



Safety Data Sheet

Issuing Date: November 14, 2018 Revision Date: November 14, 2018 Revision Number: 0

1. Identification of the Substance/Preparation and the Company Undertaking

GHS Product Identifier

Product Name Muscle Man Heavy Duty Permanent Marker – All Colors

Other Means of Identification

Part Number

Carded: 07306 White, 07307 Yellow, 07308 Black, 07309 Blue, 07310 Red, 07311 Silver, 07313 Green
Bulk: 07300 White, 07301 Yellow, 07302 Black, 07303 Blue, 07304 Red, 07305 Silver, 07312 Green

Formula Code SKM - 1012

Synonyms none

Recommended use of the chemical and restrictions on use

Recommended Use Solvent Based Marker

Uses Advised Against No information available

Supplier's Details

Supplier Address

SKM Industries Inc.
1012 Underwood Road
Olyphant, Pa 18447
Telephone: 570-383-3062

Emergency Telephone Number

Chemtrec US & Canada 800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This product is considered hazardous according to the criteria set within the US OSHA Hazard Communication Standard (29 CFR 1910.1200), Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR), and Mexico's NMX-R-019-SC-2011.

Acute Oral Toxicity Category 4
Acute Inhalation Toxicity - Vapors Category 4
Acute Inhalation Toxicity - Dusts and Mists Category 4
Serious Eye Damage/Eye Irritation Category 2
Carcinogenicity Category 2
Specific Target Organ Systemic Toxicity (Single Exposure) Category 3
Flammable liquids Category 2

GHS Label Elements, including precautionary statements

Emergency Overview

Signal Word – Danger

**Hazard Statements –**

Harmful if swallowed
Harmful if inhaled
Causes serious eye irritation
Suspected of causing cancer
May cause respiratory irritation
Highly flammable liquid and vapor

Physical and Health Hazards Not Otherwise Classified

Not applicable.

Precautionary Statements**Prevention**

- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Wear eye/face protection.
- Keep away from heat/sparks/open flames/hot surfaces - No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Keep cool.

General Advice

If exposed or concerned: get medical attention/advice

Eyes

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 attention/advice.

Skin

If on Skin (or hair): hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Inhalation

If inhaled: Remove person to fresh air and keep at rest in a comfortable position for breathing

Ingestion

If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth with water.

Fire

In case of fire use CO₂, dry chemical, or foam for extinction.

Spills and Leaks

None

Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container in approved waste disposal plant.

Other information

45.739% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS -No	Weight %	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Methyl Isobutyl Ketone	108-10-1	67.93	-	-
Cyclohexanone	108-94-1	26.7	-	-
Titanium Dioxide	13463-67-7	4.85	-	-
Carbon Black	1333-86-4	3.14	-	-

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Wash skin with soap and water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If breathing is difficult, give oxygen.
Ingestion	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Consult a physician if necessary.

Protection of First-aiders Use personal protective equipment. Remove all sources of ignition.

Most important symptoms/effects, acute and delayed

Most important symptoms/effects Eye irritation/reactions

Indication of immediate medical attention and special treatment needed, if necessary

Note to physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, carbon dioxide, foam.

Unsuitable extinguishing media water

Specific Hazards arising from the chemical Flammable. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion Data

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge Yes

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate personnel to safe areas. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Stop leak if you can do it without risk. Take precautionary measures against static discharges. Pay attention to flashback. All equipment used when handling the product must be grounded.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Ground and bond containers when transferring material. Small spillage: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Large spillage: Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. Ensure adequate ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

Conditions for safe storage, including any incompatibilities

Storage Keep away for open flame, hot surfaces and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children. Keep container closed when not in use. Keep away from incompatible materials

Incompatible products Strong oxidizing agents, strong acids, strong reducing agents, strong alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

Chemical Name	CAS	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl isobutyl ketone	108-10-1	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³ (vacated) TWA: 50	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m ³

			ppm (vacated) TWA: 205 mg/m ₃ (vacated) STEL: 75 ppm (vacated) STEL: 300 mg/m ₃	STEL: 75 ppm STEL: 300 mg/m ₃
Cyclohexanone	108-94-1	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ₃ (vacated) TWA: 25 ppm (vacated) TWA: 100 mg/m ₃ (vacated) S*	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ₃
Titanium Dioxide	13463-67-7	TWA: 10 mg/m ₃	TWA: 15 mg/m ₃ total dust (vacated) TWA: 10 mg/m ₃ total dust	IDLH: 5000 mg/m ₃
Carbon Black	1333-86-4	TWA: 3 mg/m ₃ inhalable particulate matter	TWA: 3.5 mg/m ₃ (vacated) TWA: 3.5 mg/m ₃	IDLH: 1750 mg/m ₃ TWA: 3.5 mg/m ₃ TWA: 0.1 mg/m ₃ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

Immediately Dangerous to Life or Health. ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH:

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures Showers, eyewash stations, ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Goggles. If splashes are likely to occur, wear: Chemical splash goggles.

Skin and Body Protection Risk of contact: Chemical resistant gloves. Apron. Boots.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene Measures When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid
Odor Pungent, Mild
Appearance Varies, Thin viscosity
Odor Threshold No information available

<u>Property</u>	<u>Value</u>	<u>Remarks/Method</u>
pH	No data available	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	117.22 °C / 243 °F	None known
Flash Point	15.56 °C / 60 °F	Tag closed cup
Evaporation rate	1.6 (BuAc = 1)	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air upper flammability limit	No data available	

lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	> 1 (air = 1)	None known
Specific Gravity	No data available	None known
Water Solubility	Moderate	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known

Flammable Properties Flammable liquid. HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

Explosive Properties No data available

Oxidizing Properties No data available

Other information

VOC Content (%)

Black: 85.99%
 Blue: 87.24%
 Green: 86.51%
 Red: 88.77%
 White: 86.1%
 Yellow: 89.03%

VOC (g/l)

Black: 757 g/L
 Blue: 762 g/L
 Green: 761 g/L
 Red: 796 g/L
 White: 757 g/L
 Yellow: 778 g/L

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under normal storage conditions
Possibility of Hazardous reactions	None under normal use
Hazardous Polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	Heat, flames and sparks. Incompatible products
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong reducing agents. Strong alkalis
Hazardous Decomposition -products	Carbon dioxide, smoke, soot

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Harmful if inhaled. May cause irritation of respiratory tract.
Eye Contact Causes serious eye irritation.

Skin Contact May be harmful in contact with skin.
Ingestion Harmful if swallowed.

Numerical measures of toxicity – Product

Unknown acute toxicity 45.739% of the mixture consists of ingredient(s) of unknown toxicity. *The following values are calculated based on chapter 3.1 of the GHS document:*

LD50 Oral 1502 mg/kg; Acute toxicity estimate
LD50 Dermal 3371 mg/kg; Acute toxicity estimate
Inhalation
Dust/mist 1.57 mg/L; Acute toxicity estimate
Vapor 16.06 mg/L; Acute toxicity estimate

Name	LD50 Oral	LD50 Dermal	LC50 inhalation
Methyl Isobutyl Ketone	= 2080 mg/kg (Rat)	> 16000 mg/kg (Rabbit)	= 8.2 mg/L (Rat) 4 h
Cyclohexanone	= 1544 mg/kg (Rat)	= 947 mg/kg (Rabbit)	= 8000 ppm (Rat) 4 h
Titanium Dioxide	> 10000 mg/kg (Rat)	--	--
Carbon Black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	--

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Respiratory or Skin Sensitization No information available.
Germ Cell Mutagenicity No information available.
Carcinogenicity May cause cancer. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl Isobutyl ketone	A3	Group 2B	-	X
Cyclohexanone	A3	Group 3	-	-
Titanium Dioxide	-	Group 2B	-	-
Carbon Black	A3	Group 2B	-	X

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to its Carcinogenicity to Humans

OSHA: (Occupational Safety & Health Administration)
X - Present

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic Toxicity Avoid repeated exposure. Possible risks of irreversible effects.
Target Organ Effects Liver. Kidney. Respiratory system. Eyes. Skin. Central nervous system (CNS). Lungs. Lymphatic system.
Aspiration Hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyl isobutyl ketone 108-10-1	EC50 96 h: = 400 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: 496 - 514 mg/L flow-through (Pimephales promelas)	EC50 = 79.6 mg/L 5 min	EC50 48 h: = 170 mg/L (Daphnia magna)
Cyclohexanone 108-94-1	EC50 96 h: = 20 mg/L (Chlorella vulgaris)	LC50 96 h: 481 - 578 mg/L flow-through (Pimephales promelas) LC50 96 h: = 8.9 mg/L (Pimephales promelas)	EC50 = 18.5 mg/L 5 min EC50 = 21.3 mg/L 10 min EC50 = 25 mg/L 5 min	EC50 24 h: = 800 mg/L (Daphnia magna)
Carbon black 1333-86-4				EC50 24 h: > 5600 mg/L (Daphnia magna)

Persistence and Degradability No information available.

Bioaccumulation

Chemical Name	Log Pow
Methyl isobutyl ketone	1.19
Cyclohexanone	0.86

Mobility No information available.

Other Adverse Effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local/regional/national regulations.

Contaminated Packaging Do not re-use empty containers.

US EPA Waste Number U057
U161

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl isobutyl ketone 108-10-1		Included in waste stream: F039		U161
Cyclohexanone 108-94-1		Included in waste stream: F039		U057

14. TRANSPORT INFORMATION

DOT

UN-Number UN1263

Proper shipping name Paint

Hazard Class 3

Packing Group II

Description UN1263, Paint, 3, II
Emergency Response Guide Number
128

TDG

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II
Description UN1263, Paint, 3, II

MEX

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II
Description UN1263, Paint, 3, II

IATA

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II
ERG Code 3L
Description UN1263, Paint, 3, II

IMDG/IMO

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II
EmS No. F-E, S-E
Description UN1263, Paint, 3, II, (15.56°C c.c.)

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS:

Ozone depleting substances Not applicable
Persistent Organic Pollutants Not applicable

Hazardous Waste

Chemical Name	Basel Convention (Hazardous Wastes)
Methyl isobutyl ketone	Y42

The Rotterdam Convention (Prior Informed Consent) Not applicable
International Convention for the Prevention of Pollution from Ships (MARPOL) Not applicable

International Inventories

TSCA Not determined
DSL Not determined

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
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Methyl isobutyl ketone	108-10-1	67.93	1.0
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SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Methyl isobutyl ketone	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Cyclohexanone	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Methyl isobutyl ketone	108-10-1	Carcinogen Developmental
Titanium dioxide	13463-67-7	Carcinogen
Carbon black	1333-86-4	Carcinogen

US State Right to Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Component	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Methyl isobutyl ketone	X	X	X	X	X
Cyclohexanone	X	X	X	X	X
Titanium dioxide	X	X	X		X
Carbon black	X	X	X	X	X
Methyl ethyl ketone	X	X	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA **Health Hazard** 2 **Flammability** 3 **Instability** 0 **Physical and Chemical Hazards** --
HMIS **Health Hazard** 2* **Flammability** 3 **Physical Hazard** 0 **Personal Protection** X
**Indicates a chronic health hazard*

SKM has been advised by attorney that the OSHA Hazard Communication Standard does not apply to the SKM products listed in this SDS. The explanation for the exemption is contained in 29 CFR

1910.1200(b)(6)(ix) as amended July 1, 2002 per the code of Federal Regulations. This information contained in this MSDS is forwarded to you for your information, but is not meant to imply that the Hazard Communication Standard covers the product nor is this SDS meant to comply with all requirements of the Hazard Communication Standard. This information provided in the Material Safety Data Sheet has been compiled from our experience and data with similar commercially available materials and is believed to be accurate. No guarantee of accuracy is made. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions and disposal procedures. The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet