Azo-Core TBF 20-60

Safety Data Sheet

according to Circular 17/2022/TT-BCT
Issue date: 6/23/2025 Version: 1.0

SECTION 1: Identification of the substance or mixture and of the supplier

1.1. GHS product identifier or other means of identification of the product/chemicals

Product form : Mixture
Trade name : Azo-Core TBF 20-60
Product code : TBF 20-60BLK

1.2. Recommended use and restriction on use

Recommended use : Thermal barrier polymer (Part B)

1.3. Supplier's details

Manufacturer
Azon USA Inc.
2204 Ravine Rd
49004 Kalamazoo Michigan
USA
T 269-385-5942

Manufacturer
Azon Asia Inc.
168 Joongwon Ind Rd. Judeok
CB 27459 KOR Chungju
South Korea
T +82 (0) 43 840 0500

1.4. Emergency phone number

Emergency number : For 24/7 multilingual advice for spill, leak, fire, exposure, or accident call CHEMTREC at +65 3163 8374 (Singapore, multilingual) and provide CCN 2189
Back-up Emergency Number: +1-703-527-3887 (USA, English Only)

SECTION 2: Hazards identification

2.1. GHS classification

Classification according to circular 32/2017/TT-BCT

Acute toxicity (oral), Category 5	May be harmful if swallowed.
Acute toxicity (dermal), Category 5	May be harmful in contact with skin.

2.2. GHS label elements

Signal word (GHS VN) : Warning
Contains : Glycerol propylene oxide
Hazard statements (GHS VN) : H303+H313 - May be harmful if swallowed or in contact with skin

Precautionary statements (GHS VN) : P312 - Call a POISON CENTER/doctor/physician if you feel unwell

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to circular 32/2017/TT-BCT
Glycerol propylene oxide	CAS-No.: 25791-96-2	45 – 55	Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 STOT RE Not classified Aquatic Acute Not classified Aquatic Chronic Not classified

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin areas with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact : IF IN EYES: 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.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical advice/attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : May cause slight irritation.

Symptoms/effects after eye contact : May cause slight irritation.

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

4.3. Indication of immediate medical attention and special treatment needed

Other medical advice or treatment : IF exposed or concerned: Get medical advice/attention.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Dry chemical, CO_2, or water spray or regular foam.

Unsuitable extinguishing media : None known.

5.2. Specific hazards that form when the chemical burns

Fire hazard : No fire hazard.

General measures : Avoid all personal contact including breathing in the mist, spray, vapours. Do not take actions involving personal risks. Absorb spillage to prevent material damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

Reactivity in case of fire : The product is non-reactive under normal conditions of use, storage and transport.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Protective equipment and clothing and necessary warnings for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment.

SECTION 6: Accidental release measures

6.1. Protective equipment and incident response procedures

General measures : Avoid all personal contact including breathing in the mist, spray, vapours. Do not take actions involving personal risks. Absorb spillage to prevent material damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate the danger area. If possible without taking personal risks, Remove ignition sources. If outdoors, move to an area upwind of the danger area. Prevent other non-emergency personnel from entering the danger area. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so. Prevent runoff from entering drains, sewers or waterways.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and materials for containment and cleaning up

For containment : Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Decontaminate surfaces and equipment with water and detergent. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Measures and conditions for safe handling of hazardous chemicals

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing spray, mist, vapours. Do not get in eyes, on skin, or on clothing.

Hygiene measures
Always wash hands after handling the product
Do not eat, drink or smoke when using this product.
Wash contaminated clothing before reuse.

7.2. Measures and conditions for safe storage

Storage conditions : Store in a cool, dry and well-ventilated area away from incompatible substances. Protect from sunlight. Keep container tightly closed. Store locked up.

Incompatible materials : Oxidizing agents. Acids.

Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Handle in accordance with good industrial hygiene and safety procedures. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Personal protective measures and equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:
Protective gloves. Wear suitable gloves resistant to chemical penetration

Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of inadequate ventilation, wear respiratory protection. Self-contained breathing apparatus

Personal protective equipment symbol(s):

Environmental exposure controls : Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

SECTION 9: Physical and chemical properties

Physical state	:	Liquid
Boiling point	:	No data available
Colour	:	Black
Melting point	:	No data available
Odour	:	Slight
Flash point	:	> 93.3 °C / 200 °F
Vapour pressure	:	No data available
Auto-ignition temperature	:	No data available
Relative vapour density at 20°C	:	No data available
Explosive limits	:	No data available
Solubility	:	Slightly soluble in: Water.
pH	:	No data available
Density	:	No data available

Others

Flammability (solid, gas)	:	Not applicable
Relative density	:	1.048 – 1.054 @ 25 °C / 77 °F
Viscosity, dynamic	:	400 – 500 cP @ 25 °C / 77 °F

SECTION 10: Stability and reactivity

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport
Chemical stability	:	Stable under normal conditions of use.
Hazardous reaction	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	Incompatible materials.
Incompatible materials	:	Oxidizing agents,Acids
Decomposition and hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Acute toxcity

Acute toxicity (oral)	:	May be harmful if swallowed.
Acute toxicity (dermal)	:	May be harmful in contact with skin.
Acute toxicity (inhalation)	:	Not classified.

Glycerol propylene oxide (25791-96-2)	
LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight

Skin corrosion/irritation	:	Not classified
Serious eye damage/eye irritation	:	Not classified
Respiratory sensitization/ Skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified

Glycerol propylene oxide (25791-96-2)	
NOAEL (animal/male, F0/P)	≥ 1000 mg/kg bodyweight
NOAEL (animal/female, F0/P)	300 mg/kg bodyweight

Specific target organ toxicity- single exposure	:	Not classified
Specific target organ toxicity- repeated exposure	:	Not classified

Glycerol propylene oxide (25791-96-2)	
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight

Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute)	:	Not classified.
Hazardous to the aquatic environment, long–term (chronic)	:	Not classified.

Glycerol propylene oxide (25791-96-2)	
LC50 - Fish [1]	218000 mg/l
EC50 - Crustacea [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l
LOEC (chronic)	> 10 mg/l
NOEC (chronic)	≥ 10 mg/l

12.2. Persistence and degradability

Azo-Core TBF 20-60	
Persistence and degradability	Not rapidly degradable
Glycerol propylene oxide (25791-96-2)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Azo-Core TBF 20-60	
Bioaccumulative potential	No additional information available

12.4. Mobility in soil

Azo-Core TBF 20-60	
Mobility in soil	No additional information available

12.5. Other adverse effects

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Ecological waste information : Avoid release to the environment.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

IMDG	IATA	UN RTDG
14.1 UN number		
Not regulated for transport		
14.2 Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4 Packing group		
Not regulated	Not regulated	Not regulated
14.5 Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Transport in bulk

Not applicable

14.7. Special precautions for users which need to be complied in transport

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations for the product

Law on Chemicals		
Vietnam Annex I: List of chemicals subject to conditional production or import	No information available	
Vietnam Annex II: List of chemicals restricted from production or trade	No information available	
Vietnam Annex III: List of banned chemicals	No information available	
Vietnam Annex IV: List of hazardous chemicals for which chemical incident prevention and response plans are required	Contains listed substance(s)	Azo-Core TBF 20-60
Vietnam Annex V: List of chemicals subject to compulsory declarations	Contains listed substance(s)	Azo-Core TBF 20-60

National Chemical Inventory (NCI)		
National Chemical Inventory (NCI)	Contains listed substance(s)	Poly[oxy(methyl-1,2-ethanediyl)], alpha,alpha',alpha''-1,2,3-propanetriyltris[omega-hydroxy- (25791-96-2)

15.2. International regulations

No additional information available

SECTION 16: Other information

Company : Azon USA Inc.
Version : 1.0
Issue date : 6/23/2025

Full text of H-statements:	
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Acute Tox. Not classified (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Not classified
Aquatic Acute Not classified	Hazardous to the aquatic environment – Acute Hazard Not classified
Aquatic Chronic Not classified	Hazardous to the aquatic environment – Chronic Hazard Not classified
Flam. Liq. Not classified	Flammable liquids Not classified
STOT RE Not classified	Specific target organ toxicity (repeated exposure) Not classified
H303	May be harmful if swallowed

Full text of H-statements:	
H313	May be harmful in contact with skin

Safety Data Sheet (SDS), Vietnam

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.