SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
GB/T 16483-2008, GB/T 17519-2013

Product Name Bergamid™ BG6600-8176 RS NHFR BK001
Revision date 10-11-2026 **(M)SDS Number** PRD_EM10054559
Version 1

1. Identification

Product identifier

Product Name Bergamid™ BG6600-8176 RS NHFR BK001

Product Code EM10054559

Material number(s) EM10054559BG

Other means of identification

(M)SDS Number PRD_EM10054559

Substance/mixture Mixture

Details of the supplier of the safety data sheet

Supplier
Avient Corporation
2F, Block C, 200 Jinsu Road
Pudong Shanghai, China 201206

E-mail address RegulatoryServicesAsia@Avient.com

Company Phone Number +86 60284888

Emergency telephone number

Emergency telephone number (Chemtrec 24h) +65 3163 8374

Recommended use of the chemical and restrictions on use

Recommended use For industrial use only

Restrictions on use None

2. Hazard(s) identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.After handling, always wash hands thoroughly with soap and water.

Emergency Overview

Suspected of causing genetic defects
Suspected of damaging fertility or the unborn child
Harmful to aquatic life with long lasting effects

Appearance Pellet
Physical state Solid

Odor No information available

Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

Label elements

No label elements required.

Hazard statements
No hazard statements required.

Precautionary statements

Physical and chemical hazards
Not applicable.

Health hazards
Immediate Health Effects: Not applicable.
Chronic effects: Contains a known or suspected mutagen. Contains a known or suspected reproductive toxin.

Environmental hazards
Dangerous for the environment. This material is a water pollutant. Keep out of drains, sewers, ditches and waterways. Minimize use of water to prevent environmental contamination.

Other hazards which do not result in classification
No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	Weight-%	CAS No.
Phosphorus elemental	5 - 10%	7723-14-0
Boron zinc oxide (B6Zn2O11)	3 - 5%	12767-90-7

4. First-aid measures

Description of necessary first aid measures

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

Skin contact Do not try to remove solidified material from the skin. Wash skin with soap and water. Take off contaminated clothing and wash before reuse. In the case of skin irritation or allergic reactions see a physician.

Eye contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice and attention.

Inhalation Move victim to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Rinse mouth. Do NOT induce vomiting. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Symptoms No information available.

Effects of Exposure May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility. Mutagenic effects.

For emergency responders Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. First aider: Pay attention to self-protection.

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media Do not use water jetstream.

Specific hazards arising from the chemical No information available.

Hazardous combustion products Decomposition products can include and are not limited to:.
Carbon monoxide.
Carbon dioxide (CO2).
Nitrogen oxides (NOx).
Ammonia.
Fluorinated oxides.
Hydrogen fluoride.
Hydrogen sulfide.
Sulfur oxides.
Sulfur trioxide.
Oxides of sulfur.
Phosphorus oxides.
Phosphine.
Metal oxides.

Special protective actions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Evacuate personnel to safe areas. Special danger of slipping by leaking/spilling product. See section 8 for more information.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not allow to enter

into soil/subsoil. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.

Precautions to prevent secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities Store locked up.

Incompatible materials None known based on information supplied.

8. Exposure controls/personal protection

Occupational exposure limits

Chemical name	China GBZ 2.1	ACGIH TLV
Phosphorus elemental (7723-14-0)	TWA: 0.05 mg/m³; STEL: 0.1 mg/m³;	-

Note See section 16 for terms and abbreviations

Biological occupational exposure limits
This product, as supplied, contains materials that do not have reportable biological exposure limits or are not subject to the reporting requirements of the local jurisdiction.

Monitoring and observation processes
No applicable information was found.

Engineering controls Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves.

Respiratory protection Use appropriate respiratory protection. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Pellet
Physical state	Solid
Color	black
Odor	Slight
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
SADT (°C)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Additional information

10. Stability and reactivity

Stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Reactivity No information available.

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. static discharge (electrostatic discharge). Storage near to reactive materials. Dust formation. Protect from moisture.

Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products None under normal use conditions.

11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

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

Numerical measures of toxicity No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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

Germ cell mutagenicity Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects.

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

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure) Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) Based on available data, the classification criteria are not met.

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

12. Ecological information

Ecotoxicity Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Aquatic ecotoxicity

Component Information

Chemical name	Fish	Crustacea	Algae/aquatic plants	Toxicity to microorganisms

Boron zinc oxide (B6Zn2O11) (12767-90-7)	0.169 mg/L	0.413 mg/L	0.136 mg/L	-

Persistence and degradability No information available.

Bioaccumulative potential

Component Information

Chemical name	Partition coefficient	Bioconcentration factor (BCF)	Trophic magnification factor (TMF)
Phosphorus elemental (7723-14-0)	-	200	-

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste chemicals Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

JT/T 617 Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

IATA Not regulated

Special precautions for user
Please refer to the applicable dangerous goods regulations for additional information

15. Regulatory information

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

National regulations

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalog of occupational hazard factors: Listed. Chemical hazards.
Catalog of occupational diseases: Listed. Occupational poisoning.

Chemical name	Category
Phosphorus elemental	Chemical hazards

Regulations on the Control over Safety of Hazardous Chemicals

Catalog of Hazardous Chemicals
The table below indicates ingredients above the cut-off threshold considered as relevant which are listed.

Weight-% 6.5

Chemical name	Serial number	Hazardous chemicals
Phosphorus elemental	0932	Listed

GB 18218-2018 Identification of major hazard installations for dangerous chemicals Not applicable

List of hazardous chemicals under priority management Not applicable

Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used
Inventory of highly toxic goods

Chemical name	TWA (time-weighted average)	STEL (Short Term Exposure Limit)	Maximum limit value
Phosphorus elemental	0.05 mg/m³	0.1 mg/m³	-

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals
Catalog of Severely Restricted Toxic Chemicals Not applicable

Measures for the Environmental Management of New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances Complies.

International Regulations

The Rotterdam Convention Not applicable

International Inventories

TSCA	Not determined
DSL/NDSL	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Not determined
PICCS	Not determined
AIIC	Not determined
NZIoC	Not determined
TCSI	Not determined

16. Other information

Revision date 10-11-2026

Revision Note

Abbreviations and acronyms

Key or legend to abbreviations and acronyms used in the safety data sheet
List may include phrases which are not applicable to this product

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area

BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EINECS	European Inventory of Existing Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
GHS	Globally Harmonized System
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
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
KECI	Korean 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
NDSL	Non-Domestic Substances List (Canada)
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
C_G1	Group 1 - Carcinogenic to humans

C_G2A	Group 2A - Probably carcinogenic to humans
C_G2B	Group 2B - Possibly carcinogenic to humans
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Key literature references and sources for data used to compile the SDS
U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
U.S. EPA Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
U.S. Hazardous Substance Data Bank (HSDB)
International Uniform Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
U.S. National Institute for Occupational Safety and Health (NIOSH)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

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