BAEROPOL T-BLEND 1102 SP

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : **BAEROPOL T-BLEND 1102 SP**

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

Use of the Substance/Mixture : Blend of additives
Stabilizer, antioxidant for polymers

1.3 Details of the supplier of the safety data sheet

Company : Baerlocher Production USA LLC
5890 Highland Ridge Drive
45232 Cincinnati
Telephone : Day 330-602-1528, 330-602-1531 or -1530
: Night 513-207-1620 or 513-604-2327
E-mail address : Hotline.PS@baerlocher.com
Responsible/issuing person : Product Safety Department

1.4 Emergency telephone number (0 - 24 h)

Tel.: 800-424-9300 USA or 703-527-3887

2. Hazards identification

2.1 Classification of the substance or mixture

Combustible dust

2.2 Label elements

Warning: May form combustible dust concentrations in air.

Hazard pictograms :

Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.

2.3 Hazards not otherwise classified (HNOC)

Health injuries are not known or expected under normal use.

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Preparation containing zinc salts and antioxidant

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
Zinc oxide	1314-13-2	< 15

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

If inhaled : Move to fresh air.

In case of skin contact : Wash off with soap and plenty of water.

In case of eye contact : Rinse with plenty of water.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Consult a doctor and show this safety datasheet.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO2)
Dry chemical
Sand

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during : Smoke and fumes, toxic.

firefighting

5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Remove all sources of ignition. Avoid dust formation. Provide adequate ventilation. Use personal protective equipment (see Section 8).

6.2 Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	:	Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Avoid formation and buildup of dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store at room temperature in the original container. Keep in a dry place.
German storage class	:	11 Combustible Solids

7.3 Specific end use(s)

	:	Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Components	CAS-No.	Basis	Value	Note
Zinc stearate	557-05-1	ACGIH TLV	10 mg/m3	total dust
		OSHA PEL	15 mg/m3	total dust
		OSHA PEL	5 mg/m3	Respirable fraction
		NIOSH REL	5 mg/m3	Respirable fraction
		NIOSH REL	10 mg/m3	total dust
Zinc oxide	1314-13-2	ACGIH TLV	2 mg/m3	Respirable fraction, TWA
		ACGIH TLV	10 mg/m3	Respirable fraction,
		OSHA PEL	5 mg/m3	STEL
		OSHA PEL	10 mg/m3	TWA
		NIOSH REL	5 mg/m3	STEL
		NIOSH REL	15 mg/m3	TWA Ceiling value
General limits for air contaminants (PNOC)		ACGIH TLV	10 mg/m3	total dust
		ACGIH TLV	3 mg/m3	Respirable fraction
		OSHA PEL	15 mg/m3	total dust
		OSHA PEL	5 mg/m3	Respirable fraction

8.2 Exposure controls

Engineering measures

Local exhaust

Personal protective equipment

Respiratory protection : Half mask with a particle filter P2 (EN 143).
Necessary, in case of dust formation.

Hand protection : protective gloves acc. to EN 374, e.g. neoprene

Eye protection : Safety glasses

Skin and body protection : Long sleeved clothing

Hygiene measures : When using do not eat or drink.
Do not smoke.
Wash hands before breaks and at the end of workday.
Shower or bathe at the end of working.
Keep working clothes separately.

Protective measures : Static dissipative shoes are recommended for use in environments that may not have sufficient ventilation and engineering controls to prevent incidental releases of airborne concentrations of the combustible dust to present an explosion hazard from static electrical discharge from personnel.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	white to off-white pellets
Odor	:	slight fatty odor
Odor Threshold	:	no data available
pH	:	no data available
Melting point/range	:	>100 °C, Kofler Hot Bar (OECD 102)
Flash point	:	>> 100 °C
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Flammability or explosive limits Upper Lower (MEC)	:	no data available no data available no data available
Vapor Pressure	:	no data available
Vapor Density	:	no data available
Density	:	no data available
Solubility	:	slightly soluble in water
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	Stable under normal storage and handling temperatures
Viscosity	:	no data available
Molecular formula	:	mixture
Molecular weight	:	no data available

9.2 Other information

Bulk density : no data available

10. Stability and reactivity

10.1 Reactivity

Stable at normal ambient temperature and pressure.

10.2 Chemical stability

No decomposition if stored normally.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Risk of dust explosion.

10.4 Conditions to avoid

Conditions to avoid	:	Avoid dust formation. Sources of ignition

10.5 Incompatible materials

Materials to avoid	:	Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products	:	No decomposition if used as directed.

11. Toxicological information

11.1 Information on toxicological effects

Components:

zinc oxide :

Acute oral toxicity	:	LD50: > 5.000 mg/kg, rat, OECD Test Guideline 401, Based on available data, the classification criteria are not met.
Acute inhalation toxicity	:	LC50: > 5,7 mg ZnO/l, 4 h, rat, OECD Test Guideline 403, Based on available data, the classification criteria are not met.
Acute dermal toxicity	:	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	:	mouse, Result: not irritating, 5 d
	:	guinea pig, Result: not irritating, 5 d
	:	rabbit, Result: not irritating, OECD Test Guideline 404, 24 h, Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	:	rabbit, Result: not irritating, OECD Test Guideline 405, 24 h, GLP: yes, Based on available data, the classification criteria are not met.

Respiratory or skin sensitization	:	Skin sensitization
	:	Maximization Test, guinea pig, Result: not sensitizing, OECD Test Guideline 406, GLP: yes
	:	Maximization Test, guinea pig, OECD Test Guideline 406, GLP: yes
	:	Patch Test 24 Hrs., Humans, Result: not sensitizing, Based on available data, the classification criteria are not met.
	:	Respiratory sensitization, Based on available data, the classification criteria are not met.
Germ cell mutagenicity		
Genotoxicity in vitro	:	Mutagenicity (Salmonella typhimurium - reverse mutation assay), Bacteria, Result: negative, OECD Test Guideline 471, GLP: no
	:	In vitro gene mutation study in mammalian cells, mouse lymphoma cells, Result: contradictive, OECD Test Guideline 476, GLP: yes
	:	Mutagenicity (in vitro mammalian cytogenetic test), human cells, Result: positive, OECD Test Guideline 473
	:	Mutagenicity (in vitro mammalian cytogenetic test), CHO, Result: positive, GLP: no
	:	Mutagenicity (in vitro mammalian cytogenetic test), V79, Result: negative, OECD Test Guideline 473, GLP: yes
Genotoxicity in vivo	:	In vivo micronucleus test, mouse(male), intraperitoneally, OECD Test Guideline 474, GLP: yes, Result: negative, Based on available data, the classification criteria are not met.
Carcinogenicity	:	largely based on human evidence, Based on available data, the classification criteria are not met.
Reproductive toxicity	:	largely based on human evidence
	:	Based on available data, the classification criteria are not met.
Teratogenicity	:	largely based on human evidence
	:	Based on available data, the classification criteria are not met.
STOT - single exposure	:	Remarks: Based on available data, the classification criteria are not met.
STOT - repeated exposure	:	Read-across (Analogy)
STOT - repeated exposure	:	rat / mouse, Oral, OECD Test Guideline 408, Based on available data, the classification criteria are not met.

11.2 Other Information

Likely route of exposure	:	Inhalation, Ingestion, Skin contact.
Carcinogenicity	:	Not listed in the National Toxicology Program (NTP) Report on carcinogens, not found to be a potential carcinogen by the International Agency for Research on Cancer (IARC) nor by OSHA.
Further information	:	CMR effects, Carcinogenicity, Mutagenicity, Reproductive toxicity, Hazard assessment, Category 1A, Category 1B, Based on available data, the classification criteria are not met.

12. Ecological information

12.1 Toxicity

Components:
zinc oxide :

Toxicity to fish	:	Read-across (Analogy)
	:	LC50: 0,820 mg/l, 96 h, Oncorhynchus kisutch, static test, standardized international/national methodology
	:	Read-across (Analogy)
	:	LC50: 0,169 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), static test, standardized international/national methodology
	:	Read-across (Analogy)
	:	LC50: 0,439 mg/l, 96 h, Cottus bairdii, flow-through test, standardized international/national methodology
	:	Read-across (Analogy)
	:	LC50: 0,168 mg/l, 96 h, Thymallus arcticus, static test, standardized international/national methodology
	:	Read-across (Analogy)
	:	LC50: 0,33 - 0,780 mg/l, 96 h, Pimephales promelas (fathead minnow), static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50: 1,7 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202
	:	EC50: 0,14 mg/l, 24 h, Thamnocephalus platyurus, static test, standardized international/national methodology
	:	EC50: 0,19 mg/l, 24 h, Thamnocephalus platyurus, static test, standardized international/national methodology
	:	EC50: > 5 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202

	:	EC50: 9,4 mg/l, 24 h, Tetrahymena thermophila, static test, standardized international/national methodology
	:	EC50: 12 mg/l, 24 h, Tetrahymena thermophila, static test, standardized international/national methodology
Toxicity to algae	:	IC50: 0,136 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), Growth inhibition, OECD Test Guideline 201, GLP: yes
	:	NOEC: 0,024 mg/l, 3 d, Pseudokirchneriella subcapitata (green algae), Growth inhibition, OECD Test Guideline 201, GLP: yes
Toxicity to bacteria	:	Read-across (Analogy)
	:	EC50: 5,2 mg/l, 3 h, activated sludge, Respiration inhibition, OECD Test Guideline 209
	:	Read-across (Analogy)
	:	IC50: > 10 mg Zn/L, 3 h, activated sludge, Respiration inhibition, ISO 8192
	:	Read-across (Analogy)
	:	NOEC: 5 mg Zn/L, 3 d, activated sludge, static test

12.2 Persistence and degradability

Components:
zinc oxide :

Biodegradability	:	The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Components:
zinc oxide :

Bioaccumulation	:	not applicable

12.4 Mobility in soil

Components:
Zinc oxide :

Mobility	:	no data available

12.5 Results of PBT and vPvB assessment

Components:
Zinc oxide :

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

12.6 Other adverse effects

Zinc oxide :

Further information	:	No information available.

13. Disposal considerations

13.1 Waste treatment methods

Product	:	Consult an expert on the disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Dispose in accordance with local, state and federal regulations.
Contaminated packaging	:	Empty containers must be handled with care due to product residue.

14. Transport information

14.1 UN number

DOT	**:** Not dangerous goods
TDG (Canada)	**:** Not dangerous goods
IMDG	**:** 3077
IATA	**:** 3077

14.2 Proper shipping name

DOT	**:** Not dangerous goods
TDG (Canada)	**:** Not dangerous goods
IMDG	**:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide, mixture)
IATA	**:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide, mixture)

14.3 Transport hazard class

DOT	**:** Not dangerous goods
TDG (Canada)	**:** Not dangerous goods
IMDG	**:** 9
IATA	**:** 9

14.4 Packing group

DOT	**:** Not dangerous goods	
TDG (Canada)	**:** Not dangerous goods	
IMDG	**:** Packaging group	: III
	: Labels	: 9
	:EmS Number	: F-A, S-F
IATA	: Packing instruction (cargo)	: 956
	: Packaging group	: III
	: Labels	: 9

14.5 Environmental hazards

DOT	**:** Not dangerous goods
TDG (Canada)	**:** Not dangerous goods
IMDG	**:** Marine pollutant
IATA	**:** Marine pollutant

14.6 Special precautions for user

See this safety data sheet chapter 6. - 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : No transport according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

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

Section 313 Supplier Notification (USA)

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

Components	wt [%]
Zinc compounds	66.7

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

15.3 Chemical Inventory

Europe	EINECS	:	listed
United States	TSCA	:	listed
Canada	DSL	:	listed
Australia	AICS	:	listed
Japan	ENCS	:	listed
Korea	KECL	:	not reviewed
Philippines	PICCS	:	not reviewed
China	IECSC	:	listed

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

16.1 HMIS Rating (USA)

Health	1
Flammability	1
Reactivity	1
Personal Protection	E

BAEROPOL T-BLEND 1102 SP

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.