Cool 3

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)
Issue date: 8/26/2022 Supersedes: 8/26/2022 Version: 1.0 (M)SDS Number: 1340891

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : Cool 3
Product code : 10-6001, 10-6004, 10-6010

1.2. Recommended use and restrictions on use

Recommended use : Laboratory chemicals
Restrictions on use : None known

1.3. Supplier

Buehler
41 Waukegan Rd
Lake Bluff, IL 60044
T 1-847-295-6500
custserv@buehler.com

1.4. Emergency telephone number

Emergency number : Global Access Code: 334545; Americas" +1 760 476 3962; Middle East/Africa: +1 760 476 3959; Asia Pacific +1 760 476 3960; Europe +1 760 476 3961

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA) :

Signal word (GHS CA) : Warning

Hazard statements (GHS CA) : H319 - Causes serious eye irritation.
Precautionary statements (GHS CA) : P264 - Wash hands, forearms and face thoroughly after handling.
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.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
Methyldiethanolamine	Bis(2-hydroxyethyl)methylamine / Diethanolamine, N-methyl- / Diethanolmethylamine / Ethanol, 2,2'-(methylimino)bis- / Ethanol, 2,2'-(methylimino)di- / N-Methyldiethanolamine / 2,2'-(Methylimino)diethanol / 2,2'-Methyliminodiethanol / MDEA / N-Methyl-2,2'-iminobis(ethanol) / Di(2-hydroxyethyl)methylamine / N-Methyl-2,2'-iminodi(ethanol) / METHYL DIETHANOLAMINE / Methyl diethanolamine	CAS-No.: 105-59-9	20 – 40	Eye Irrit. 2A, H319

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
Diethylene glycol monobutyl ether	Butoxydiglycol / Butyl carbitol / Butyl dioxitol / Diethylene glycol butyl ether / Ethanol, 2-(2-butoxyethoxy)- / 2-(2-Butoxyethoxy)ethanol / Diethylene glycol mono-n-butyl ether / BUTOXYDIGLYCOL / Butyl diglycol / Diglycol monobutyl ether / Decan-1-ol, 3,6-dioxa- / BDG / Dowanol DB / Butyl carbitol (diethylene glycol monobutyl ether) / Monobutyl ether of diethyleneglycol / Monobutyl ether of diethylene glycol	CAS-No.: 112-34-5	1 – 5	Flam. Liq. 4, H227 Eye Irrit. 2A, H319
1H-Benzotriazole	1,2,3-Benzotriazole / Benzotriazole / NSC-3058 / 1H-1,2,3-Benzotriazole / BENZOTRIAZOLE / Benzeneazimide / 1,2,3-1H-Benzotriazole	CAS-No.: 95-14-7	0.1 – 1	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after 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.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Not determined.

5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diethylene glycol monobutyl ether (112-34-5)	
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA [ppm]	10 ppm (inhalable fraction and vapor)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA [ppm]	10 ppm (inhalable fraction and vapor)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA [ppm]	10 ppm (inhalable fraction and vapor)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA [ppm]	10 ppm (inhalable fraction and vapor)
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA [ppm]	10 ppm (inhalable fraction and vapor)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	10 ppm (inhalable fraction and vapor)

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Colour : Yellow

Odour	:	Slight
Odour threshold	:	No data available
pH	:	9 – 10
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1040 – 1070 kg/m³
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	Extremely high temperatures.
Incompatible materials	:	Strong oxidizing agents.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time:	:	No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified.
Acute toxicity (dermal)	:	Not classified.
Acute toxicity (inhalation)	:	Not classified.

Methyldiethanolamine (105-59-9)	
LD50 dermal rabbit	10244 mg/kg
ATE CA (Dermal)	10244 mg/kg bodyweight

Diethylene glycol monobutyl ether (112-34-5)	
LD50 oral rat	5660 mg/kg
LD50 dermal rabbit	2700 mg/kg

1H-Benzotriazole (95-14-7)	
LD50 oral rat	560 mg/kg
LD50 dermal rabbit	> 10000 mg/kg

1H-Benzotriazole (95-14-7)	
LC50 Inhalation - Rat	1910 mg/m³ (Exposure time: 3 h)
ATE CA (oral)	500 mg/kg bodyweight

Skin corrosion/irritation : Not classified.
pH: 9 – 10

Serious eye damage/irritation : Causes serious eye irritation.
pH: 9 – 10

Respiratory or skin sensitization : Not classified.

Germ cell mutagenicity : Not classified.

Carcinogenicity : Not classified.

Reproductive toxicity : Not classified.

STOT-single exposure : Not classified.

STOT-repeated exposure : Not classified.

Aspiration hazard : Not classified.

Symptoms/effects after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified.

Hazardous to the aquatic environment, long–term (chronic) : Not classified.

Methyldiethanolamine (105-59-9)	
LC50 - Fish [1]	> 1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 - Crustacea [1]	230 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	37 mg/l (Species: Desmodesmus subspicatus)
EC50 96h - Algae [1]	20 mg/l (Species: Desmodesmus subspicatus)
Partition coefficient n-octanol/water (Log Pow)	-1.08 (at 25 °C (at pH 10.1)

Diethylene glycol monobutyl ether (112-34-5)	
LC50 - Fish [1]	1300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 - Crustacea [1]	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 96h - Algae [1]	> 100 mg/l (Species: Desmodesmus subspicatus)
BCF - Fish [1]	(no bioconcentration expected)

1H-Benzotriazole (95-14-7)	
LC50 - Fish [1]	39 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 - Crustacea [1]	141.6 mg/l (Exposure time: 48 h - Species: water flea)
EC50 96h - Algae [1]	15.4 mg/l (Species: freshwater algae)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Methyldiethanolamine (105-59-9)	
Partition coefficient n-octanol/water (Log Pow)	-1.08 (at 25 °C (at pH 10.1)

Diethylene glycol monobutyl ether (112-34-5)	
BCF - Fish [1]	(no bioconcentration expected)

12.4. Mobility in soil

Methyldiethanolamine (105-59-9)	
Partition coefficient n-octanol/water (Log Pow)	-1.08 (at 25 °C (at pH 10.1)

12.5. Other adverse effects

Ozone : Not classified.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

TDG
Transport hazard class(es) (TDG) : Not applicable

DOT
Transport hazard class(es) (DOT) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (TDG) : Not applicable
Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

TDG
No data available

DOT
No data available

IMDG
No data available

IATA
No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Hexanoic acid, 6,6',6''-(1,3,5-triazine-2,4,6-triyltriimino)tris- (80584-91-4)

Listed on the Canadian DSL (Domestic Substances List)

Methyldiethanolamine (105-59-9)

Listed on the Canadian DSL (Domestic Substances List)

Diethylene glycol monobutyl ether (112-34-5)

Listed on the Canadian DSL (Domestic Substances List)

Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (9082-00-2)

Listed on the Canadian DSL (Domestic Substances List)

Oxirane, methyl-, polymer with oxirane, mono(3,5,5-trimethylhexyl) ether (204336-40-3)

Listed on the Canadian NDSL (Non-Domestic Substances List)

1H-Benzotriazole (95-14-7)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Hexanoic acid, 6,6',6''-(1,3,5-triazine-2,4,6-triyltriimino)tris- (80584-91-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Methyldiethanolamine (105-59-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Diethylene glycol monobutyl ether (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (9082-00-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Oxirane, methyl-, polymer with oxirane, mono(3,5,5-trimethylhexyl) ether (204336-40-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)

1H-Benzotriazole (95-14-7)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
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Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16: Other information

Issue date : 08/26/2022

Supersedes : 08/26/2022

Full text of H-statements:	
H227	Combustible liquid
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

Safety Data Sheet (SDS), Canada

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