SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name CAS No. Trade Name Product Code

Mixture Mixture **OSBORN HIGH TECH ELEC CLEANER 76334** M-5722

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

Identified Use(s) Uses Advised Against

Company Identification

Telephone Fax E-Mail (competent person)

Emergency telephone number Emergency Phone No.

Electronics Cleaner None Osborn

2350 Salisbury Road North Richmond, IN 47374 USA

(765) 965-5333 (765) 935-0212 marketsupport@osborn.com

Transportation Emergency: CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Label elements

Hazard Symbol

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



Signal word(s) Hazard Statement(s)

Precautionary Statement(s)

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

May cause damage to organs through prolonged or repeated exposure: Liver,

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

Do not pierce or burn, even after use.

Obtain special instructions before use.

Extremely flammable aerosol.

May damage fertility or the unborn child.

May cause drowsiness or dizziness. May cause respiratory irritation.

Central nervous system.

Contains gas under pressure; may explode if heated.

Causes skin irritation. Causes serious eye irritation.

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 no expose to temperatures exceeding 50°C/ 122°F. Page: 1/6

Other hazards

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

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If symptoms

Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Take off contaminated

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation

IF SWALLOWED: Immediately call a POISON CENTER or

Immediately call a POISON CENTER or doctor/physician. Do not give

develop, obtain medical attention.

clothing and wash it before reuse.

persists: Get medical advice/attention.

May cause drowsiness or dizziness.

anything by mouth to an unconscious person.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt.	CAS No.	Hazard classification	
		50 106-94-5	Flam. Liq. 2; H225	
			Skin Irrit. 2; H315	
			Eye Irrit. 2; H319	
	50		Repr. 1B: H360	
1-Bromopropane	50		STOT SE 3: H335, H336	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

Inha	latio	n

Skin Contact

Eye Contact

Ingestion

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media -Unsuitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or water spray. 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.

doctor/physician.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and
emergency proceduresEliminate sources of ignition. Avoid contact with skin and eyes.
Avoid breathing spray. Wear protective gloves/eye protection.Environmental precautionsPrevent liquid entering sewers, basements and work pits. Avoid
release to the environment.

Methods and material for containment and cleaning up

Reference to other sections Additional Information Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

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

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

*Assure minimum oxygen content of work atmosphere.

Recommended monitoring method

Appropriate engineering controls

Personal protection equipment Eye/face protection NIOSH 1025 (Bromopropane)

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

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

Skin protection (Hand protection/ Other)



Exposure controls

Respiratory protection



Thermal hazards

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

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

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 Color.

Aerosol spray Clear

Odor

Odor Threshold (ppm) pH (Value) Melting Point (°C) / Freezing Point (°C) Boiling point/boiling range (°C): Flash Point (°C) **Evaporation Rate** Flammability (solid, gas) Explosive Limit Ranges Vapor pressure (Pascal) Vapor Density (Air=1) Density (g/ml) Solubility (Water) Solubility (Other) Partition Coefficient (n-Octanol/water) Auto Ignition Point (°C) Decomposition Temperature (°C) Kinematic Viscosity (cSt) Explosive properties Oxidizing properties

Sweet Not available Not available -129.5 (1-Bromopropane) 63.4 (1-Bromopropane) -25.5 (1-Bromopropane) Not available Flammable Liquid Lower= 4.6 Upper=7.8% (1-Bromopropane) 22.7 x 10^4 (1-Bromopropane) Not available 4.34 (1-Bromopropane) 2.5 g/l (1-Bromopropane) Not available Not available 370 (1-Bromopropane) Not available Not available Not explosive. Not oxidizing. None

SECTION 10: STABILITY AND REACTIVITY

Reactivity Chemical stability	Stable under normal conditions. 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

Other information

Irritation/Corrosivity Sensitization Repeated dose toxicity Oral LD50 >2000 mg/kg bw (rat) Dermal LD50 >2000 mg/kg bw (rat) Inhalation LC50 14,374 ppm (4 hour(s)) (rat)

Causes skin irritation. Causes serious eye irritation. It is not a skin sensitizer.

It is unlikely to present a carcinogenic hazard to man.

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

Carcinogenicity

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

Mutagenicity Reproductive toxicity Other information Negative

May damage fertility or the unborn child. None known.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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

Short term

Long 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)

Not available.

Persistence and degradability Bioaccumulative potential Mobility in soil Results of PBT and vPvB assessment Other adverse effects

Not readily biodegradable. Not available. Not available. Not classified as PBT or vPvB. 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.

SECTION 14: TRANSPORT INFORMATION

	<u>U.S. DOT</u>	Sea transport (IMDG)	Air transport <u>(ICAO/IATA)</u>
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:
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🛛 Fire	🛛 Sudden Release	Reactivity	🛛 Immediate (acute)	🛛 Chronic (delayed)
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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

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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