2 Cranberry Road, Unit A4,
Parsippany, NJ 07054,USA
Tel: 862-210-8344
Fax: 862-210-8336
Sales@applechem.com

G-Block DZ 480 CCT

(Material) Safety Data Sheets

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Chemical Type Mixture, containing 80% Zinc Oxide

Trade Name **G-Block DZ-Zano M dispersion**

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1 Relevant Identified Uses

Major use category Personal care, cosmetic and toiletry

Use of the Substance/Mixture Protection against UVA and UVB; skin protection.

1.2.2. Uses Advised Against

No additional Information available.

1.3. Details of the Supplier of the Material Safety Data Sheet

For Product, safety, and pricing Information, please contact Applechem or your local distributors/agents

Applechem, Inc.

2 Cranberry Road, Unit A4

Parsippany-Troy Hills, NJ 07054, USA

(O) 862-210- 8344 (F) 862-210-8336. sales@applechem.com website: www.applechem.com

1.4. Emergency Telephone Number

The following phone # is ONLY for Chemical Emergency – Spill, Leak, Fire, Exposure, or Accident.

Country	Emergency phone #	Language
United States and Canada*	1-800-424-9300	English
Outside of US and Canada	+1-703-527-3887	English
Europe		
France	+33-975181407	French
Germany*	0800-181-7059	German
Italy*	800-789-767	Italian
Italy (Milan)	+39-0245557031	Italian
Poland (Warsaw)	+48-223988029	Polish
Spain*	900-868538	European Spanish
UK (London)	+44-870-8200418	English
Asia		
S. Korea*	00-308-12--2549	Korean
Taiwan*	00801-14-8954	Mandarin
People's Republic of China*	4001-204937	Mandarin

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

2.1.1 Classification According to GHS and Regulation (EC) number – 1272/2008 (CLP).

H400 -Acute aquatic toxicity: Category 1. Very toxic to aquatic life

H410-Long term hazard to aquatic environment : Category 1, Very toxic to aquatic life with long lasting effect

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

N; R50/53

2.1.3 Adverse Physicochemical, Human health and Environmental Effects

Eye Contact: May cause slight eye irritation. Corneal injury is unlikely

Skin Contact: Brief contact is essential nonirritating to skin. Prolonged contact may cause slight skin irritation with local redness. Repeated contact may cause light skin irritation with local redness

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts

Inhalation: At room temperature, exposure to vapor is minimal due to low volatility.

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal operation are not likely to cause injury; However, swallowing a large amount may cause injury. Swallowing may result in gastrointestinal irritation. May cause nausea and vomiting.

Environment: This product contains 70% of Zinc Oxide which is harmful to the aquatic organism.

2.2.1 Labeling According to Regulation (EC) Number 1272/2008 (CLP)

Hazard Statements	Very toxic to aquatic life; and Very toxic to aquatic life with long lasting effects
Precautionary Statements	Avoid release to the environment (P273); Collect Spillage (P391); Disposal of contents/container in a safe way (P501)
Signal word	**warning**
Pictograms or hazard symbols	
GHS product Identifier	**G-Block DZ 480 CCT**

2.3. Other Hazards

No data available

SECTION 3: Composition and Information on Ingredients

3.2. Mixtures

This product is a proprietary mixture with the INCI: Zinc Oxide (and) Caprylic/Capric Triglyceride (and) Polyhydroxystearic acid (and) Polyglyceryl-3 Polyricinoleate (and) Isostearic Acid (and) Lecithin.

INCI Name/Chemical Name	%	CAS #	EC #	Reach #	DSP/DPD Classification	CLP Classification
Zinc Oxide	75-82%	1314-13-2	215-222-5	No data available	N; R-50/53	Aquatic Acute 1 H400, Aquatic Chronic 1 H410

There are no additional ingredients which, with the best knowledge of the supplier and in the concentration applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or haven been assigned a workplace exposure limit and hence require reporting in this section.

SECTION 4: First Aid Measures

4.1. Description of First Aid Measures

General — If potential for exposure exists refer to Section 8 for specific personal protective equipment

Inhalation — Move person to fresh air; Obtain medical service if ill effects occur.

Skin contact — Remove contaminated clothing, and wash with water and soap. If irritation persists, consult medical service

Eye contact — Irrigate with eyewash solution or clean water. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. Hold the eyelids apart and flush for at least 10 minutes. Consult with eye doctor if irritation persists

Ingestion — Wash out mouth with water and give 200 -300 ml of water to drink. Consult with medical services if ill effects occur.

4.2. Most Important Symptoms and Effects, both Acute and Delayed

Symptoms/Injuries: No additional information available

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

No supplemental information available

SECTION 5: Fire Fighting Measures

5.1. Extinguishing Media

Water fog or fine spray; Dry chemical fire extinguishers; Carbon dioxide fire extinguishers; Foam – general purpose synthetic foams (including AFFF type) or protein foams are preferred if available.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard	Direct fire hazard – Combustible. Indirect fire Hazard – heating increases the fire hazard. Temperature above flash point – higher fire/explosion hazard
Explosion Hazard	No direct explosion hazard. Violent steam generation or eruption may occur upon application of direct water stream to hot liquid. Dense smoke may be produced when product burns.
Reactivity:	On burning – release of carbon monoxide/carbon dioxide and other combustion products of varying composition which may be toxic and/or irritating.
General Measures:	Mark the danger area. Exposure to heat – have neighborhood close doors and windows. Exposure to fire/heat – consider evacuation. Wash contaminated clothes

5.3. Advice for Firefighters

Fire fighting procedures: Keep people away. Isolate fire and deny unnecessary entry. Do not use direct water stream, May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. If not contained, fire water run-off may cause environmental damage. Review the “Accidental Release Measures” and the “Ecological information” sections.

Special Protective equipments for fire fighter: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

6.1.1. For Non-Emergency Personnel

Spilled material may cause a slipping hazard. Refer to section 7 and 8 for handling and exposure control/personal protection

6.1.2. For Emergency Responders

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7 and 8 for handling and exposure control/personal protection

6.3. Methods and Material for Containment and Cleaning Up

Contain spilled material if possible. Absorb with materials such as: sand, earth, non-combustible material. Wash the spill site with water. Large spills: collect in suitable and properly labeled containers. See Section 13 – Disposal consideration, for additional information.

6.4. Reference to Other Sections

Section 7 and 8

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling

Prevent eye contact and ingestion. Wash thoroughly with soap/water after handling.

7.2. Conditions for Safe Storage, Including any Incompatibilities

Prohibitions on mixed storage	Keep the product away from: ignition sources , strong acids, strong bases, and strong oxidizing agents
Storage area	In well-ventilated place, at room temperature. Meet the legal requirements
Special rules on packaging	Keep it closed, correctly labeled, and meet with the legal requirements
Packaging materials	Plastics or steel with plastic inner lining.

7.3. Specific End Uses

No additional information is available

SECTION 8: Exposure Controls and Personal Protection

8.1. Control Parameters

EU	none
Exposure limit(s)	Although some of the components of this product may have exposure guidelines. No exposure would be expected under normal handling conditions due to the physical state of this product

8.2. Exposure Controls

Personal protective equipment	Use safety glasses (with side shields), Wear clean, body-covering clothes. Use gloves when prolonged or frequently repeated contact could occur. Select the gloves which have good chemical resistant to this product and other commonly used products in your production.
Respiratory Protection	Under intended handling conditions, no respiratory protection should be needed.
Ingestion	Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.
Ventilation	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operation. Local exhaust ventilation may be necessary for some operations.

SECTION 9: Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Appearance (room temperature):	Off-white paste
Color:	Off-white
Odor:	Mild characteristic odor
pH:	No applicable
Melting point:	Not applicable
Solidification point:	No test data available
Boiling point:	No test data available

Flash point:	No test data available
Vapor pressure:	No supplemental data available
Relative vapor density at 20°C:	No supplemental data available
Density:	2 – 2.5
Solubility	Not soluble in water. Dispersible in oils
Log Pow	No supplemental data available
Self ignition temperature	No supplemental data available
Decomposition temperature	No supplemental data available
Viscosity	8000 – 120000 cP

9.2. Other Information

Other Properties Not dispersible in water. Dispersible in oil, and most organic solvents

SECTION 10: Stability and Reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use. On burning, release carbon monoxide/carbon dioxide, and other combustion productions which may be toxic or irritating.

10.2. Chemical Stability

Stable under normal use condition

10.3. Possibility of Hazardous Reactions

Polymerization will not occur

10.4. Conditions to Avoid

Exposure to elevated high temperature can cause product to decompose.

10.5. Incompatible Materials

Avoid strong oxidizing agents, strong acid and base

10.6. Hazardous Decomposition Products

No supplementary information available

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

The following information is based on a consideration of the properties of the main components- Zinc oxide and caprylic/capric triglyceride. This data is based on publically available information, the information by their manufactures, and data on the similar products

	Zinc Oxide
Acute toxicity	
Oral	Rat. LD50> 5000mg/Kg (EU-RAR 43(2004)), Not Classified
Dermal	No Data available
Inhalation	ZnO dust, LC 50 > 5.7mg/Kg (EU-RAR 43(2004)), not classified Under normal use condition, this product post does not have inhalation
Dermal Corrosion	No stimulating is supposed as described in ACGIH (2003) and EU-RAR 43 (2004). (Rabbit). Not classified
Serious damage to eyes	In two-thirds reports selected in the document EU-RAR 43 (2004), very slight stimulation is reported, and another no stimulation is reported. Not Classified.
Respiratory sensitization	No data available
Skin Sensitization	Not Classified. EU-RAR 43 (2004)
Germ Cell Mutagenicity	The result of the chromosomal aberration test in vivo as false positive. In vitro reports, one was positive, but other was negative. Therefore, it is not classified in GHS Classification
Carcinogenicity	EPA of US: Group D. Animal test: Negative. Not Classified
Reproductive toxicity	Not Classified. EU-RAR 43 (2004)
Specific target organ toxicity (repeated exposure)	The repetition-inhalation exposure to the guinea pig and the rat showed the influence in lungs. The reports are conclusion but not sufficient for classification

Aspiration hazards No data available

SECTION 12: Ecological Information

12.1. Toxicity.

The information is based on the main components - Zinc Oxide and Caprylic/Capric Triglyceride. The remaining components are not expected to present any ecological hazards, based on the available data.

Ecology – general: Very toxic to aquatic organisms

Ecology – water: Very toxic to aquatic organisms. Do not discharge into the drains.

Zinc Oxide: Is highly toxic to aquatic organisms on an acute basis (LC 50/EC50 , 0.1 mg/L in the most sensitive species).

Fish acute & prolonged toxicity – LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 h: 0.14-1.1 mg/L

Aquatic Invertebrate Acute Toxicity – EC 50, Daphnia magna (water flea), static test, 48 h, immobilization: 0.07 mg/L

Caprylic/capric triglyceride – Toxicity to aquatic species occurs at concentrates above material's water solubility.

Fish Acute & Prolonged toxicity – LC 50, Oncorhynchus mykiss (rainbow trout), static test, 96 h > = 53mg/L

Aquatic Invertebrate Acute Toxicity – EC 50, Daphnia magna (water flea), static test, 24 h, immobilization: > 2.2mg/L

Toxicity to Micro-organisms – EC10: Bacteria, 5 h: > 1,900 mg/L

12.2. Persistence and Degradability

Zinc Oxide	Biodegradation is not applicable
Caprrylic/Capric triglyceride	Readily biodegradable. OECE test (Method ISO 10708): Biodegradation -93%, exposure time -28 d; 10-day Window -Pass.

12.3. Bioaccumulative Potential

Zinc oxide	Partition coefficient, n-octanol/water is not applicable
Caprylic/capric triglyceride	Log Pow > 3

12.4. Mobility in Soil

Zinc Oxide	No data available
Caprylic/capric triglyceride	No supplemental data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other Adverse Effects

No supplemental data available

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Disposal	Wear protective clothing to prevent skin and eye contamination, as well as dust masks to avoid dust inhalation. For small spills, remove and wipe up residue using absorbent material. For larger spills, gather together material using appropriate tools (shovel, scraper) and place in appropriate container for disposal. Please exercise caution as contaminated surfaces will be very slippery. Any dust formation must be cleaned using a vacuum cleaner equipped with HEPA-type filter. Disposed in accordance with country, state, and local regulations. For unused & uncontaminated product, the preferred options include sending to a licensed, permitted recycler or reclaimer for incinerator or other thermal destruction device.
Ecology – waste materials	Do not discharge into drains or the body of water. Dispose by a licensed waste treatment company.
Regional legislation (waste)	No supplemental information available

SECTION 14: Transport Information

DOT Non-Bulk	Not regulated
DOT Bulk	Not regulated
UN number	UN 3082
UN packaging group	PG III
UN Hazard class-primary	9
International Maritime Organization (IMDG)	
Proper shipping name	Environmentally hazardous substance, liquid, N.O.S (contains Zinc Oxide)
Marine Pollutant	Yes
class-primary	9
EMS number	F-A, S-F
International Air Transportation Association Classification (IATA)	
Proper shipping name	Environmentally hazardous substance, liquid, N.O.S (contains Zinc Oxide)
Hazard class	9
ID #	UN 3082
Packing group	PG III
Cargo packing instruction	964
Passenger Packing Instruction	964
ADR/RID	Proper shipping name: Environmentally Hazardous substance, Solid, N.O.S. (Zinc Oxide) UN no. 3077, Class 9 Packaging group III ADR/RID-Labels 9+ENV Risk No. 90

Limited quantity 5 Kg

Tunnel code E

SECTION 15: Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation specific to Substance/Mixture

HMIS (USA)	Health: 1	Flammability: 1	Reactivity: 0	Personal Protection: C
NFPA (USA)	Health: 1	Fire Hazard: 1	Instability: 0	Special Hazard: None

OSHA Hazard Communication Standard, 29 CFR 1910.1200 Not considered a "hazardous chemical" as defined by 29 CFR 1910.1200

Resource Conservation and Recovery Act –RCRA (40 CFR 261)

Not listed

Comprehensive Environmental Response, Compensation and Liability (CERCLA/Superfund)

No RQ

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III

Section 302 – Extremely Hazardous Substances

Not listed

Section 304 – Hazardous Substances

No RQ

Sections 311 and 312- Hazardous Communication Standard

Immediate (acute) health hazard	No
Delayed (Chronic) health hazard	No
Fire hazard	No
Reactive hazard	No
Sudden Release of Pressure Hazard	No

Sections 313-Toxic Chemical List

This product contains the following substances which are subject to the reporting requirements of this regulation..

Zinc oxide, CAS # 1314-13-2 > 60%; < 75%

Pennsylvania (worker and community Right-to-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List

The following product components are cited in this list, and are present at levels which require reporting:

Zinc oxide, CAS # 1314-13-2 > 60%; < 75%

Pennsylvania (worker and Community Right-to-Know Act): Pennsylvania Special Hazardous Substance List:

To the best of our knowledge, this product does not contain chemical at level which require reporting under this statue.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

To the best of our knowledge, this product does not contain any listed substance known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statue.

New Jersey RTK- Substance: Listed substance

Zinc Oxide, CAS # 1314-13-2, > 60%; < 75%

Massachusetts RTK – Substance: Listed Substance

Zinc Oxide, CAS # 1314-13-2, > 60%; < 75%

Chemical Inventory Legend	Compliant
AICS – Australian Inventory of Chemical Substances	Y
DSL – Canadian Domestic Substances List	Y
ECL – Korean Existing Chemical List	Y
IECS – Inventory of Existing Chemicals in China	Y
NZIOC – New Zealand Inventory of Chemicals	Y
PICCS – Philippine Inventory of Chemicals and Chemical Substances	Y

TSCA - USA Toxic Substances Control Act	Y
EC Inventories – European Community Inventories of Chemicals (EINECS/ELINCS/NLP/REACH)	Y

15.2. Chemical Safety Assessment

No supplemental data available

SECTION 16: Other Information

SDS Reason for revision	To change the information of Caprylic/capric triglyceride from the new data of supplier
SDS changed sections	3.2
Training advice	
Other information	

Key or legend to abbreviations and acronyms
None
Key Literature references and sources for data:
Refer to the respective sections
Component supplier's data
McLean and Bledsoe 1992, Behavior of Metals in Soils. EPA/540/S-92/018

Classification/evaluation Procedure –EC No. 1272/2008 (CLP), article 9
Based on the physical state (paste) of this product, being a mixture, and public data of Zinc oxide hazardous classification.

Full text of phrases/statements which are not written out in full under section 2 and 3	
None	
Training Advice	No data available
Further information	No data available
Instruction for use	No data available

Disclaimer

The information in this publication is based on the public information and the (M) SDS and information supplied by the component's suppliers. The information is believed to be accurate and is given in good faith but not representation or warranty as to its completeness or accuracy is made.

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