

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-0AF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

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

1.1 Product identifier

Trade name/designation

PW08-0000-0AF AC ExoBloc Turbo
UFI: E1HM-W0SW-A00A-ADPM

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

paint and/or paint-related material

Relevant identified uses

Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Supplier

Berger-Seidle GmbH
Maybachstr. 2 Telephone: +49 6359 8005-0
67269 Grünstadt E-mail: info@berger-seidle.de
Germany Website: www.berger-seidle.de

Department responsible for information

E-mail (competent person) Sicherheitsdaten@berger-seidle.de

1.4 Emergency telephone number

Emergency telephone number: +1 872 5888271 or +11 49 700 24112112
24 hr. emergency phone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flam. Liq. 4	H227 Combustible liquid.
Eye Irrit. 2A	H319 Causes serious eye irritation.
STOT SE 3 Irritation to respiratory tract	H335 May cause respiratory irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.

2.2 Label elements

Labeling according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazard pictograms



GHS07

Signal word

Warning

Hazard statements

H227	Combustible liquid.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves and eye protection/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-OAF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

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.
P312	Call a POISON CENTER if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

Hexamethylene diisocyanate, oligomers

2.3 Hazards not otherwise classified (HNOC)

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

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 3: Composition/information on ingredients.

3.2 Mixtures

Description

Isocyanathaltige Zubereitungen

Hazardous ingredients

CAS No. EC No. Index No.	Substance name REACH No.	weight-%
28182-81-2 500-060-2 -	Hexamethylene diisocyanate, oligomers Skin Sens. 1 H317 / Acute Tox. 4 H332 / STOT SE 3 H335	50,0 < 70,0
9046-01-9 618-558-4 -	2-(tricycloxy) ethyl dihydrogen phosphate Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Aquatic Chronic 3 H412	1,00 < 2,00

Remark

Full text of H-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

Following inhalation

In case of irregular breathing or respiratory arrest provide artificial respiration. Remove casualty to fresh air and keep warm and at rest.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-OAF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

In all cases of doubt, or when symptoms persist, seek medical advice.

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO₂), Powder, spray mist, (water)

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3 Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

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 vapours.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

For containment

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

For cleaning up

Clean using cleansing agents. Do not use solvents.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: refer to section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Personal protection equipment: see section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Advices on general occupational hygiene

When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Storage class LGK10 - Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions

Keep container tightly closed. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Store in a well-ventilated and dry room at temperatures between 5 °C and 25 °C.

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-OAF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

7.3 Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	Substance name	Source	Long-term /short-term (Spitzenbegrenzung)
822-06-0	1,6-Hexamethylene diisocyanate	ACGIH	0.034 / - (-) mg/m ³
822-06-0	1,6-Hexamethylene diisocyanate	NIOSH	0.035 / -(0.14) mg/m ³

Additional information

Long-term: Long-term occupational exposure limit value

short-term: short-term occupational exposure limit value

Biological limit values

CAS No.	Substance name	Source	Value/ Test material
822-06-0	1,6-Hexamethylene diisocyanate	ACGIH-BEI	15 µg/g creatinine / urine end of exposure or end of shift

DNEL worker

CAS No.	Substance name	DNEL type	DNEL value
28182-81-2	Hexamethylene diisocyanate, oligomers	Acute - inhalation, local effects	1 mg/m ³
28182-81-2	Hexamethylene diisocyanate, oligomers	Long-term – inhalation, local effects	0.5 mg/m ³

PNEC

CAS No.	Substance name	PNEC type	PNEC Value
28182-81-2	Hexamethylene diisocyanate, oligomers	aquatic, intermittent release	1.27 mg/L
28182-81-2	Hexamethylene diisocyanate, oligomers	aquatic, marine water	0.013 mg/L
28182-81-2	Hexamethylene diisocyanate, oligomers	sewage treatment plant	88 mg/L
28182-81-2	Hexamethylene diisocyanate, oligomers	sediment, freshwater	266,701 mg/kg sediment dw
28182-81-2	Hexamethylene diisocyanate, oligomers	sediment, marine water	26,670 mg/kg sediment dw

8.2 Exposure controls

Provide good ventilation. This can be achieved with local or room suction.

Personal protection equipment

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material >= 0.4 mm

Breakthrough time >= 480 min

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. Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin.

Recommended glove articles: EN ISO 374

Skin protection

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Eye glasses with side protection: EN 166

Body protection

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. Anti-static clothing including shoes are recommended.

Environmental exposure controls

Do not allow to enter into surface water or drains.

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-0AF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	colourless
Odour	characteristic
pH at 20 °C	not applicable
Melting point/freezing point	not determined
Initial boiling point and boiling range	175 °C Source: Dipropylene glycol dimethyl ether
Flash point	65 °C
flammability	Combustible liquid.
Lower explosion limit at 20°C	0.7 Vol-% Source: Dipropylene glycol dimethyl ether
Upper explosion limit at 20°C	5.5 Vol-% Source: Dipropylene glycol dimethyl ether
Vapour pressure at 20°C	0.321 mbar
Relative vapour density	not applicable
Density at 20 °C	1.02 kg/l
Water solubility at 20°C	partially soluble
Partition coefficient: n-octanol/water	see section 12
Ignition temperature in °C	165 °C Source: Dipropylene glycol dimethyl ether
Decomposition temperature	not determined
Viscosity at 20 °C	80 mm ² /s
particle characteristics	not applicable

9.2 Other information

Solid content	56.4 %
solvent content	43.5 %

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3 Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4 Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-OAF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

11.1 Information on toxicological effects

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

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Overall assessment on CMR properties

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

STOT-single exposure

May cause respiratory irritation.

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.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: Headache, Dizziness, fatigue, amyosthenia, Dizziness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 Toxicity

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

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information 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 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not empty into drains; dispose of this material and its container in a safe way.

Waste codes/waste designations according to EWC/AVV

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-0AF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

080501* - Waste isocyanates

* Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Other disposal recommendations

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1 UN number or ID number

not applicable

14.2 UN proper shipping name

Land transport (US DoT 49 CFR)

No dangerous good in sense of these transport regulations.

Sea transport (IMDG)

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

not applicable

14.4 Packing group

not applicable

14.5 Environmental hazards

Land transport (US DoT 49 CFR)

not applicable

Sea transport (IMDG)

not applicable

14.6 Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

14.8 Additional information

Land transport (US DoT 49 CFR)

not applicable

Sea transport (IMDG)

not applicable

Air transport (ICAO-TI / IATA-DGR)

not applicable

SECTION 15: Regulatory information

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

National regulations

Observe in addition any national regulations!

SARA Title III Section 311/312 Hazard Categories:

Refer to section 2 of the safety data sheet.

This product contains max. 444 g/l g/l VOC (according to ASTM D2369).

Substance/product listed in the following inventories

Australian Inventory of Chemical Substances (AICS) - AU

Domestic Substances List (DSL) - CA

U.S. Toxic Substances Control Act (TSCA) - US

SECTION 16: Other information

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

Safety Data Sheet

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

PW08-0000-0AF
Version 20.0

AC ExoBloc Turbo
Revision date Jun 26, 2025

Print date Jun 26, 2025

H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Key literature references and sources for data

Data arise from reference works and literature.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL: Occupational Exposure Limit Value

BLV: Biological limit values

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging

CMR: Carcinogenic, Mutagenic and Reprotoxic

DIN: German Institute for Standardization / German industrial standard

DNEL: Derived No-Effect Level

EAKV: European Waste Catalogue Directive

EC: Effective Concentration

EC: European Community

EN: European Standard

EU/EEA: European Economic Area

IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

ICAO-TI: International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG Code: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

LC: Lethal Concentration

LD: Lethal Dose

:

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD: Organisation for Economic Cooperation and Development

PBT: persistent, bioaccumulative, toxic

PNEC: Predicted No Effect Concentration

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

UN: United Nations

VOC: Volatile Organic Compounds

vPvB: very persistent and very bioaccumulative

Indication of changes

* Data changed compared with the previous version.