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

1.1 Product identifier

Mirapont B
Article number: 203009, 203010, 203011

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

1.2.1 Relevant uses

Special plastic for stumps and models

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Hager & Werken GmbH & Co. KG
Ackerstr. 1
47269 Duisburg / GERMANY
Phone +49(0)203-99269-0
Fax +49 (0)203 29 92 83
Homepage www.hagerwerken.de
E-mail info@hagerwerken.de

Address enquiries to

Technical information info@hagerwerken.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0) 551-19240 Giftinformationszentrum-Nord

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Skin Irrit. 2: H315 Causes skin irritation.
Skin Sens. 1: H317 May cause an allergic skin reaction.
Eye Irrit. 2: H319 Causes serious eye irritation.
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT SE 3: H335 May cause respiratory irritation.
Carc. 2: H351 Suspected of causing cancer.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms

Signal word DANGER

Contains: Diphenylmethanediisocyanate, isomeres and homologues

Hazard statements

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
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 through inhalation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe vapours.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P284 In case of inadequate ventilation wear respiratory protection.
P302+P352 IF ON SKIN: Wash with plenty of water / soap.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 IF exposed or concerned: Call a POISON CENTER / doctor.
P501 Dispose of contents/container in accordance with local/national regulation.

Special labelling EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.
Contains no ingredients with endocrine-disrupting properties.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
20 - <25	Diphenylmethanediisocyanate, isomeres and homologues
	CAS: 9016-87-9
	GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373
	SCL [%]: >= 0,1: Resp. Sens. 1: H334, >= 5: Skin Irrit. 2: H315, >= 5: Eye Irrit. 2: H319, >= 5: STOT SE 3: H335
10 - <20	Bis(isopropyl)naphthalene
	CAS: 38640-62-9
	GHS/CLP: Asp. Tox. 1: H304 - Aquatic Chronic 1: H410

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated soaked clothing immediately and dispose of safely.

Inhalation
Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact
In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact
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.

Ingestion
Seek medical advice immediately.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions
Irritant effects
Nausea, vomiting.
Drowsiness
Vertigo
Headache

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol-resistant foam.
Dry powder.
Carbon dioxide.
Water spray jet.

Extinguishing media that must not be used
Full water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NOx).
Hydrogen cyanide (HCN).
Isocyanate

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Do not inhale explosion and/or combustion gases.
Wear full protective suit.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).
High risk of slipping due to leakage/spillage of product.
Use breathing apparatus if exposed to vapours/aerosol.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide suitable vacuuming at the processing machines.

Do not eat, drink, smoke or take drugs at work.
Remove contaminated soaked clothing immediately and dispose of safely.
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep container tightly closed.
Keep container in a well-ventilated place.
Store in a dry place.
Protect from heat/overheating.
Do not keep at temperatures above 50 °C.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Diphenylmethanediisocyanate, isomeres and homologues
CAS: 9016-87-9
Long-term exposure: 0,02 mg/m³, as NCO, Sen
Short-term exposure (15-minute): 0,07 mg/m³

DNEL

Substance
Bis(isopropyl)naphthalene, CAS: 38640-62-9
Industrial, dermal, Long-term - systemic effects, 2,38 mg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 8,4 mg/m³
general population, oral, Long-term - systemic effects, 850 µg/kg bw/day
general population, dermal, Long-term - systemic effects, 850 µg/kg bw/day
general population, inhalative, Long-term - systemic effects, 1,48 mg/m³

PNEC

Substance
Bis(isopropyl)naphthalene, CAS: 38640-62-9
soil, 171 µg/kg soil dw
sediment (seawater), 85.3 µg/kg sediment dw
sediment (freshwater), 853 µg/kg sediment dw
sewage treatment plants (STP), 150 µg/L
seawater, 23,6 ng/L
freshwater, 236 ng/L

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.
Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.

Eye protection
safety glasses (EN 166:2001)

Hand protection
The details concerned are recommendations. Please contact the glove supplier for further information.
0,7 mm Butyl rubber, >480 min (EN 374-1/-2/-3).

Skin protection
Protective clothing (EN 340)

Other
Avoid contact with eyes and skin.
Do not inhale gases/vapours/aerosols.
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.

Respiratory protection
In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.
Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)

Thermal hazards
not determined

Delimitation and monitoring of the environmental exposition
Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	pasty
Color	beige
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	190
Flash point [°C]	>200
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	0,001
Density [g/cm³]	1,68
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	reacts with water
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	>20,5 mm²/s
Relative vapour density	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Auto-ignition temperature	not applicable
Decomposition temperature [°C]	not determined
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with alkalies (lyes).
Reactions with amines.
Reactions with alcohols.
Reactions with acids.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Water

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Substance
Bis(isopropyl)naphthalene, CAS: 38640-62-9
LD50, oral, Rat, 4130 - 4320 mg/kg bw
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LD50, oral, Rat, > 10000 mg/kg (OECD 401)

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

Substance
Bis(isopropyl)naphthalene, CAS: 38640-62-9
LD50, dermal, Rat, 4500 mg/kg bw
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LD50, dermal, Rabbit, > 9400 mg/kg (OECD 402)

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

Substance
Bis(isopropyl)naphthalene, CAS: 38640-62-9
LC50, oral, Rat, 5,64 mg/L, 4h
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LC50, inhalativ (mist), Rat, 0,31 mg/l/4h (OECD 403)
NOAEL, inhalative, Rat, 0,2 mg/m³ (OECD 453)
LOAEL, inhalative, Rat, 1 mg/m³ (OECD 453)
ATE, inhalativ (mist), 1,5 mg/l

Serious eye damage/irritation Based on the available information, the classification criteria are fulfilled.
Irritant

Skin corrosion/irritation Irritant

Respiratory or skin sensitisation May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Specific target organ toxicity — single exposure May cause respiratory irritation.

Specific target organ toxicity — repeated exposure May cause damage to organs through prolonged or repeated exposure through inhalation.

Mutagenicity Does not contain a relevant substance that meets the classification criteria.

Reproduction toxicity Does not contain a relevant substance that meets the classification criteria.

Carcinogenicity This product contains one or more substances of categorie Carc. 2 (CLP).
Suspected of causing cancer.

Aspiration hazard Does not contain a relevant substance that meets the classification criteria.

General remarks

Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Bis(isopropyl)naphthalene, CAS: 38640-62-9
LC50, (96h), fish, 500 µg/L
EC50, (48h), Invertebrates, 160 µg/L
LC0, (96h), fish, 240 µg/L
NOEC, (72h), Algae, 150 µg/L
NOELR, (48h), Invertebrates, 1 mg/L
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LC50, (96h), Danio rerio, > 1000 mg/l (OECD 203)
EC50, (3h), Bacteria, > 100 mg/l (OECD 209)
EC50, (24h), Daphnia magna, > 1000 mg/l (OECD 202)
NOEC, (21d), Daphnia magna, > 10 mg/l (OECD 202)
ErC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201)

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not determined

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with national regulations.

Product

Dispose of as hazardous waste.

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Dispose full / partially emptied cartridges as hazardous waste in accordance with official regulations.

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	3082
Inland navigation (ADN)	3082
Marine transport in accordance with IMDG	3082
Air transport in accordance with IATA	3082

14.2 UN proper shipping name

Transport by land according to ADR/RID	Environmentally hazardous substance, liquid, n.o.s. (Bis(isopropyl)naphthalene)
- Classification Code	M6
- Label	
- ADR LQ	5 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 3 (-)
Inland navigation (ADN)	Environmentally hazardous substance, liquid, n.o.s. (Bis(isopropyl)naphthalene)
- Classification Code	M6
- Label	
Marine transport in accordance with IMDG	Environmentally hazardous substance, liquid, n.o.s. (Bis(isopropyl)naphthalene)
- EMS	F-A, S-F
- Label	
- IMDG LQ	5 l
Air transport in accordance with IATA	Environmentally hazardous substance, liquid, n.o.s. (Bis(isopropyl)naphthalene)
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	9 (N)
Inland navigation (ADN)	9 (N)
Marine transport in accordance with IMDG	9
Air transport in accordance with IATA	9

14.4 Packing group

Transport by land according to ADR/RID	III
Inland navigation (ADN)	III
Marine transport in accordance with IMDG	III
Air transport in accordance with IATA	III

14.5 Environmental hazards

Transport by land according to ADR/RID	yes
Inland navigation (ADN)	yes
Marine transport in accordance with IMDG	MARINE POLLUTANT
Air transport in accordance with IATA	yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

not determined

SECTION 15: Regulatory information

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

TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for young people. Observe employment restrictions for mothers-to-be and nursing mothers.
- VOC (2010/75/CE)	0 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.2 Other information

Classification procedure

Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
Carc. 2: H351 Suspected of causing cancer. (Calculation method)
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation. (Calculation method)
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)

Modified position

none