TEK - B35 Interleaving Powder

1 Identification

GHS Product Identifier

TEK - B35

Other means of identification

White powder

Recommended use of the chemical and restriction on use

Corrosion inhibitor and mechanical separator for glass

Supplier's details

Teknapack, Inc.
471 Apollo Drive, Suite 10
Lino Lakes, MN 55014
www.teknapack.com

Emergency phone number

1-651-780-0088
(Monday thru Friday; 7:30AM - 3:30PM CST)

2 Hazard(s) identification

Classification of the substance or mixture

Reproductive Toxicity	Category 2

GHS label elements

Suspected of damaging fertility or the unborn child

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

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Dispose of contents/container to be in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification

May form combustible dust-air mixture if dispersed.
Spillages may be slippery.
Handle in accordance with good industrial hygiene and safety practice.

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
			0	
Poly(Methyl methacrylate)	9011-14-7		60 - 70	
Boric Acid	10043-35-3		30 - 40	

4 First-aid measures

Description of necessary first-aid measures

Inhalation:
Remove the affected individual into fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, seek professional medical attention.

Skin Contact:
Wash throughly with soap and water. Wash clothing separately. Seek professional medical attention if irritation develops or persists.

Eye Contact:
Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Seek professional medical attention.

Ingestion:
If swallowed, do NOT induce vomiting. If vomiting occurs naturally, have individual lean forward to reduce risk of aspiration. Seek professional medical attention if ill effects occur.

Most important symptoms/effects, acute and delayed

Inhalation:
May cause coughing.

Skin Contact:
Absorption through large areas of severely damaged skin may cause skin redness and peeling.

Eye Contact:
May cause eye irritation. Symptoms may include scratching, tearing, redness, swelling and blurred vision.

Ingestion:
High doses of inorganic borate salts may cause nausea, vomiting and/or diarrhea.

Indication of immediate medical attention and special treatment needed, if necessary

General: Ensure that rescue and medical personnel take precautions to protect themselves.

Note to physicians: Supportive care only is required for adult ingestion of less than a few grams of boric acid (this material is 50/50 mix with boric acid). For ingestion of larger amounts, maintain fluid and electrolyte balance and maintain adequate kidney function. Gastric lavage is only recommended for heavily exposed, symptomatic patients in whom emesis has not emptied the stomach. Hemodialysis should be reserved for patients with massive acute absorption, especially for patients with compromised renal function. Boron analyses of urine or blood are only useful for verifying exposure and are not useful for evaluating severity of poisoning or as a guide in treatment.[1]

5 Fire-fighting measures

Suitable extinguishing media

Water mist, Foam, Dry Powder or CO2.

Do NOT use a solid water stream as it may scatter and spread fire.
Do NOT use water jet.

Specific hazards arising from the chemical

Polymer portion is combustible but not readily ignited. May form combustible dust concentrations in air.
Boric acid portion is not flammable, combustible nor explosive.
Combustion or thermal decomposition of polymer portion will evolve toxic, irritant and flammable vapors.
By analogy with similar materials, the polymer portion may decompose if heated to temperatures above 392^0 F (200^0 C).

Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing, and face mask.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Caution - spillages may be slippery.
Wear personnel protective clothing and equipment. See Sections 7 and 8.
Do not breathe dust.
Remove all sources of ignition.

Environmental precautions

Prevent further spillage if safe to do so.
Avoid discharge into drains and water courses.
Avoid release to the environment.
The boric acid portion of the product is water-soluble and may cause damage to trees or vegetation by root absorption. Do not use affected water until natural dilution returns the boron value to its normal environmental background level or meets local water quality standards.

Methods and materials for containment and cleaning up

Avoid dust formation and dispersal. Potential for dust combustion. Remove all sources of ignition. Ensure adequate ventilation.
Pick up spillage by shovel or using a dust suppressant agent before sweeping.
Dispose of into appropriate container and according to local, regional, and national regulations.

7 Handling and storage

Precautions for safe handling

Avoid contact with eyes. Avoid prolonged skin contact. Do not breathe dust from this material. Wear appropriate personnel protective clothing and equipment. Wash hands throughly after contact. Maintain good industrial hygiene. Avoid spills. No smoking. Unlikely to represent a dust hazard under normal handling conditions.

Conditions for safe storage, including any incompatibilities

Keep in a clean, cool and dry area away from heat sources. Natural ventilation is adequate. Storage temperature is ambient. No known incompatible materials.
To minimise caking of the product, bags should be handled on a first-in, first-out basis.

8 Exposure controls/personal protection

Control parameters

Respirable Dust	5 mg/m^3 (OSHA PEL TWA)
Total Dust	15 mg/m^3 (OSHA PEL TWA)

Boric acid CAS 10043-35-3
2 mg/m^3 (TWA OEL - inhalable fraction of boric acid)
6 mg/m^3 (STEL - inhalable fraction of boric acid)

Polymer portion of the product, when used as recommended, has all hazardous constituents of the polymer wetted by the polymer system and therefore is unlikely to present exposure under normal conditions of use; the polymer portion requires no monitoring.

Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

Individual protection measures

Respiratory protection: A suitable dust mask or dust respirator with filter P3 or FFP3 (EN 143 or EN149) may be appropriate. In the unlikely event of formation of particularly high levels of dust, a self contained breathing apparatus mat be appropriate.

Skin protection: Not normally required.

Eye/Face protection: Safety glasses with side shields, safety goggles, or chemical goggles and face shield.

9 Physical and chemical properties

Physical and chemical properties

Form:	Solid, powder
Color:	White
Odor:	Typically methacrylate (polymeric)

10 Stability and reactivity

Reactivity

None known. Stable and non-reactive under normal conditions of use, transport, and storage.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

The boric acid portion of the product is a weak acid that may cause corrision of base metals. Reaction with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas which could create an explosive hazard.

Conditions to avoid

Avoid dust generation. Keep away from heat.
Avoid contact with strong reducing agents by storing according to good industrial practice.

Incompatible materials

Strong reducing agents.

Hazardous decomposition products

Decomposition of the polymer portion of the product may occur under high temperature conditions. Under thermal decomposition, product emits Carbon monoxides, Carbon dioxides, Methyl methacrylate.

11 Toxicological information

Information on the likely routes of exposure

Inhalation, skin, eyes, ingestion.
If product becomes airborne or dusty, product, inhalation is the most significant route of exposure.
Dermal exposure is not usually a concern because product is poorly absorbed through intact skin.
Also if product becomes airborne or dusty, product may easily enter eye. Wear eye protection. Wash hands before touching eyes.
Product is NOT intended for ingestion.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:
May cause coughing.
Eyes:
May cause scratching, tearing, redness, swelling and blurred vision.
Ingestion & Skin Contact:
Product is NOT intended for ingestion. Small amounts (e.g. a teaspoonful) swallowed accidentally is not likely to cause effects. Symptoms of accidental over-exposure to high doses of inorganic borate salts have been associated with ingestion or absorption through severely damaged skin. These may include nausea, vomiting and diarrhea, with delayed effects of skin redness and peeling.

Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation:
Unlikely to be hazardous by inhalation.
Skin:
Unlikely to cause skin irritation on undamaged skin.
Eyes:
Polymer particles, like other inert materials, are mechanically irritating to the eyes. Can cause scratching to the eye. Symptoms may include scratching, tearing, redness, swelling and blurred vision. If not removed, it may injure eye tissue.
Ingestion:
Low oral toxicity unless over-exposed (see Section 11.8).

Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid and sodium borate dust. Human epidemiological studies show no effect on fertility in occupational populations with chronic exposures to borate dust and indicate no effect to a general population with high exposures to borates in the environment.

Numerical measures of toxicity (such as acute toxicity estimates)

For boric acid portion of product, numerical data is available upon request.
For polymer portion of product, none. These polymeric beads have been in use for many years with no evidence of adverse effects.

Other information

Handle appropriately.

12 Ecological information

Toxicity

The product is predicted to have low toxicity to aquatic organisms. This substance is not classified as hazardous to the environment.
Boron is an essential micronutrient for healthy growth of plants, but it can be harmful to Boron sensitive plants in higher quantities. Care should be taken to minimize the amount of Borate released to the environment.

Persistence and degradability

The polymer portion of the product is non-biodegradable in soil. There is no evidence of polymer degradation in soil and

water.
The Boric Acid portion of the product is an inorganic substance and so biodegradation is not an applicable endpoint for this portion of the product.

Bioaccumulative potential

The polymer portion of the product has low potential for bioaccumulation.
The boric acid portion of the product will undergo hydrolysis in water to form undissociated boric acid. Boric acid will not biomagnify through the foodchain.

Mobility in soil

The polymer portion of the product is predicted to have low mobility in soil.
The boric acid portion of the product is soluble in water and is leachable through normal soil. Adsorption to soils or sediments is insignificant.

Other adverse effects

None known.

13 Disposal considerations

Disposal methods

The waste is considered to be non hazardous.
Dispose of spilled material and empty containers by landfill, in accordance with local regulations for waste that is non-hazardous by Federal definition.
Product packaging should be recycled where possible or ensured to be disposed of safely in accordance with local regulations.
Note: This information applies to the material as manufactured; processing, use or contamination may make this information inappropriate, inaccurate, or incomplete.

14 Transport information

UN Number

Not regulated.

UN Proper Shipping Name

Not regulated.

Transport hazard class(es)

Not regulated.

Packing group, if applicable

Not regulated.

Environmental hazards

Not regulated.

Special precautions for user

Not regulated but review Sections 6, 7, and 8.

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

Not regulated.

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

SARA 302 and 313: Not listed

US State Regulations: Substances known to the state of California to cause cancer: None known. Substances known to the state of California to cause birth defects or other reproductive harm: Not listed.

16 Other information

Other information

The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed are the only ones which exist. No warranty of any kind, expressed or implied, is made herein concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. User has sole responsibility to determine the suitability of the materials for any use, and the manner of use contemplated. Use must meet all applicable safety and health standards. User is responsible to advise their workers and the general public of any risks resulting from use of this material.