

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0



Ralmont GmbH
92361 Berggau
Page 1 of 11

RALMO-FLOTT 2K – Component A

Section 1: Name of the substance or mixture and the company

- 1.1 Product identifier:**
RALMO-FLOTT 2K (Comp. A)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Product use: polyurethane foam
- 1.3 Details of the supplier who provides the safety data sheet:**
Manufacturer / Supplier:
Ralmont GmbH
Pavelsbacher Straße 17
D-92361 Berggau
Contact person for information: info@ralmont.de
- 1.4 Emergency number:**
Poison center Bonn, 24 hours daily, Tel. +49(0)228-19240

Section 2: Hazard Identification

- 2.1 Classification of the substance or mixture:**
Classification (REGULATION (EG) No. 1272/2008)
- | | |
|--|---|
| Acute toxicity, Category 4 | H332: Harmful if inhaled. |
| Skin irritation, Category 2 | H315: Causes skin irritation. |
| Eye irritation, Category 2 | H319: Causes serious eye irritation. |
| Inhalation Sensitization, Category 1 | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitization, Category 1 | H317: May cause an allergic skin reaction. |
| Carcinogenicity, Category 2 | H351: Suspected of causing cancer. |
| Specific target organ toxicity - one-time Exposure, Category 3, Respiratory System | H335: May cause respiratory irritation. |
| Specific target organ toxicity - repeated Exposure, Category 2 | H373: May cause damage to organs through prolonged or repeated exposure if inhaled. |
- 2.2 Label elements:**
Labelling (REGULATION (EG) No. 1272/2008)
Hazard pictograms:
-  
- Signal word:** Danger
- Hazard statements:** H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H351: Suspected of causing cancer.
H373: May cause damage to organs through prolonged or repeated exposure if inhaled.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Bergau
Page 2 of 11

Precautionary Statements: P101 If medical advice is needed, have container or label at hand.
P102 Keep out of the reach of children.

Prevention:

P202 Read and understand all safety precautions before use.
P260 Do not breathe dust / smoke / gas / mist / vapor / aerosol.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

Reaction:

P304 + P340 + P312 IF INHALED: Remove the person to fresh air and ensure that they can breathe freely. Call a POISON CENTER / doctor if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice / attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents / container to in accordance with local regulations

Additional labeling:

The handling of this product can cause allergic reactions in people who are already sensitized to diisocyanates. Avoid contact, including skin contact, with the product in the event of asthma, eczematous skin diseases or skin problems. Do not use the product if there is insufficient ventilation or wear a protective mask with an appropriate gas filter (type A1 according to EN 14387).

2.3 Other dangers:

This substance / mixture does not contain any components in concentrations of 0.1% or higher that are either classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

Section 3: Composition/ information on ingredients

3.2 Mixtures:
Ingredients

Chemical name	CAS No. EC No. Registration number	Concentration (% w/w)
Diphenylmethane diisocyanate, isomers and homologues	9016-87-9 Unallocated	100

Section 4: First aid measures

4.1 Description of first aid measures:

General information:	Take affected persons out of the danger area. Consult a doctor. Show this safety data sheet to the doctor in attendance.
After inhalation:	Move to fresh air. Consult a doctor after severe exposure.
After skin contact:	Take off contaminated clothing and shoes immediately. Wash with soap and lots of water. If the problems are persistent, consult a doctor.
After eye contact:	In the event of contact with the eyes, rinse immediately and thoroughly with plenty of water. Remove contact lenses. Keep your eyes wide open when rinsing. If eye irritation persists, consult a specialist.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Bergau
Page 3 of 11

After swallowing: Do not induce vomiting without medical advice.
Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything orally to an unconscious person.

4.2 Important acute symptoms and delayed symptoms:

Symptoms: Asthmatic complaints
Coughing
Breathing disorder
Allergic reaction
Excessive lacrimation
Reddening of the skin
Headache
Dermatitis
See section 11 for more detailed health information effects and symptoms.

Risks: Irritating effects
Sensitizing effects
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure if inhaled.

4.3 Indication of any immediate medical attention and special treatment needed:

Treatment: Symptomatic treatment.

Section 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: In the event of fire, to extinguish water / water spray / water jet / carbon dioxide / use sand / foam / alcohol-resistant foam / dry powder.

5.2 Special hazards arising from the substance or mixture:

Hazardous combustion products: Carbon dioxide (CO₂)
Carbon monoxide
Nitrogen oxides (NO_x)
Hydrogen cyanide (hydrocyanic acid)

5.3 Advice for firefighting:

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus.
Further information: Usual measures for chemical fires.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions: Use personal protective equipment.
Deny access to unprotected persons.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Bergau
Page 4 of 11

6.2 Environmental protection measures:

Environmental protection measures: Do not allow to enter surface water or sewage system.
In the event of contamination of waterways or sewers, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up:

Methods for cleaning up: Absorb with a liquid-binding material (e.g. sand, silica gel, acid binding agent, universal binding agent, sawdust).
Place into suitable closed containers for disposal.

6.4 Reference to other sections:

Personal protective equipment, see section. 8.

Section 7: Handling and storage

7.1 Precautions for safe handling:

Advice on safe handling: Avoid aerosol formation.
Avoid exceeding the specified occupational exposure limit values (OEL)(see section 8).
Do not get in eyes, on skin, or on clothing.
Personal protective equipment, see section. 8.
People suffering from skin sensitization problems, asthma, allergies, chronic or recurrent respiratory diseases should not be used in any processing in which this mixture is used.
Do not eat, drink or smoke in the area of application.
Ensure adequate air exchange and / or extraction in the work rooms.
The general hygiene measures when handling chemicals are to be observed.

Advice on protection against fire and explosion: Usual measures for preventive fire protection.

Hygiene measures: The usual precautionary measures when handling chemicals are to be observed. do not eat and drink during work. Do not smoke while working. Wash hands before breaks and at the end of work.

7.2 Conditions for safe storage taking into account incompatibilities:

Requirements for storage rooms and containers: Store in the original container. Keep container tightly closed in a dry, well-ventilated place.
Close opened containers carefully and store upright to prevent any leakage.
Notes on the label. Store in accordance with local regulations.

Storage class (TRGS 510): 10, Flammable liquids

More information about the storage stability: No decomposition if stored and used as directed.

7.3 Specific end uses:

Specific use(s): Read current product data sheet before use.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
 Print date: 05.11.2020
 Version: 1.0

Ralmont GmbH
 92361 Bergangau
Page 5 of 11

Section 8: Exposure controls / personal protection

8.1 Parameters to be monitored

Limits for occupational exposure:

Ingredients	CAS-No.	Value type (type of Exposure)	To be monitored Parameter *	Basis*
	Further information: The AGW of the individual isomers (4,4'-MDI, 2,4'-MDI, 2,2'-MDI) apply to the two-core component; The EBW (manufacturer's information) is to be used for the homologous portion.			
Diphenylmethane diisocyanate, isomers and homologues	9016-87-9	AGW (Inhalable fraction)	0,05 mg/m ³ (MDI)	DE TRGS 900
	Peak limitation: excursion factor (category): 1; = 2 = (I)			
	Further information: Senate commission for testing hazardous substances of the DFG (MAK commission). The occupational exposure limit value usually only applies to monomers. For the assessment of oligomers or polymers see TRGS 430 'Isocyanate', skin resorptive, a risk of fruit damage need not be feared if the occupational exposure limit and the biological limit value (BGW) are observed. Skin and respiratory sensitizing substance			

*The above values correspond to the current legislation on the release date of the data sheet.

8.2 Exposure limit and monitoring exposure:

Personal protection equipment:

- Eye protection: Safety glasses with side protection according to EN 166
 Eye wash bottle with pure water

- Hand protection: When handling chemical products must be chemical-resistant
 Gloves (EN 374) must be worn.
 Manufacturer's instructions are to be observed.
 Suitable for short-term work or as a splash guard: Gloves off
 Butyl rubber / nitrile rubber (> 0.1 mm)
 Change and dispose of contaminated gloves immediately.
 With permanent product contact:
 Viton gloves (0.4 mm)
 Penetration time > 30 min.

- Skin and body protection: Protective work clothing (e.g. safety shoes according to EN ISO 20345, long-sleeved work clothing, long trousers). A rubber apron and protective boots (EN 14605) are also recommended for mixing and stirring work.

- Respiratory protection: Wear respiratory protection in case of insufficient ventilation.
 The selection of respiratory masks (EN 14387) must be based on the known or expected concentrations, the dangers of the product and the workplace limit values (section 8.1) of the respective respiratory protection mask.
 Use a properly fitted, air-purifying or air-fed respirator in accordance with an approved standard if a risk assessment indicates this is necessary.
 Filter against organic vapors (type A)
 A1: <1000 ppm; A2: <5000 ppm; A3: <10,000 ppm
 Provide adequate ventilation. This can be achieved through local extraction or general exhaust air.
 (EN 689 - Methods for determining inhalation exposure)
 This is especially true at the mixing or stirring station.
 If this is not sufficient to keep the concentration below the occupational exposure limit, use respiratory protection.
 Ensure sufficient ventilation, especially in closed rooms.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Berggau
Page 6 of 11

Limitation and monitoring of the environmental exposition

General information: Do not allow to enter surface water or sewage system.
In the event of contamination of waterways or sewers, inform the responsible authorities.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	liquid
Color:	brown
Odor:	No data available
Odor threshold:	No data available
pH value:	Not applicable
Melting point / melting point range / freezing point:	No data available
Boiling point / boiling range:	No data available
Flash point:	> 200 ° C
Evaporation rate ability:	No data available
Flammability (solid, gaseous):	No data available
Upper explosion limit / Upper flammability limit:	No data available
Lower explosion limit / Lower flammability limit:	No data available
Vapor pressure:	0.01 hPa
Relative vapor density:	No data available
Density:	1.24 g / cm ³ (25 ° C)
Solubility(ies)	
Water solubility:	No data available
Solubility in others	
Solvents:	No data available
Partition coefficient:	n-
Octanol / water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity	
Viscosity, dynamic:	200 mPa.s (25 ° C)
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available

9.2 Additional information:

No data available

Section 10: Stability and reactivity

10.1 Reactivity:

No dangerous reactions known under normal conditions.

10.2 Chemical stability:

The product is chemically stable.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Bergau
Page 7 of 11

10.3 Possibility of hazardous reactions:

Hazardous reactions: No hazards to be particularly mentioned.

10.4 Conditions to avoid:

Conditions to avoid: No data available

10.5 Incompatible materials:

Materials to avoid: No data available

10.6 Hazardous decomposition products:

No decomposition if stored and applied as directed.

Section 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

Harmful if inhaled.

Ingredients:

Diphenylmethane diisocyanate, isomers and homologues:

Acute oral toxicity: LD50 Oral (rat):> 10,000 mg / kg

Acute inhalation toxicity: Acute toxicity estimate: 1.5 mg / l

Exposure time: 4 h

Test atmosphere: dust / mist

Method: professional judgment

Assessment: The component / mixture is slightly toxic even after brief inhalation.

Acute dermal toxicity: LD50 dermal (rabbit):> 9,400 mg / kg

Irritation and etch effects on the skin

Causes skin irritation.

Heavy eye irritation

Causes serious eye irritation.

Sensitization of the respiratory system and skin

Sensitization through skin contact

May cause an allergic skin reaction.

Sensitization through respiration

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Not classified based on the information available.

Carcinogenicity

Suspected of causing cancer.

Reproduction toxicity:

Not classified based on the information available.

Specific target organ toxicity at single exposure

May cause respiratory irritation.

Specific target organ toxicity at multiple exposures

May cause damage to organs through prolonged or repeated exposure if inhaled.

Aspiration toxicity

Not classified based on the information available.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Bergau
Page 8 of 11

Section 12: Ecological information

12.1 Toxicity:

Inhaltsstoffe:

Diphenylmethane diisocyanate, isomers and homologues:

Toxicity to fish: LC50 (Brachydanio rerio (zebrafish))> 1,000 mg / l
Exposure time: 96 h

Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae))> 1,640 mg / l
Exposure time: 72 h

12.2 Persistence and degradability:

No data available

12.3 Bio accumulative potential

No data available

12.4 Mobility in soil:

No data available

12.5 Results of PBT- and vPvB-assessment:

Product:

Assessment: This substance / mixture does not contain any components in concentrations of 0.1% or higher that are either classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.6 Other harmful effects:

Product:

Additional ecological
information:

No data is available for this product.

Section 13: Disposal considerations

13.1 Waste treatment methods:

Product:

The generation of waste should be avoided or minimized wherever possible.

Empty containers and liners may contain product residue.

Waste and containers must be disposed of in a safe manner.

Dispose of surpluses and products not suitable for recycling via a recognized waste disposal company.

This product and its solutions and by-products must be disposed of at all times in compliance with environmental protection requirements and waste disposal laws, as well as the requirements of local authorities.

Avoid dispersal of spilled material, runoff, and contact with soil, waterways, drains and sewers.

Section 14: Transport information

14.1 UN number:

Not classified as dangerous goods

14.2 UN proper shipping name:

Not classified as dangerous goods

14.3 Transport hazard classes:

Not classified as dangerous goods

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Berggau
Page 9 of 11

14.4 Packing group:

Not classified as dangerous goods

14.5 Environmental hazards:

Not classified as dangerous goods

14.6 Special precautions for users:

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL73 / 78 and the IBC Code

Does not apply to product as shipped.

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, preparations and articles (Annex XVII):

The restriction conditions for the following entries should be taken into account:
Number in the list 3
Diphenylmethane diisocyanate, isomers and homologues (number in list 56)

International Chemical Weapons Convention (CWC)

Lists of toxic chemicals and raw materials:

Not applicable

REACH - List of for a Authorization of substances of very high concern in question (Article 59):

None of the components are listed (=> 0.1%)

REACH - List of substances subject to authorization (Annex XIV):

Not applicable

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer:

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (new version):

Not applicable

Regulation (EC) No. 649/2012 of the European Parliament and of the Council on the export and import of dangerous chemicals:

Not applicable

REACH information:

The substances contained in our products are
- registered and / or by our suppliers
- registered by us and / or
- exempt from the REACH regulation and / or
- are subject to the REACH regulation, but are exempt from the obligation to register.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Berggau
Page 10 of 11

Seveso III: Directive 2012 /
18/EU des Europäischen
Parliament and Council

on the Mastery of Major Accident
Hazards with Hazardous Substances:

Not applicable

Water hazard class:

WGK 1 slightly hazardous to water
Classification according to AwSV, Annex 1 (4)

Water hazard class:

WGK 1 slightly hazardous to water
Identification number: 9.393
Classification according to AwSV, Annex 1 (4)

Volatile organic compounds:

Ordinance on the incentive tax on volatile organic compounds (VOCV)
without VOC tax

Directive 2010/75 / EU of the
European Parliament and of the
Council of November 24, 2010 on
industrial emissions (integrated
pollution prevention and control):

Not applicable

Other regulations:

Observe employment restrictions according to the law on the protection of mothers at work,
in training and in studies (Mutterschutzgesetz - MuSchG).
The product is not subject to the Chemicals Prohibition Ordinance.

Contains a substance that is subject
to the TRGS 905 directory of carcinogenic,
germ cell mutagenic or toxic to reproduction
substances:

Diphenylmethane diisocyanate, isomeres and homologues

15.2 Chemical safety assessment:

The supplier has not carried out a chemical safety assessment for this substance.

Section 16: Other information

Wording of other abbreviations:

DE TRGS 900:	TRGS 900 - Occupational exposure limits
DE TRGS 900 / AGW:	Occupational exposure limits
ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	Chemical Abstracts Service
DNEL:	Derived no-effect level
EC50:	Half maximal effective concentration
GHS:	Globally Harmonized System
IATA:	International Air Transport Association
IMDG:	International Maritime Code for Dangerous Goods
LD50:	Median lethal dose (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50:	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL:	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL:	Occupational Exposure Limit
PBT:	Persistent, bioaccumulative and toxic
PNEC:	Predicted no effect concentration

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Revised on: 09.07.2020
Print date: 05.11.2020
Version: 1.0

Ralmont GmbH
92361 Bergau
Page 11 of 11

REACH: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Re-gistration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency

SVHC: Substances of Very High Concern

vPvB: Very persistent and very bioaccumulative

Additional information

The information contained in this safety data sheet corresponds to our level of knowledge at the time of publication. They do not represent guaranteed properties. With regard to warranty, only the corresponding product data sheets and the general conditions of sale apply. Observe product data sheets before use and processing.

Changes compared to the last edition!