

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Rakoll® Express 25 D

Version	Revision Date:	SDS Number:	Date of last issue: 18.03.2022
2.0	24.09.2024	100000016189	Date of first issue: 18.03.2022
	Print Date:		
	22.07.2025		

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Product name** : Rakoll® Express 25 D**1.2 Relevant identified uses of the substance or mixture and uses advised against**Use of the Sub-
stance/Mixture : Water based adhesiveRecommended restrictions
on use : For industrial use only.**1.3 Details of the supplier of the safety data sheet**

Company : H.B. Fuller, Isar-Rakoll, S.A.

Address : Estrada Nacional 13
PT-4486-851 Mindelo - Vila do Conde
+351 229 288 200E-mail address of person
responsible for the SDS : EU-MSDS@hbfuller.com**1.4 Emergency telephone number**Emergency telephone number : In case of poisoning:
GBK-EMTEL International
Tel.(24h):+49(0)6132/84463 (all languages)In case of transport accidents:
Tel.(24h): (001) 352 323 3500 (Infotrac - Contract ID: 90373 /
GBK)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

2.2 Label elements**Labelling (REGULATION (EC) No 1272/2008)**

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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Additional Labelling

EUH210 Safety data sheet available on request.

EUH208 Contains 2-methyl-2H-isothiazol-3-one, 5-Chloro-2-methyl-3(2H)isothiazolone mixt. with 2-Methyl-3(2H)isothiazolone. May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients
3.2 Mixtures
Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
5-Chloro-2-methyl-3(2H)isothiazolone mixt. with 2-Methyl-3(2H)isothiazolone	55965-84-9 613-167-00-5 01-2120764691-48-0000	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100	>= 0,0002 - < 0,0015

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		specific concentration limit Skin Corr. 1C; H314 >= 0,6 % Skin Irrit. 2; H315 0,06 - < 0,6 % Eye Irrit. 2; H319 0,06 - < 0,6 % Skin Sens. 1A; H317 >= 0,0015 % Eye Dam. 1; H318 >= 0,6 %	
2-methyl-2H-isothiazol-3-one	2682-20-4 220-239-6 613-326-00-9 01-2120764690-50-0000	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1 specific concentration limit Skin Sens. 1A; H317 >= 0,0015 %	<= 0,0002

For explanation of abbreviations see section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures

General advice : Show this safety data sheet to the doctor in attendance.

If inhaled : Remove person to fresh air. If signs/symptoms continue, get

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medical attention.

- In case of skin contact : Wash off immediately with plenty of water.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
- If swallowed : Do NOT induce vomiting.
If accidentally swallowed obtain immediate medical attention.
If conscious, drink fresh water.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water mist
Foam
Dry powder
Carbon dioxide (CO₂)

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Cool closed containers exposed to fire with water spray.

5.3 Advice for firefighters

- Special protective equipment for firefighters : No special protective measures against fire required.
- Further information : This product is an aqueous mixture that will not burn. Dried product film will burn in a fire.
In the event of fire, wear self-contained breathing apparatus.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
Dilute with much water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Send for recovery or disposal in suitable containers.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8., For disposal considerations see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling : Avoid release to the environment.
Keep out of reach of children.

Advice on protection against fire and explosion : In the event of fire and/or explosion do not breathe fumes.
Have fire extinguishing equipment ready in case of nearby fire.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Do not freeze. Keep tightly closed in a dry and cool place.
Keep container closed when not in use. Protect against light.

Advice on common storage : No special restrictions on storage with other products.

Recommended storage temperature : > 5 °C

7.3 Specific end use(s)

Specific use(s) : No further relevant information available.

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SECTION 8: Exposure controls/personal protection
8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
2-(2-butoxyethoxy)ethyl acetate	Workers	Eye contact	Local effects	
	Workers	Dermal	Systemic, long-term	100 mg/kg
2-methyl-2H-isothiazol-3-one	Workers	Inhalation	Local, long-term	0,021 mg/m ³
	Workers	Inhalation	Local, short-term	0,043 mg/m ³
5-Chloro-2-methyl-3(2H)isothiazolone mixt. with 2-Methyl-3(2H)isothiazolone	Workers	Eye contact	Local effects	
	Workers	Inhalation	Local, long-term	0,02 mg/m ³
	Workers	Inhalation	Local, short-term	0,04 mg/m ³

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
2-(2-butoxyethoxy)ethyl acetate	Soil	0,29 mg/kg
	Predator	70 mg/kg
	Marine sediment	0,08 mg/kg
	Marine water	0,011 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water	0,108 mg/l
2-methyl-2H-isothiazol-3-one	Fresh water sediment	0,8 mg/kg
	Soil	0,047 mg/kg
	Fresh water	3,39 µg/l
	Marine water	3,39 µg/l
5-Chloro-2-methyl-3(2H)isothiazolone mixt. with 2-Methyl-3(2H)isothiazolone	Sewage treatment plant	0,23 mg/l
	Sewage treatment plant	0,23 mg/l
	Fresh water sediment	0,027 mg/kg
	Soil	0,01 mg/kg
	Marine sediment	0,027 mg/kg
	Fresh water	3,39 µg/l
	Marine water	3,39 µg/l

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8.2 Exposure controls**Engineering measures**

Please take care on national and local requirements.

Personal protective equipment

Eye protection	:	Safety glasses or equipment with better protection
Hand protection	:	
Material	:	Protective gloves
Remarks	:	The glove material has to be impermeable and resistant to the product/the substance/the preparation. The exact break through time can be obtained from the protective glove producer and this has to be observed.
Skin and body protection	:	Protective clothing
Respiratory protection	:	Not necessary if room is well-ventilated.
Protective measures	:	The usual precautionary measures should be adhered to in handling the chemicals.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state	:	liquid
Colour	:	yellow
Odour	:	characteristic
Odour Threshold	:	is not determined
Melting point/freezing point	:	0 °C
Boiling point/boiling range	:	100 °C
Flammability	:	Not classified as a flammability hazard
Upper explosion limit / Upper flammability limit	:	Upper flammability limit is not determined
Lower explosion limit / Lower flammability limit	:	Lower flammability limit is not determined
Flash point	:	Not applicable

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Auto-ignition temperature	:	not self-igniting
Decomposition temperature	:	Not applicable
pH	:	7
Viscosity		
Viscosity, dynamic	:	16.000 mPa.s (20 °C)
Solubility(ies)		
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	no data available
Vapour pressure	:	23 hPa (20 °C)
Density	:	1,06 g/cm ³
Relative vapour density	:	is not determined

9.2 Other information

Explosives	:	Not explosive
Evaporation rate	:	is not determined

SECTION 10: Stability and reactivity**10.1 Reactivity**

No further relevant information available.

10.2 Chemical stability

No decomposition if used according to the specifications.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoidConditions to avoid : Heat may lead to dangerous pressure build-up in sealed container.
Protect from frost.**10.5 Incompatible materials**

Materials to avoid : No further relevant information available.

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10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

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

Skin corrosion/irritation

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

Serious eye damage/eye irritation

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

Respiratory or skin sensitisation**Skin sensitisation**

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

Respiratory sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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 toxicity

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

11.2 Information on other hazards**Endocrine disrupting properties****Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

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levels of 0.1% or higher.

SECTION 12: Ecological information**12.1 Toxicity****Components:****5-Chloro-2-methyl-3(2H)isothiazolone mixt. with 2-Methyl-3(2H)isothiazolone:**

M-Factor (Acute aquatic toxicity) : 100

M-Factor (Chronic aquatic toxicity) : 100

2-methyl-2H-isothiazol-3-one:

M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 1

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil**Product:**Mobility : Medium: Soil
Remarks: Do not allow product to reach ground water, water bodies or sewage system.**12.5 Results of PBT and vPvB assessment****Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties**Product:**

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Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product : Do not dispose of with domestic refuse.
Do not dispose of waste into sewer.
The generation of waste should be avoided or minimized wherever possible.
Incinerate under controlled conditions in accordance with all local and national laws and regulations.
Disposal must be made according to official regulations.

Contaminated packaging : Recommended cleaning agent: Water, if necessary with cleaning agent.
Disposal must be made according to official regulations.

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

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Compliant
REACH - Candidate List of Substances of Very High Concern for Authorisation (SVHC, Article 59)	: Compliant
Regulation (EC) 2024/590 on substances that deplete the ozone layer	: Compliant
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Compliant
RoHS: 2011/65/EU, Restriction of Hazardous Substances	: Compliant
Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors	: Neither banned nor restricted
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	: Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	: Compliant
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	Not applicable
Volatile organic compounds	: Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 0,68 %

The components of this product are reported in the following inventories:

REACH : On the inventory, or in compliance with the inventory

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15.2 Chemical safety assessment

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

SECTION 16: Other information**Full text of H-Statements**

H301	: Toxic if swallowed.
H310	: Fatal in contact with skin.
H311	: Toxic in contact with skin.
H314	: Causes severe skin burns and eye damage.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H330	: Fatal if inhaled.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
EUH071	: Corrosive to the respiratory tract.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Dam.	: Serious eye damage
Skin Corr.	: Skin corrosion
Skin Sens.	: Skin sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic sub-

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stance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Modified data compared to the previous version

The following sections have been updated:

- Section 1
- Section 2
- Section 3
- Section 4
- Section 5
- Section 6
- Section 7
- Section 8
- Section 10
- Section 11
- Section 12
- Section 15
- Section 16

Contact Point : Prepared by: Global Regulatory Department
EU-MSDS@hbfuller.com

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 other materials or in any process, unless specified in the text.

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