Reviewed on 10/23/2014 Printing date 10/23/2014

1 Identification

· Trade name: BINZEL® ABI-Cool

· Article number: 192.9019, 192.9020, 192.9021

· MSDS Number: 122 · UPC bar code(s): N/Ap

· Relevant identified uses of the substance: COOLING FLUID FOR WELDING SYSTEMS

· Manufacturer/Supplier:

ADDRESS:

ABICOR Binzel USA 650 Medimmune Ct.

Suite 110

Frederick, MD 21703 Tel: (800) 542-4867 Fax: (301) 846-4497

· Information department:

Tel: (905) 428-1611

http://www.binzel-abicor.com/ Emergency telephone number:

ChemTrec (800) 424-9300

Canada only: CANUTEC (Call collect) (613) 996-6666

2 Hazard(s) identification

Classification of the substance or mixture:



Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2B H320 Causes eye irritation.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Signal word: Warning
- · Hazard-determining components of labeling:

ethylene glycol

Hazard statements:

Harmful if swallowed.

Causes eye irritation.

· Precautionary statements:

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF IN EYES: 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.

Rinse mouth.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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

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Safety Data Sheet acc. to OSHA HCS & WHMIS

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· WHMIS-symbols:

D2A - Very toxic material causing other toxic effects



· NFPA ratings (scale 0 - 4):



3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

107-21-1 ethylene glycol

30-60%

· Additional information: Exact concentrations are being withheld as trade secrets.

4 First-aid measures

- · General information: Symptoms of poisoning may even occur after several hours.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eve 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.

- · After swallowing: Call a poison center/doctor if you feel unwell. Rinse mouth.
- · 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 Fire-fighting measures

- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture: No further relevant information available.
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures:
- Wear protective clothing.
- · Environmental precautions:

Dilute with plenty of water.

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

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• Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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

· Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Storage
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s): Cooling fluid for welding systems

8 Exposure controls/personal protection

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

· Components with limit values that require monitoring at the workplace:

107-21-1 ethylene glycol

EL Short-term value: 20** mg/m³ Long-term value: 10** mg/m³

Ceiling limit value: 100* mg/m³, 50*** ppm

*Aerosol; **Particulate; ***Vapour EV Ceiling limit value: 100 mg/m³

- · Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Breathing equipment:

Use an approved organic vapor (air purifying) respirator in case of insufficient ventilation.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves:

Protective gloves not normally required. People with sensitive skin may prefer to wear water-proof gloves, such as rubber or neoprene, to avoid skin contact.

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

· Form: Liquid

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	(Contd. of page
· Color: · Odor:	Blue Odorless
· Odour threshold:	Not determined.
· pH-value at 20 °C:	6
· Change in condition	05.00
Melting point/Melting range: Boiling point/Boiling range:	-35 °C 93 °C
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	410 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits	0.0 \(\delta \) ()
Lower: Upper:	3.2 Vol % 53.0 Vol %
· Vapor pressure at 20 °C:	23 hPa
· Density at 20 °C:	1.066 g/cm ³
Relative density:	Not determined.
 Vapour density at 20 °C: Evaporation rate at 20 °C: 	.610 (AIR=1) 1 (BA=1)
· Solubility in / Miscibility with	. (=,
Water:	Fully miscible.
· Partition coefficient (n-octanol/w	ater): Not determined.
· Viscosity:	
Dynamic: Kinematic:	Not determined. Not determined.
	NOT determined.
Solvent content: Organic solvents:	0.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- · 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: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

- · Information on toxicological effects:
- · Acute toxicity

	LD/LC50 values that are relevant for classification:		
107-21-1 ethylene glycol		ene glycol	
	Oral	LD50	5840 mg/kg (rat)
	Dermal	LD50	9530 mg/kg (rabbit)

- · Specific symptoms in biological assay: No further relevant information available.
- · Primary irritant effect
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

Harmful

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· 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

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability: No further relevant information available.
- Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- Additional ecological information
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

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

· Other adverse effects: No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

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- · Uncleaned packagings
- Recommendation:

Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.

• Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information		
· UN-Number · DOT, TDG, ADN, IMDG, IATA	Not regulated	
UN proper shipping nameDOT, TDG, ADN, IMDG, IATA	Not regulated	
· Transport hazard class(es)		
· DOT, TDG, ADN, IMDG, IATA · Class	Not regulated	
· Packing group · DOT, TDG, IMDG, IATA	Not regulated	
Environmental hazards:Marine pollutant:	No	
· Special precautions for user:	Not applicable.	
· Transport in bulk according to Annex MARPOL73/78 and the IBC Code:	II of Not applicable.	
· UN "Model Regulation":	-	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

107-21-1 ethylene glycol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

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· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency):

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH):

107-21-1 ethylene glycol

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients is listed.

· Canadian substance listings

· Canadian Domestic Substances List (DSL):

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%):

107-21-1 ethylene glycol

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS07

· Signal word Warning

· Hazard-determining components of labeling:

ethylene glycol

· Hazard statements

Harmful if swallowed.

Causes eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF IN EYES: 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.

Rinse mouth.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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

16 Other information

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. This sheet was compiled from the latest available information and reliable sources. Procedures are based on accepted usage. They are not necessarily all-inclusive and may vary in every circumstance. Abicor Binzel USA provides no warranties either expressed or implied and assumes no responsibility for the accuracy or completeness of the data 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

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caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· Department issuing MSDS: Product safety department

· Contact: N/Av

- Date of preparation / last revision 10/23/2014 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

CA