



OSBORN HIGH TECH ELECTRONIC CLEANER 76334

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Mixture
CAS No.	Mixture
Trade Name	OSBORN HIGH TECH ELEC CLEANER 76334
Product Code	M-5722

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

Identified Use(s)	Electronics Cleaner
Uses Advised Against	None

Company Identification	Osborn 2350 Salisbury Road North Richmond, IN 47374 USA
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Telephone	(765) 965-5333
Fax	(765) 935-0212
E-Mail (competent person)	marketsupport@osborn.com

Emergency telephone number

Emergency Phone No.	Transportation Emergency: CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)
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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 1; Compressed gas; Repr. 1B; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT RE 2

Label elements

Hazard Symbol



DANGER

Signal word(s)

Hazard Statement(s)

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

May damage fertility or the unborn child.

Causes skin irritation. Causes serious eye irritation.

May cause drowsiness or dizziness.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure: Liver, Central nervous system.

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Precautionary Statement(s)

Obtain special instructions before use.

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not pierce or burn, even after use.

Use only outdoors or in a well-ventilated area.

Avoid breathing mist/vapours/spray.

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

Wash hands and exposed skin after use.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

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Other hazards

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt.	CAS No.	Hazard classification
1-Bromopropane	50	106-94-5	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 1B; H360 STOT SE 3; H335, H336 STOT RE 2; H373 Aquatic Acute 3; H402 Aquatic Chronic 3; H412
1,1,1,2-Tetrafluoroethane	50	811-97-2	Compressed gas; H280

Additional Information –None.

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.
Skin Contact	Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Take off contaminated clothing and wash it before reuse.
Eye Contact	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.
Ingestion	Immediately call a POISON CENTER or doctor/physician. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

May cause drowsiness or dizziness.

Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or water spray.
-Unsuitable Extinguishing Media	Do not use water jet.

Special hazards arising from the substance or mixture

Pressurised container: May burst if heated

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Eliminate sources of ignition. Avoid contact with skin and eyes. Avoid breathing spray. Wear protective gloves/eye protection.

Environmental precautions

Prevent liquid entering sewers, basements and work pits. Avoid release to the environment.

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Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

Reference to other sections
Additional Information

None
None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Eliminate sources of ignition. Avoid contact with skin and eyes. Avoid breathing spray. Wear protective gloves/eye protection.

Conditions for safe storage, including any incompatibilities

-Storage temperature

Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

-Incompatible materials

This product should be stored away from sources of strong heat, oxidizing agents, reducing agents, and strong acids. Do not mix with finely divided alkali or alkaline earth metals. May attack some plastics, rubbers, and coatings.

Specific end use(s)

Electronics Cleaner

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
1-Bromopropane	106-94-5	----	0.1 ppm	----	-----	-----

*Assure minimum oxygen content of work atmosphere.

Recommended monitoring method

NIOSH 1025 (Bromopropane)

Exposure controls

Appropriate engineering controls

Use only with adequate ventilation to keep exposures (airborne levels of dust, fume, vapour etc) below recommended exposure limits.

Personal protection equipment

Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely. Check with protective equipment manufacturer's data.

Respiratory protection



Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.

Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Aerosol spray

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Odor	Sweet
Odor Threshold (ppm)	Not available
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	-129.5 (1-Bromopropane)
Boiling point/boiling range (°C):	63.4 (1-Bromopropane)
Flash Point (°C)	-25.5 (1-Bromopropane)
Evaporation Rate	Not available
Flammability (solid, gas)	Flammable Liquid
Explosive Limit Ranges	Lower= 4.6 Upper=7.8% (1-Bromopropane)
Vapor pressure (Pascal)	22.7 x 10 ⁴ (1-Bromopropane)
Vapor Density (Air=1)	Not available
Density (g/ml)	4.34 (1-Bromopropane)
Solubility (Water)	2.5 g/l (1-Bromopropane)
Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	370 (1-Bromopropane)
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	Not available
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Other information	None

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Avoid contact with heat and ignition sources.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition product(s)	None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

1-Bromopropane (CAS No. 106-94-5):

Acute toxicity	Oral LD50 >2000 mg/kg bw (rat) Dermal LD50 >2000 mg/kg bw (rat) Inhalation LC50 14,374 ppm (4 hour(s)) (rat)
Irritation/Corrosivity	Causes skin irritation. Causes serious eye irritation.
Sensitization	It is not a skin sensitizer.
Repeated dose toxicity	May cause damage to organs through prolonged or repeated exposure: Liver, Central nervous system.
Carcinogenicity	It is unlikely to present a carcinogenic hazard to man.

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity	Negative
Reproductive toxicity	May damage fertility or the unborn child.
Other information	None known.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

1-Bromopropane (CAS No. 106-94-5):

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Short term	LC50 (96 hour): 24.3 mg/L (Fish) EC50 (48 hour): 99.3 mg/L (Daphnia magna) ErC50 (96 hour): 72.3 mg/L (Algae)
Long Term	Not available.
Persistence and degradability	Not readily biodegradable.
Bioaccumulative potential	Not available.
Mobility in soil	Not available.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.
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SECTION 14: TRANSPORT INFORMATION

	U.S. DOT	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	1950	1950	1950
Proper Shipping Name	Aerosols, flammable	Aerosols, flammable	Aerosols, flammable
Transport hazard class(es)	2.1	2.1	2.1
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards	None assigned	None assigned	None assigned
Special precautions for user	None assigned	None assigned	None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

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

TSCA (Toxic Substance Control Act) - Inventory Status: Bromopropane (CAS No. 106-64-5)

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	-----	-----	-----

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
None	-----	-----

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	-----	-----	-----

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
1-bromopropane	106-94-5	Developmental, female, male

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: May 14, 2015

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Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)

- H225: Highly flammable liquid and vapour.
- H280: Contains gas under pressure; may explode if heated.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H360: May damage fertility or the unborn child.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H402: Harmful to aquatic life.
- H412: Harmful to aquatic life with long lasting effects.

Training advice: None.

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