

Safety Data Sheet

According to 1907-2006/EC, Article 31

1. PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BOW 785 FLUX

Details of the supplier of the safety data sheet:

This Safety Data Sheet has been updated in accordance with the Globally Harmonized System (GHS).

Manufacturer Name: Canfield Technologies/BOW Electronic Solders

Address: 1 Crossman Road, Sayreville, NJ 08872

General Phone Number: 732-316-2100

INFOTRAC 24 Hour Emergency Telephone Number: 1-800-535-5053

SDS Creation Date 6-Jan-15

SDS Revision Date: 6-Jan-18

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) NO 1272/2008



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor



GHS08 Health Hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Skin Sens. 1 **H317** May cause an allergic skin reaction.

Acute Tox. 4 **H302** Harmful if swallowed.

Acute Tox. 4 **H332** Harmful if inhaled.

Eye Irrit. 2A **H319** Causes serious eye irritation.

Skin Sens. 1 **H317** May cause an allergic skin reaction.

STOT SE 3 **H336** May cause drowsiness or dizziness.

Label elements

Labeling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

Hazard pictograms



GHS08



GHS02



GHS07

Signal word: Danger

Hazard-determining components of labeling: Isopropanol

Hazard Statements

- H225** Highly flammable liquid and vapor.
H302+H332 Harmful if swallowed or inhaled.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.

Precautionary statements

- P261** Avoid breathing dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352 IF ON SKIN: Wash with plenty of water.
P501 Dispose of contents/container in according with local/regional/national regulations.

Classification system:

NFPA ratings (scale 0-4)



HEALTH	1	Health = 1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

3. COMPOSITION OF MIXTURE

Chemical characterization: Mixtures

Description: Mixtures of the substances listed below with nonhazardous additions.

CAS No.	Description		% Range
CAS: 8050-09-7 EINECS: 232-475-7	Gum Rosin	Resp. Sens. 1, H334 Skin Sens. 1, H317	30 - 45%
CAS: 67-63-0 EINECS: 200-661-7	Isopropanol	Flam. Liq.2, H225 Eye Irrit. 2A, H319: STOT SE 3, H336	40-60%
CAS: 506-59-2 EINECS: 208-046-5	DMA-HCL	Skin Sens. 1, H315 Eye Irrit. 1A, H319	5-10%
Proprietary ingredient(s)	Proprietary	Skin Sens. 1, H315	1-5%

Additional information:

This solder product does not contain any Substance of Very High Concern (SVHC) on the European Chemicals Agency (ECHA) Candidate list.

4. FIRST AID MEASURES

Description of first aid measures

After inhalation: Supply fresh air, consult doctor in case of complaints.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: Seek immediate medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed. No further relevant information available.

Indication of any immediate medical attention and special treatment needed. No further relevant information available.

5. FIREFIGHTER MEASURES

Extinguishing media

Suitable extinguishing agents: CO₂, sand extinguishing powder. Do not use water.

Special hazards arising from the substance or mixture

In certain fire conditions, traces of other toxic gases cannot be excluded.

In case of fire, the following can be released:

Nitrogen oxides (Nox)

Advise for fire fighters

Protective equipment: Wear self-contained respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and clearing up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See section 13 for disposal information.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Ensure good ventilation /exhaustion at the workplace.

Information about protection against explosions and fires: No ignition sources - do not smoke.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Specific end use (s): No further relevant information available.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

67-63-0 Isopropanol

PEL Long-term value: 980 mg/m³ , 400 ppm

REL Short-term value: 1225 mg/m³ , 500 ppm

Long-term value: 980 mg/m³ , 400 ppm

TLV Short-term value: 984 mg/m³ , 400 ppm

Long-term value: 492 mg/m³ , 200 ppm

Additional information:

PEL = Permissible Exposure Limit (OSHA)

TLV = Threshold Limit Value (ACGIH)

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment:

Exposure controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation to control Airborne levels below recommended exposure limits.

When ventilation is not sufficient to remove airborne levels from the breathing zone, a NIOSH safety approved respirator or self-contained breathing apparatus should be worn. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Protection of hands:



Protective gloves

Material of gloves:

Nitrile rubber, NBR

Natural rubber, NR

Penetration time of glove material:

The exact break through time has to be found by the manufacturer of the protective gloves and to be observed.

Eye protection:



Face Shield when refilling

Body protection:



Apron

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid
Color: Amber colored
Odor: Alcohol-like
pH-value: Not determined

Change in condition

Melting point/melting range: Undetermined.

Boiling point/boiling range: 82.3°C (180.1 °F)

Flash point: 18°C (64°F)

Ignition temperature: 390°C (734°F)

Auto igniting: Product is not self igniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

Explosion Limits:

Lower: 1.7 Vol %

Upper: 15.0 Vol %

Vapor pressure at 20°C (68°F): 59 hPa (44 mm Hg)

Density at 20°C (68°F): 0.93 g/cm³ (7.761 lbs/gal)

Solubility in / miscibility with water: Not miscible or difficult to mix

Solvent content:

Organic solvents: VOC Content 459 g/L

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability:

Thermal decomposition /conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known

Conditions to avoid No further relevant information available.

Incompatible materials: Strong acids, strong oxidizers.

Hazardous decompositions products: No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

On the skin: Irritant to skin and mucous membranes.

On the eye: Irritant effect.

Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

Harmful

Carcinogenic categories

IARC (International Agency for Research on Cancer)

67-63-0 Isopropanol

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Result of PBT and vPvB assessment

PBT: Not applicable.

VPvB: Not applicable.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

Uncleaned packaging's:

Recommendations: Disposal must be made in accordance to official regulations.

14. TRANSPORT INFORMATION

UN- NUMBER	UN1987
DOT,ADR, IMDG, IATA	UN1987, Alcohol, n.o.s. (Isopropyl Alcohol), 3, II
UN proper shipping name	
DOT,ADR, IMDG, IATA	
Transport hazard class (es)	
DOT	
	
Class	3 Flammable liquids
Label	3
ADR, IMDG, IATA	
	
Class	3 Flammable liquids
Label	3
Packing group	
DOT, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport / Additional information:	
DOT	
Quantity Limitations	On passenger aircraft/ rail: 5 L On cargo aircraft only: 60 L
ADR	
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation"	UN1987, Alcohol, n.o.s. (Isopropyl Alcohol), 3, II

15. REGULATORY INFORMATION

Safety, Health and Environmental regulation/ legislation specific for the substance or mixture

All ingredients are listed on the following Government Inventories:

China: Inventory of Existing Chemical Substances in China (IECSC)

Korea: Korea Existing Chemicals List (ECL)

Europe: European Inventory of Existing Commercial Substances (EINECS)

Japan: Inventory of Existing AND New Chemical Substances (ENCS)

Philippines: Philippine Inventory of Chemicals and Chemical Substances (PICCS)

USA: TSCA (Toxic Substances Control Act) TSCA Inventory of Chemical Substances

USA The following information relates to product regulation specific to the USA.

SARA (Superfund Amendments and Reauthorization Act)

Section 355 (Extremely hazardous substances):

None of the ingredients is listed

Section 313 (Specific toxic chemical listings):

67-63-0 Isopropanol

TSCA (Toxic Substances Control Act): Canfield Technologies certifies that all components listed below for the subject finished Product are on the TSCA Inventory of Chemical Substance and are not subject to any chemical specific regulation under TSCA Section 12(b) export notification requirements delineated at 40 CFR part 707, subpart D.

All ingredients are listed or exempt from listing.

California Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

NIOSH-CA (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

CANADA: Not classified.

Workplace Hazardous Materials Identification (WHMIS):

Labeling according to Regulation (EC) NO 1272/2008

The product has classified and labeled according to the CLP regulation.

Hazard pictograms



GHS08



GHS07



GHS08

Signal word Danger

Hazard-determining components of labeling:

Isopropanol

Hazard statements

H225 Highly flammable liquid and vapor.

H302+H332 Harmful if swallowed or inhaled.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302+P352 IF ON SKIN: Wash with plenty of water.

P501 Dispose of contents/container in according with local/regional/national regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Bow/Canfield Technologies extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. This Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process.

All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Safety Data Sheet as a source for hazard information.

Department issuing Safety Data Sheet (SDS): Product Compliance / EHS Department

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

IMDG: International Maritime Code for Dangerous Goods.

DOT: US Department of Transportation.

IATA: International Air Transport Association.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

EINECS: European Inventory of Existing Commercial Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

NFPA: National Fire Protection Association (USA).

HMIS: Hazardous Materials Identification System (USA).

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox.2: Acute toxicity, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Resp. Sens. 1: Sensitisation- Respirat., Hazard Category 1

Resp. Sens. 1B: Sensitisation- Respirat., Hazard Category 1B

Skin Sens. 1: Sensitisation- Skin, Hazard Category 1

Skin Sens. 1B: Sensitisation- Skin, Hazard Category 1B

Carc. 1A: Carcinogenicity, Hazard Category 1 A

STOT SE 1: Specific Target organ toxicity- Single exposure, Hazard Category 1

STOT SE 3: Specific Target organ toxicity- Single exposure, Hazard Category 3

Data compared to the previous version altered.