

Safety Data Sheet

according to Regulation (EC) No. 1907/2006, annex II

HYGO CLEAN Alcoholic quick disinfectant Curacid® Aktiv Plus **Article No. 31561 / 31565 / 31564**

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

1.1. Product identifier

HYGO CLEAN Alcoholic quick disinfectant Curacid® Aktiv Plus

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

Use of the substance/mixture: Disinfectants

Uses advised against: Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Firmenname: Franz Mensch GmbH

Straße: Werner-von-Siemens-Str. 2

Ort: D-86807 Buchloe

Telefon: +49 (0)8241/9633-0

E-Mail: verkauf@franz-mensch.de

Internet: www.franz-mensch.de

1.4. Emergency telephone number

Poison Information Center Mainz, Germany, Tel: +49 (6131) 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Flammable liquid: Flam. Liq. 3

Hazard Statements: Flammable liquid and vapour

2.2 Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



Hazard statements: H226 Flammable liquid and vapour.

Precautionary statements:

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

P233 Keep container tightly closed.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378 In case of fire: Use Carbon dioxide, Dry powder, Water spray jet, alcohol resistant foam. to extinguish.

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

P501 Dispose of contents/container to local/regional/national/international regulations.

2.3 Other hazards

In use, may form flammable/explosive vapour-air mixture.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64-17-5	ethanol, ethyl alcohol			45 - < 50 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2; H225			
78-93-3	butanone; ethyl methyl ketone			< 1 %
	201-159-0	606-002-00-3		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			

Full text of H and EUH statements: see section 16.

Further Information: Product does not contain listed SVHC substances > 0.1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.
After inhalation:	Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.
After contact with skin:	Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.
After contact with eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
After ingestion:	Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Carbon dioxide (CO ₂). Dry extinguishing powder. alcohol resistant foam. In case of major fire and large quantities: Atomized water.
Unsuitable extinguishing media:	High power water jet.

5.2 Special hazards arising from the substance or mixture

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO₂).

5.3 Advice for firefighters

In case of fire:	Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.
Additional information:	Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ventilate affected area. Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes. Wear personal protection equipment. (See section 8.)

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area. Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Provide adequate ventilation as well as local exhaust at critical locations. Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion: Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

Further information on handling: General protection and hygiene measures: See section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight. Ensure adequate ventilation of the storage area. Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Advice on storage compatibility: Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable

gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions:

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Protect against: UV-radiation/sunlight. heat. moisture. frost.

storage temperature: 15-25°C

7.3 Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WE
		300	899		STEL (15 min)	L
64-17-5	Ethanol	1000	1920		TWA (8 h)	WE
					STEL (15 min)	L
						WE

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift

8.2 Exposure controls



Appropriate engineering controls: Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures: The usual precautions for handling chemicals should be considered. Keep away from food, drink and animal feedingstuffs. Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing.

Eye/face protection:	Wear safety glasses; chemical goggles (if splashing is possible). DIN EN 166
Hand protection:	In case of prolonged or frequently repeated skin contact: Wear suitable gloves. (DIN EN 374) Suitable material: Butyl rubber. Thickness of glove material: 0,5 mm Breakthrough time \geq 480 min. penetration time (maximum wearing period): ~ 120 min. (estimated) In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Skin protection:	Wear suitable protective clothing. Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.
Respiratory protection:	With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: exceeding exposure limit values Insufficient ventilation. Suitable respiratory protective equipment: gas filtering equipment (EN 141). Type: A The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).
Environmental exposure controls:	Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic
pH-Value:	not determined

Changes in the physical state

Melting point:	-114 (1 atm) °C
Initial boiling point and boiling range:	78 (1,013 hPa) °C
Flash point:	24°C

Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	2,5 vol. %
Upper explosion limits:	13,5 vol. %
Ignition temperature:	>363°C
Decomposition temperature:	not determined

Oxidizing properties

None.

Vapour pressure: (at 19.6°C)	57,26 hPa
Density:	0,9 – 0,95 g/m ³
Water solubility:	miscible.

Solubility in other solvents

not determined

Viscosity / dynamic: (at 20 °C)	not determined
Viscosity / kinematic: (at 20 °C)	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined

9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity**10.1 Reactivity**

No information available

10.2 Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Protect against: UV-radiation/sunlight. heat. moisture.

In use may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

10.5 Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong. Strong acid. strong alkalis.

10.6 Hazardous decomposition products

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicokinetics, metabolism and distribution: No data available.

Acute toxicity: Based on available data, the classification criteria are not met.
The product has not been tested.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 mg/kg >5000	Rat	ECHA Dossier	
	inhalation (4 h) vapour	LC50 mg/l 124,7	Rat	ECHA Dossier	
78-93-3	butanone; ethyl methyl ketone				
	dermal	LD50 mg/kg >2000	Rabbit	ECHA Dossier	

Irritation and corrosivity:

- Based on available data, the classification criteria are not met.

Sensitising effects:

- Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

- Based on available data, the classification criteria are not met.

STOT-single exposure

- Based on available data, the classification criteria are not met.

STOT-repeated exposure

- Based on available data, the classification criteria are not met.

Aspiration hazard

- Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

- No data available.

Further information:

Solvent:

Symptoms: Depression of the central nervous system. Liver and kidney damage. drowsiness. vomiting. Nausea. Dizziness. unconsciousness. Impaired consciousness. Intoxication. erythema (redness)

SECTION 12: Ecological information**12.1 Toxicity**

The product has not been tested.

CAS No	Chemical name						
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method	
64-17-5	ethanol, ethyl alcohol						
	Acute fish toxicity	LC50 mg/l	14200	96 h	Pimephales promelas	ECHA Dossier	
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	ECHA Dossier	
	Acute crustacea toxicity	EC50 mg/l	5012	48 h	Ceriodaphnia dubia	ECHA Dossier	
	Crustacea toxicity	NOEC mg/l	(9,6)	9 d	Daphnia magna	ECHA Dossier	
78-93-3	butanone; ethyl methyl ketone						
	Acute fish toxicity	LC50 mg/l	1656	96 h	Pimephales promelas	ECHA Dossier	
	Acute algae toxicity	ErC50 mg/l	1982	72 h	Pseudokirchnerella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50	308 mg/l	48 h	Daphnia magna	ECHA Dossier	

12.2 Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64-17-5	ethanol, ethyl alcohol			
	other guideline	84%	20	ECHA Dossier
	Biodegradable.			
78-93-3	butanone; ethyl methyl ketone			
	OECD 301D/ EEC 92/69/V, C.4-E	98%	28	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			

12.3 Bio accumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31
78-93-3	butanone; ethyl methyl ketone	0,3

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

No data available.

Further information

- Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal:

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products: 160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

Waste disposal number of used product: 160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

Waste disposal number of contaminated packaging: 150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging: Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**14.1 UN number**

UN 1170

14.2 UN proper shipping name

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Transport hazard class(es):

3

14.4 Packing group:

III

Hazard label: 3

**Land transport (ADR/RID)**

Classification code:	F1
Special Provisions:	144 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

Classification code:	F1
Special Provisions:	144 601
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

Marine pollutant:	NO
Special Provisions:	144, 223
Limited quantity:	5 L

Excepted quantity: E1
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

Special Provisions: A3 A58 A180
 Limited quantity Passenger: 10 L
 Passenger LQ: Y344
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 355
 IATA-max. quantity - Passenger: 60 L
 IATA-packing instructions - Cargo: 366
 IATA-max. quantity - Cargo: 220 L

14.5 Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6 Special precautions for user

See section 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): No information available.
 2004/42/EC (VOC): No information available.
 Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2 Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information

Changes

Rev. 1.00; Initial release 23.05.2018

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OSHA: Occupational Safety and Health Administration

PNEC: predicted no effect concentration

PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern

TRGS Technische Regeln fuerGefahrstoffe

TSCA: Toxic Substances Control Act

VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

WGK: Wassergefaehrdungsklasse

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data

Relevant H and EUH statements (number and full text)

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)