SAFETY DATA SHEET

Regulation : In accordance with Regulation (EU) 2015/830 (REACH), Annex II

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name : SKYPET® BB, BB8055, BL, BL8050, BR, BR8040, BR-V

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

Recommended use of the chemical and restrictions on use

Recommended use : Plastics

Restrictions on use : Use for recommended use only.

1.3 Details of the supplier of the safety data sheet

Supplier

Company name : SK Chemicals GmbH

Address : Topas 2, Mergenthalerallee 79-81, 65760 Eschborn Germany

Emergency phone number : +49-6196-90206-11

Fax : +49-6196-90206-29

1.4 Emergency Telephone : +49-6196-90206-11

SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP] :

- Not classified

2.1.2 Additional information :

For full text of Hazard- and EU Hazard-statements: see SECTION 16

2.2 Label elements

Hazard pictograms : Not applicable

Signal word : Not applicable

Hazard statements : Not applicable

Additional precautionary statements : Not applicable

2.3 Other hazards

According to Annex XIII, the substance does not meet PBT or vPvB criteria.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name (Synonyms)	CAS No.	EC No.	Content (%)	REACH Registration No.	Classification according to Regulation (EC) No 1278/2008 (CLP)
Polyethylene terephthalate	PET	25038-59-9	Not available	100		- Not classified

SECTION 4 : FIRST-AID MEASURES

4.1 Description of first aid measures

General notes

Not Available

Following eye contact

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

Following skin contact

- In case of contact with substance, immediately flush skin with running water at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

Following inhalation

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Administer oxygen if breathing is difficult.

Following ingestion

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

Self-protection of the first aider

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

Acute effects : Not available

Delayed effects : Not available

4.3 Indication of immediate medical attention and special treatment needed

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

- Suitable extinguishing media: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO_2

Unsuitable extinguishing media

- Unsuitable extinguishing media: High pressure water streams

5.2 Special hazards arising from the substance or mixture

- May be ignited by heat, sparks or flames.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.

Hazardous combustion products : Not available

5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personel

Protective equipment : Not Available

Emergency procedures

- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.
- Do not touch or walk through spilled material.

6.1.2 For emergency responders

- Eliminate all ignition sources.
- Ventilate the area.
- Prevent dust cloud.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- Large Spill; Dike far ahead of liquid spill for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

6.3.1 For containment

- Large Spill; Dike far ahead of liquid spill for later disposal.

6.3.2 For cleaning up

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

6.3.3 Other information

- Not Available

6.4 Reference to other sections

- See also sections 8 and 13 of the Safety Data Sheet.

SECTION 7 : HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.

Measures to prevent fire

- Be careful to high temperature.

Measures to protect the environment : Not Available

Measures to prevent aerosol and dust generation : Not Available

Advice on general occupational hygiene : Not Available

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions : Not Available

Packaging materials : Not Available

Requirements for storage rooms and vessels

- Store in a closed container.

in cool and dry place.

Storage class

Further information on storage conditions : Not Available

7.3 Specific end use(s)

Recommendations : Not Available

Industrial sector specific solutions : Not Available

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limits

ACGIH Regulation : Not available

Biological exposure index : Not available

OSHA Regulation : Not available

NIOSH Regulation : Not available

EU Regulation : Not available

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Substance/mixture related measures to prevent exposure during identified uses

- Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Structural measures to prevent exposure : Not Available

Organisational measures to prevent exposure : Not Available

Technical measures to prevent exposure : Not Available

- Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

8.2.2 Individual protection measures, such as personal protective equipment

Eye and face protection

- Wear facepiece with goggles to protect.
- An eye wash unit and safety shower station should be available nearby work place.

Skin protection

(i) Hand protection :

- Wear chemical resistant gloves.
- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

(ii) Other skin protection :

- Wear appropriate protective chemical resistant clothing.
- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

Respiratory protection :

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.
- In case exposed to particulate material, the respiratory protective equipments as follow are recommended. ;facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use(dust, mist, fume)
- In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained oxygen breathing apparatus.

Thermal hazards : Not Available

- Not Available

8.2.3 Environmental exposure controls

Substance/mixture related measures to prevent exposure : Not Available

ction measures to prevent exposure : Not Available

isational measures to prevent exposure : Not Available

Technical measures to prevent exposure : Not Available

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Description : Solid

Color : White or Colorless

Odor : Not available

Odor threshold : Not available

pH : Not available

Melting point/freezing point : Not available

Initial boiling point and boiling range : Not available

Flash point : Not available

Evaporation rate : Not available

Flammability (solid, gas) : Not available

Upper/lower flammability or explosive limits : Not available

Vapor pressure : Not available

Solubility (ies) : Not available

Vapor density : Not available

Specific gravity : 1.3 ~ 1.4 g/cm^3

Partition coefficient: n-octanol/water : Not available

Auto ignition temperature : Not available

Decomposition temperature : Not available

Viscosity : Not available

Explosive properties : Not available

Oxidizing properties : Not available

Molecular weight : Not available

9.2 Other information : Not available

SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity

- Some of these materials may burn, but none ignite readily.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Containers may explode when heated.
- Fire may produce irritating and/or toxic gases.
- Some liquids produce vapors that may cause dizziness or suffocation.
- Inhalation of material may be harmful.

10.4 Conditions to avoid

- Ignition sources (heat, sparks or flames)

10.5 Incompatible materials

- Combustibles

10.6 Hazardous decomposition products

- Irritating and/or toxic gases

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

A. Information on the likely routes of exposure

Not available

(a) Acute toxicity;	
Oral	Not available
Dermal	Not available
Inhalation	Not available
(b) Skin corrosion/ irritation	**Not classified** - Molten material will produce thermal burns.
(c) Serious eye damage/ irritation	**Not classified** - Molten material will produce thermal burns.
(d) Respiratory sensitization	Not available
(e) Skin sensitization	Not available
(f) Carcinogenicity	Not available
(g) Mutagenicity	**Not classified** - Polyethylene terephthalate (PET) was tested as a source of mutagen contamination from bottles used for beverage packaging. PET bottles were filled with mineral water and stored in daylight and in the dark for different periods of time. The water samples were concentrated and the concentrates (Non – volatile compounds) tested for mutagenicity with the Ames test (static tests). Total organic carbon (TOC) leaching was determined concurrently. Leaching of mutagens was also studied using dynamic tests; shaking distilled water in PET bottles. New methods were also used to test the leaching potential of both volatile and non-volatile compounds: directly testing the mutagenicity in unconcentrated water stored in PET bottles and growing Salmonella strains directly in the plastic bottles. The results were positive only for the static test, which identified leaching of mutagens after 1 month of storage in PET bottles. This activity was higher after storage in daylight.
(h) Reproductive toxicity	Not available
(i) Specific target organ toxicity (single exposure)	**Not classified** - In a 1-month study, rats received wine extracts obtained after several months contact with PET. The treatment produced no harmful effect on animals.
(j) Specific target organ toxicity (repeat exposure)	**Not classified** - Rats were given 5.0 to 400 mg technical grade PET/kg bw and 5.0 to 100 mg pure PET/kg bw over a 3-month period. There were no changes in their behavior, BW gain, biochemical indices of blood serum, urine, or hematology analyses, or in relative weights of internal organs.
(k) Aspiration Hazard	Not available

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity	
Acute toxicity	Not available
Chronic toxicity	Not available

12.2 Persistence and Degradability	**Persistence :** Not available **Degradability :** Not available - PET is subject to various types of degradations during processing. The main degradations that can occur are hydrolytic, thermal and, probably most important, thermal oxidation. When PET degrades, several things happen: discoloration, chain scission resulting in reduced molecular weight, formation of acetaldehyde and cross-links("gel" or "flash-eye" formation). Discoloration is due to the formation of various chromophoric systems following prolonged thermal treatment at elevated temperatures. This become a problem when the optical requirements of the polymer are very high, such as in packaging applications. The thermal and thermoxidative degradation results in poor processability characteristics and performance of the material.
12.3 Bioaccumulative potential	**Bioaccumulation** : Not available **Biodegradation :** Not biodegradable.
12.4 Mobility in soil	Not available
12.5 Results of PBT and vPvB assessment	Not available
12.6 Other adverse effects	- Commentary published in Environmental Health Perspectives in April 2010 suggested that PET might yield endocrine disruptors under conditions of common use and recommended research on this topic. Proposed mechanisms include leaching of phthalates as well as leaching of antimony. Other authors (Fraz and Welle) published evidence based on mathematical modeling, indicating that it is quite unlikely that PET yields endocrine disruptors in mineral water.
12.7 Hazardous to the ozone layer	Not available

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal

Waste codes / waste designations according to LoW : Not Available

13.1.2 Waste treatment-relevant information

- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

13.1.3 Sewage disposal-relevant information : Not Available

13.1.4 Other disposal recommendations

- Consider the required attentions in accordance with waste treatment management regulation.

SECTION 14 : TRANSPORT INFORMATION

14.1 UN Number : Not applicable

14.2 UN Proper shipping name : Not applicable

14.3 Transport Hazard class : Not applicable

14.4 Packing group : Not applicable

14.5 Environmental hazards : Not applicable

14.6 Special precautions

in case of fire : Not applicable

in case of leakage : Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available

SECTION 15 : REGULATORY INFORMATION

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

EU Regulatory Information

EU Classification

Classification : Not regulated

Hazard statement codes : Not regulated

EU SVHC list : Not regulated

EU Authorisation List : Not regulated

EU Restriction List : Not regulated

EU BPR : Not regulated

Foreign Regulatory Information

External information :

Substance of Rotterdam Convention : Not regulated

Substance of Stockholm Convention : Not regulated

Substance of Montreal Protocol : Not regulated

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16 : OTHER INFORMATION

Product safety data sheet for prepared in accordance with Regulation (EU) 2015/830 (REACH), Annex II

16.1 Indication of changes

Date Updated : March 05, 2020

Version : 3.0

16.2 Abbreviations and acronyms

ACGIH = American Conference of Government Industrial Hygienists

CLP = Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008

CAS No. = Chemical Abstracts Service number

EC No. = EINECS and ELINCS Number (see also EINECS and ELINCS)

EU = European Union

IARC = International Agency for Research on Cancer

NIOSH = National Institute for Occupational Safety & Health

NTP = National Toxicology Program

OSHA = European Agency for Safety and Health at work

PBT = Persistent, Bioaccumulative and Toxic substance

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 453/2010

SVHC = Substances of Very High Concern

vPvB = Very Persistent and Very Bioaccumulative

MARPOL = International Convention for the Prevention of Pollution from Ships (IMO)

IBC = Intermediate Bulk Container

EINECS = European Inventory of Existing Commercial chemical Substances

ELINCS = European List of Notified Chemical Substances

16.3 Key literature reference and sources for data

- American Conference of Governmental Industrial Hygienists TLVs and BEIs.
- NIOSH Pocket Guide; http://www.cdc.gov/niosh/npg/npgdcas.html
- National Toxicology Program; http://ntp.niehs.nih.gov/results/dbsearch/
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans;
  ://monographs.iarc.fr

- EU CLP; https://echa.europa.eu/information-on-chemicals/cl-inventory-database
- TOMES-LOLI®; http://www.rightanswerknowledge.com/loginRA.asp

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation(EC) 1272/2008(CLP):

Classification according to Regulation (EC) 1272/2008	Classification procedure
Not classified	Not available

16.5 Training advice :

- Do not handle until all safety precautions have been read and understood.

16.6 Further information :

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.