Material Safety-Data-Sheet Brantho-Korrux in the "Komfortdose" (high-build aerosol-can)

according to 1907/2006 (does not concern standard pre-filled spraycans)

Date: 24.8.2021 Last revision: 24.8.2021 page 1/3 + appendix (tentative translation)

1. Designation of the mixtures and of the company

1.1. Product identifier:

Brantho-Korrux 3 in 1 and Nitrofest in 400ml-Komfortdose (ex-works high-build aerosol-can, not pre-filled-spraycans)

1.2. Intended use:

protective coating, paint, enamel, varnish, primary coating, rust prevention, metal prevention, maintenance paint for spraying; manual for interior and exterior regions; for industrial- or 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: 0049 551-19240

2. Hazards identification (liquid product, not dry paint)

2.2. Labelling according to VO 1272/2008/EG (GHS, CLP)

Hazard pictograms:

GHS02 Flame



Signal word: Danger

Hazard statements: H222 Extremely flammable aerosol; H229 pressurized container: may burst if heated.

Precautionary statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking. P410+P412 Protect from sunlight and do not exceed temperatures more than 50°C/122°F.

P251 Can is pressirized: Do not pierce or burn, even after use. P102 Keep out of reach of children.

P271 Use only outdoors or in well-ventilated area. Without sufficient ventilation the formation of explosive vapour/air mixtures cannot be excluded. P501 Dispose of contents/container according to national/local rules.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Characterization: high-solids coating material: air dryin

2.3. Characterization: high-solids coating material; air drying				
3. Information on ingredients	۶۲	BfR-Numbers and Trade names		
3.2. Mixtures	etter	BrF-Nr.: Komfortdose "3in1": 7658605, Komfortdose "nitrofest": 7658603		
%-share of substances	<u>"</u>	Brantho-Korrux in the high-build aerosol-can		
classified as hazardous to	. <u>:</u>			
health or environment	ndix	Komfortdose		
	I a			
	App			
Dimethyl ether ;CAS 115-10-6	X	25-35		
entarom. KW; CAS 64742-48-9	Α	5-10		
PM; CAS 107-98-2	В	4-8		
PMA; CAS 108-65-6	С	4-8		
PGDA;CAS 623-84-7	F	0-2		
Al-di-ph; CAS 78-93-3	Н	1-2		
Butanon; CAS 78-93-3	Υ	0-5		
EPA; CAS 54839-24-6	G	0-3		
n-Butylacetat;CAS 123-86-4	D	0-2		
Continued on page 4: Detailed Information see appendix Material-Safety-Data-Sheet.				
Depending on colour, 0-18% titanium dioxide (TiO2, white pigment, food additive E171, 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 drunken 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.

5. Firefighting measures

5.1. Extinguishing media: recommended: alcohol resistant foam, CO₂, powders, water spray/mist

Not suitable: water-iet

- **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, watercourses, floors, etc.

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: Avoid exceeding the occupational exposure limit values and formation of explosive vapour-air mixtures. Use only in areas from where naked lights, fire and other ignition sources have been excluded. Electrical equipment should be protected to the appropriate standard. 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.

Combined storage: Keep away from oxidising agents, strong alkaline and strong acid materials.

Additional storage requirements: Observe label precautions. Store in well-ventilated, cool

and dry, areas; away from sources of heat and direct sunlight.

Storage classification: 2B

7.3.Specific end use: see chapter 1.2.

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 these are not sufficient, use suitable 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: When workers are exposed over the occupational exposure limits (o.e.l.) acc. 8.1 or when aerosols might occur they must use appropriate certified respirators. Please check application conditions and rules of the relevant association (rules for using resparatory equipment). The possible risk of fine aerosol should be considered when choosing the appropriate respirator (follow manufacturer's recommendations).

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. Suitable materials are: Nitrile-rubber; material strength: > 0,4 mm, penetration time: > 480 minutes. At longer exposure with liquid paint or thinner higher a 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 creames help to protect the exposed areas of skin. Follow manufacturer's recommendations.

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

Skin protection: If, due to application conditions or method, the risk of contact cannot be avoided, elctrostatic conduction (protective) clothing (cotton) can be worn. Follow manufacturer's recommendations.

8.2.2. Environmental Data: The preparations are **not** subject to "environmental hazardous-N" labelling-requirements. Further data see chapter 3 (page 1) and appendix (page 4) for single substances.

9. Physical and chemical properties

Trade names	Brantho-Korrux in the "Komfortdose" (high-build aerosol-can)
9.1. physical state	Aerosol
colour	various
Smell	aromatic
change in condition	evaporation, thickening due to not closed condition
Flash point (DIN 53213)	< 0° C
Ignition temperature (DIN 51794)	235 °C
Fire supporting properties/Auto ignition	no/no
Explosion hazard due to	During application explosive or extremely flammable-air-mixture is possible
	UEG 3% Vol., OEG 19% Vol.
Explosion limits lower/higher	electroconductive substance (entarom. KW) UEG 0,6 % (=35 g/m³),
	OEG 6 % Vol. (=350 g/m³)
Vapour pressure at 20° C	3.400 h Pa
Density at 20° C	depends on colour
Solubility in water at 20° C	low miscibility
Viscosity at 20° C 4 mm (DIN 53211)	
or 6 mm (ISO 2431)	not measurable
Solvent content (% by weight)	appr. 51%
9.2. Solvent separation test ADR/RID	not applicable
Solids content/ph value	appr. 49%

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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:

- 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. Liquid splashed in the eyes may cause irritation and reversible damage. Generally the combination of solvent vapours and alcohol consuption is considered health endagering. Exposure to solvent vapours above the stated o.e.l. may lead to adverse health effects such as: irritation of the mucous membranes and respongans, headache, dizziness, fatigue and adverse effects to the kidneys and liver, central nervous system and, in extreme cases, loss of consciousness. **The preparations contain:** Dimethyl Ether (DME) as compressed gas, binders/resins (natural and systhetic-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. 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. BfR-numbers: 7658605 (="3 in 1") and 7658603 (="nitrofest")

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** harzardous waste.

13.1.2. Containers: Empty containers entirely, 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.

14. Transport information

- 14.1 ADR, IMDG, IATA: UN number: 1950; 14.2. ADR: compressed gas packaging; IMDG: Aerosols; IATA: Aerosols, flammable;
- 14.3. ADR: class 2 (5F gas), hazard label 2.1; IMDG + IATA: class 2.1, label 2.1
- 14.4. ADR, IMDG, IATA: not classified; 14.5. no marine pollutant
- 14.6. Caution: gas, EMS-Nr. F-D, S-U; 14.7. no transport in bulk.

Additional transport information for land transportation (ADR): limited quantity, LQ (max. 12x0,4ltr. = 4,8 ltr. per carton),

Tunnel limitation code: D/E

Additional transport information for sea transportation (IMDG): "LQ"; marine pollutant: no Additional transport information for air transportation (ICAO/IATA): dangerous goods

15. Regulatory information

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

Trade name	Brantho-Korrux in the "Komfortdose" (high-build aerosol-can)
TA-Luft (Gew. %): Kl. I / II / III	0/0/60
Water polluting danger	1 = small potential
VOC-value (g/l)	510 g/l
Product code by GISBAU accord.	

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

16. Other information

I. Indication of changes: MSDS-changes that respresent 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 agronyms 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.

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 not to be considered as a guarantee of the products properties. The appendix ist part of the MSDS.

Appendix, Substance from the Safety-Data-Sheet chapters 3., 8., 11. und 12.

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A entarom. KW; CAS 64742-48-9; aromate free hydrocarbons, Naphtha (petroleum, hydrotreated, heavy);

EINECS 265-150-3; INDEX 649-327-00-6; Reg.-No. 012119463258-33;

H226 Flam. Liq, H304 Asp. Tox. 1, H336 STOT SE3; 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; WHC 1 (water hazard classification).

B **PM; CAS 107-98-2**; 1-Methoxy-2-propanol; EINECS 203-539-1; INDEX 603-064-00-3; Reg.-No. 012119457435;

 $\textbf{H226} \; \mathsf{Flam}. \mathsf{Liq}. \; 3, \, \textbf{H336} \; \mathsf{STOT} \; \mathsf{SE3}$

 $AGW\ (TRGS\ 900)\ 370\ mg/m^3\ 100\ ppm\ sharp\ limit\ 2;\ IOELV\ (EU):\ TWA\ 375\ mg/m^3\ 100\ ppm;\ STEL\ 568\ mg/m^3\ 150\ ppm;$

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; WHC 1

C PMA; CAS 108-65-6; 2-Methoxy-1-methylethylacetate; EINECS 203-603-9, INDEX 607-195-00-7; Reg.-No. 012119475791-29;

H226 Flam-Liq 3; 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 sensitizing (guinea pig, maximization test)

Readily biodegradable: 100 % 8 d (dental wellens test EG 88/302); Fish toxicity: LC 50 Qucorhynchus mykiss 100-180 mg/l 96 h OEDC TG 203;

Daphnia toxicity: EC 50 Daphnia magna > 500 mg/l 48 h (RL 67/548/EWG appendix V. C2);

Bacterial toxicity: activated sludge > 1.000 mg/l 0,5 h, WHC 1

D n-Butylacetate; CAS 123-86-4; EINECS 204-658-1; INDEX 607-025-00-1; Reg.-No. 012119485493-29;

H226 Flam.Liq., H336 STOT SE; 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

F PGDA; CAS 623-84-7; Propyleneglycolediacetate; EINECS 210-817-6; Reg.-no. 12119892736-20-0002;

according to CLP-regulation classified as not dangerous; WHC 1

G EPA; CAS 54839-24-6; Ethoxypropylacetate, 2-Ethoxy-1-methylethylacetate, EINECS 259-370-9, INDEX 603-177-00-8,

Reg.-No. 01211947558-25, H226 Flam.Liq., H336 STOT SE; AGW (TRGS 900) 300 mg/m³ sharp limit 2 (II)

Ingestion: LD 50 rat 4.755 mg/kg; Inhalation: LC 50 rat 6,99 mg/l 4 h; Skinabsorption: Rabbit minor skin irritation (OECD 404);

Eye contact: Rabbit weak eye irritation (OECD 405); Readily biodegradable: 100 % 28 d; no bioaccumulation;

Fish toxicity: LC 50 Oncorhynchus mykiss 140 mg/l 96 h; Daphnia toxicity: EC 50 Daphnia Magna 110 mg/l 48 h;

Bacteria toxicity: EC 10 Pseudomonas putida 560 mg/l 16 h; WHC 1

H Butanone Oxim; CAS 96-29-7: Methylethylketoxim; EINECS 202-496-6; INDEX 616-014-00-0; Reg.-no. 012119539477-28;

AGW 1 mg/m³ (TRGS 900 vom 19.9.2013), Category I, Exceedance Factor 8;

H312 Acute Tox.4; H317 Skin Sens.1; H318 Eye Dam.1, H351 Carc.Cat.2 pregnancy group Y (no risk of foetal damage), skin sensitization (Sh) and skin resorption (H) experimentally proven. Ingestion: LD 50 rat 3,68 g/kg; Inhalation: LC 50 rat > 4,8 mg/l 4 h; skin absorption:LD50 rabbit 0,92 g/kg; biodegradable (diluted):88 % 28 d; fish toxicity: LC 50 Pimpephales promelas > 10.000 mg/l 24 h;WGK 1

N <u>TiO2</u>; <u>CAS 13463-67-7</u>: Pigment white Titanium dioxide; EG-no. 236-675-5; Reg.-no. 01-2119489379-17-xxxx. Carc. 2 **H351** (Inhalation); non-flammable, no hazardous to water; no dangerous goods;

LC 50 > 1000 mg/l; EC50 > 100mg/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 food (E171), cosmetics, pharmaceuticals, toys.

- X <u>Dimethyl ether (DME); CAS 115-10-6;</u> Methyloxid C_2H_6O ; EINES 204-065-8; Reg.-no. 01-219472128-37xxxx **H220** Flam. Gas1, **H280** Press. Gas; OEL(Occupational Exposure Limit) long-term value: 1.900 mg/m³, 1.000 ml/m³; WHC 1
- Y <u>Butanon, CAS 78-93-3,</u> EINECS 201-159-0, Reg. no. 01-2119457290-43

H225 Flam. Liq. 2, H319 Eye Irrit. 2, H336 STOT SE 3, EUH066, 8-h-OEL 600mg/m³, highest-OEL 600mg/m³, WHC 1

Explanation; R-, S-, H and P-phrases:

H220 Extremely flammable gas; H226 Flammable liquid and vapour. H280 Contains gas under pressure; may explode if heated;

H222 Extremely flammable aerosol; H225 Highly flammable liquid and vapour; **H229 Pressurized container, may explode if heated**; H304 May be fatal if swallowed and enters airways (i.e. in liquid form in the airways); H312 Harmful in contact with skin; H317 May cause an

allergic skin reaction; H318 Causes serious eye damage, H319 Causes serious eye irritation; H336 May cause drowsiness or dizziness; H351 suspected of causing cancer (inhalation)

P102 Keep out of reach of children; P210 Keep away from heat/sparks/open flames/hot surfaces.-No smoking;

P251 Pressurized container: Do not pierce or burn, even after use;

P271 Use only outdoors or in well-ventilated area; P410/412 Protect from sunlight and do not exceed temperatures more than 50°C;

P501.1 Dispose container properly.

EUH066 Repeated exposure may cause skin dryness or cracking.