



PyroVex[®] B-108W

SECTION 1: Identification

1.1 Product identifier

Trade name: **PyroVex[®] B -108W**

Chemical Name and Synonyms:

Bis(tetrabromophthalimido)ethane; 1,2-Bis(tetrabromophthalimide)ethane; N,N'-Ethylenebis(3,4,5,6-tetrabromophthalimide); 1H-Isoindole-1,3(2H)-dione, 2,2'-(1,2-ethanediyl) bis[4,5,6,7-tetrabromo-; Ethylene bis tetrabromophthalimide; EBTBP.

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

1.2.1 Relevant identified uses:

Flame retardant in electrical and electronics components, wire and cable insulation, switches, and conductors. Brominated additive flame retardant.

1.2.2 Recommended restrictions on use: Professional users only.

1.3 Details of the supplier of the safety data sheet

Velsicol Chemical LLC

10400 W. Higgins Road, Suite 303

Rosemont, Illinois 60018 USA

Phone: (847) 813-7888

Fax: (847) 768-3227

www.velsicol.com

1.4 Emergency telephone number

Outside the continental U.S.A. call CHEMTREC 1-800-424-9300 (24 hours)

In the continental U.S.A. call CHEMTREC 703-527-3887 (24 hours)

SECTION 2: Hazards Identification

2.1 Hazard classification and Hazard statement(s)

No adverse health effects in human are known.

2.2 Precautionary statements: Not available

2.3 Signal Word: None

2.4 Pictograms: None

2.5 Other hazards: No available

2.6 Additional Information: No available

SECTION 3: Composition/information on ingredients:

3.1 Substance:

Chemical Name	CAS number	EC number	% by Weight
1,2-Bis (tetrabromophthalimide) ethane	32588-76-4	251-118-6	≥97

3.2 Impurities and stabilizing additives

No information available



PyroVex[®] B-108W

SECTION 4: First-Aid Measures

4.1 Description of first aid measures

4.1.1 General information:

Inhalation and skin contact are expected to be the primary routes of occupational exposure.

4.1.2 Following inhalation:

Remove to under fresh air. If breathing is difficult, give artificial respiration. Get medical attention.

4.1.3 Following skin contact:

Wash skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse.

4.1.4 Following eye contact:

Flush with plenty of water for at least 15 minutes. Get medical attention.

4.1.5 Following ingestion:

Rinse mouth with water. Get medical attention.

4.1.6 Self-protection of the first aider:

See section 8

4.1.7 Notes for the doctor:

Not available.

4.2 Most important symptoms and effects, both acute and delayed

Not available.

4.3 Indication of any immediate medical attention and special treatments needed:

Not available.

SECTION 5: Fire-Fighting Measures

5.1 Extinguishing media

Flammability Properties: Non-flammable.

Suitable extinguishing media: Dry chemical, water spray (fog), foam or carbon dioxide. Use extinguishing media appropriate to surrounding fire conditions.

Unsuitable extinguishing media: DO NOT use water jet.

5.2 Special hazards arising from the substance or mixture

High temperature may liberate toxic gases. Do not breathe smoke or fumes.

Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire fighters

Fire-fighters should wear protective clothing and Self-Contained Breathing Apparatus (MSHA-NIOSH approved) with chemical resistant gloves. Firefighting equipment should be thoroughly decontaminated after use.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent possible contamination of skin, eyes and personal clothing.

Avoid dust formation. Avoid breathing dust.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system.

6.3 Methods and materials for containment clearing up



PyroVex[®] B-108W

Stop the leak if possible. Pick up and arrange disposal without creating dust. Sweep up and shovel. Dispose of contents/container in accordance with local/regional/national/international regulation.

6.4 References to other sections

See sections 7, 8 and 13 for further advice.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practices. Wear suitable protective clothing, gloves and eye/face protection. Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in well-ventilated and dry area; Keep container tightly closed.

Specific incompatibilities

Strong oxidizing agents .

7.3 Specific end uses(s)

Raw industrial material.

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

No exposure limits have been established for this product. Occupational exposure to this product may occur through inhalation and dermal contact with this compound at workplaces where it is produced or used.

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Provide ventilation if necessary to minimize exposure. If practical use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

8.2.2 Personal protective measures:

Local exhaust ventilation, or other engineering controls. Ensure that eyewash station and safety shower is proximal to the work-station location. Suggested protective clothing might not be sufficient.

Respiratory protection

Dust respirator. Suggested protective clothing might not be sufficient.

Body Protection

Splash goggles. Lab coat. Boots. Gloves.

Eye and face protection

Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Hygiene measures



PyroVex[®] B-108W

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.3 Environmental exposure controls:

Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: White powder

Odor: No distinctive odor.

Odor threshold: No information available.

pH: no data available

Boiling point (average): no data available

Melting point/freezing point: 456°C

Flashpoint: no data available

Evaporation rate: no data available

Flammability (solid): Not flammable

Vapor pressure: 2.5X10⁻²² mm Hg at 25°C

Vapor density: no data available

Specific Gravity: 2.77 g/cm³

Bulk Loose Density: 573 kg/m³

Bulk Packed Density: 1149 kg/m³

Solubility in water (weight % at 25 °C): <0.01 in water, acetone, methanol, toluene

Solubility in other solvents: varies

Surface tension: no data available

Partition coefficient: no data available

Auto ignition temperature: no data available

Decomposition temperature: no data available

Viscosity: Not applicable

Explosive properties: no data available

Oxidizing properties: no data available

Dissociation Constant: no data available

Molecular Weight: 951.47

9.2 Other information:

No information available.

SECTION 10: Stability and Reactivity

10.1 Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2 Chemical stability

This substance is stable under recommended storage conditions.

10.3 Others

Possibility of hazardous reactions:

No hazardous reactions expected under normal conditions of use.

Conditions to avoid:

High temperatures above 400°C / 752°F.

Incompatible materials:

Strong oxidizing agents



PyroVex[®] B-108W

Hazardous decomposition products:

Hydrogen bromide, hydrogen cyanide and oxides of nitrogen. In the event of fire: see section 5

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Velsicol Chemical LLC has not conducted toxicity tests on this substance. However, toxicity data are available for this or similar substances.

(a) Acute toxicity

LD50 Rat (Sherman-Wistar) oral >7500 mg/kg bw;

LC50 Rat inhalation >203 mg/L/1 hr;

LD50 rabbit skin >2000 mg/kg

(b) Skin corrosion/irritation

Not a skin irritant

(b) Serious eye damage/irritation

Not an eye irritant

(d) Respiratory/skin sensitisation

No data available

(e) Germ cell mutagenicity

No data available

(f) Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP and OSHA.

(g) Reproductive toxicity

No data available

(h) STOT-single exposure

No data available

(i) STOT-repeated exposure

No data available

(j) Aspiration hazard

No data available

(k) Additional Information

RTECS Number: NR3398507

SECTION 12: Ecological Information

12.1. Toxicity

Velsicol Chemical LLC has not conducted toxicity tests on this substance. However, some data are available on the components of this material. In general, aquatic toxicity unlikely.

TERRESTRIAL FATE (SRC): expected to be immobile in soil, not expected to volatilize from dry soil surfaces, biodegradation in soil may be slow.



PyroVex[®] B-108W

AQUATIC FATE (SRC): not expected to adsorb to suspended solids and sediment, Volatilization from water surfaces is not expected, potential for bioconcentration in aquatic organisms is low.

Orange-red killifish (*Oryzias latipes*), 48 hr LC50 > 500 ppm (w/v).

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent, bio-accumulative and toxic (PBT).

12.6 Other adverse effects

No data available

SECTION 13: Disposal Considerations

Recycle to process, if possible. Dispose of contents/container in accordance with local/regional/national/international regulation.

SECTION 14: Transport Information

Not dangerous goods for DOT, IMDG, and IATA.

SECTION 15: Regulatory Information

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

This substance included on or exempted from listing on the following inventories:

United States - Inventory (TSCA). This chemical is listed as a High Production Volume (HPV) (65FR81686; <http://www.epa.gov/opptintr/chemrtk/hpvchmlt.htm>) and TSCA Flag:

XU [Exempt from reporting under Inventory Update Rule (IUR)]

European Inventory of Existing Commercial Chemical (EINECS # 251-118-6, This substance is not listed in the Annex I of Regulation (EC) No 689/2008.)

Canada - Domestic Substances List (DSL)

Australia - Inventory of Chemical Substances (AICS)

China - Inventory of Existing Chemical Substances (IECSC)

Japan - Existing and New Chemical Substances (ENCS) ((5)-5550)

Korea - Existing and Evaluated Chemical Substances (KECL) (KE-13207)

New Zealand - Inventory of Chemicals (Status: nzG)

Philippines - Inventory of Chemicals and Chemical Substances (PICCS)

15.2 Chemical Safety Assessment

No information available.

SECTION 16: Other Information

16.1 Indication of changes



PyroVex[®] B-108W

This is the second SDS under OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)) with new format, 22 October 2015

V2: Change PyroVex to ResNovae, 06 November 2015

V3: Change ResNovae to PyroVex, replace ResNovae.com to Velsicol.com, and replace logo, 25 August, 2016

16.2 Key literature references and sources for data

Hazardous Substances Databank

Ariel WebInsight, 3E Company.com

Registry of Toxic Effects of Chemical Substances (RTECS)

Information on Chemicals, ECHA website: <http://echa.europa.eu/web/guest/home>

Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)) and Appendix C, D

Manufacture SDS.

16.3 Training advice: accordance with Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

16.4 Further information: Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.