 mg/m³; permitted for cosmetics, pharmaceuticals. tovs.

Explanation: H and P-phrases:

H226 Product and vapours are flammable; H304 May be fatal if swallowed and enters airways (as liquid state in the airways);
H312 Harmful in contact with skin; H315 Causes irritation to skin; H317 May cause an allergic skin reaction; H318 Causes serious eye damage;
H319 Causes severe eye irritation; H335 Can irritate the respiratory tract;
H336 Vapours may cause dizziness/drowsiness; H412 Harmful to aquatic life with long lasting effects;
H373 May cause damage to organs through prolonged or repeated exposure; P102 Keep out of reach of children
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking; 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;
P370+P378 In case of fire: Use dry sand, dry extinguishing agents or alcohol-resistant foam for extinction; P403+P235 Store in well-ventilated
place. Keep cool. P271 Use only outdoors or in a well-ventilated area.
P261 void breathing dust/fume/gas/mist/vapours/spray; P262 Do not get in eyes, on skin, or on clothing
EUH066 Repeated exposure may cause skin dryness or cracking.