SAFETY DATA SHEET



HD Orange Hand Cleaner

Section 1. Identi	
GHS product identifier	: HD Orange Hand Cleaner
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of	f the substance or mixture and uses advised against
Identified uses	
reasonably foreseeable use requirements of a SDS for t	smetic, or drug product that is safe for consumers and other users under normal and e. Cosmetics and drug products, specifically defined by regulations, are exempt from the the consumer. This SDS contains valuable information critical to the safe handling and proper strial workplace conditions as well as unusual and unintended exposures such as large spills.
Supplier's details	: Betco Corporation LTD 400 Van Camp Road Bowling Green, OH 43402 www.betco.com 888-462-3826
Emergency telephone number (with hours of operation)	: Chemtrec (800) 424-9300 24 hour
Section 2. Hazar	ds identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard
	(29 CFR 1910.1200).
Classification of the substance or mixture	: RESPIRATORY SENSITIZATION - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Signal word Hazard statements	 Danger May cause allergy or asthma symptoms or breathing difficulties if inhaled.
-	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Hazard statements	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Hazard statements Precautionary statements	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Hazard statements <u>Precautionary statements</u> Prevention	 May cause allergy or asthma symptoms or breathing difficulties if inhaled. S Wear respiratory protection. Avoid breathing vapor. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or
Hazard statements <u>Precautionary statements</u> Prevention Response	 May cause allergy or asthma symptoms or breathing difficulties if inhaled. S Wear respiratory protection. Avoid breathing vapor. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician.

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

: Mixture

: Not available.

CAS number/other identifiers

CAS number	: Not applicable.
Product code	: 792

Ingredient name	%	CAS number
crystalline silica, respirable powder	≥10 - <25	14808-60-7
Distillates (petroleum), hydrotreated light	≥5 - <10	64742-47-8
titanium dioxide	≥0.3 - <1	13463-67-7
Terpenes and Terpenoids, sweet orange-oil	≥0.1 - <0.3	68647-72-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed			
Potential acute health effects			
Eye contact	: No known significant effects or critical hazards.		
Inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.		
Skin contact	: No known significant effects or critical hazards.		
Ingestion	: No known significant effects or critical hazards.		
Over-exposure signs/symptoms			
Eye contact	: No specific data.		

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Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following: wheezing and breathing difficulties asthma
Skin contact	: No specific data.
Ingestion	: No specific data.
Notes to physician	 dical attention and special treatment needed, if necessary Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Notes to physician	
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures		
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.		
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".		
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).		
Methods and materials for containment and cleaning up			
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.		

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Section 6. Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling				
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.			
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.			
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.			

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits			
crystalline silica, respirable powder	OSHA PEL Z3 (United States, 2/2013). Notes: 250/(%SiO2+5) TWA: 250 MPPCF / (%SiO2+5) 8 hours. Form: Respirable OSHA PEL Z3 (United States, 2/2013). Notes: 10/(SiO2+2) TWA: 10 MG/M3 / (%SiO2+2) 8 hours. Form: Respirable OSHA PEL 1989 (United States, 3/1989). TWA: 0.1 mg/m ³ , (as quartz) 8 hours. Form: Respirable dust ACGIH TLV (United States, 4/2014). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2013). TWA: 0.05 mg/m ³ 10 hours. Form: respirable dust ACGIH TLV (United States, 4/2014).			
Distillates (petroleum), hydrotreated light	ACGIH TLV (United States, 4/2014). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.			
titanium dioxide	ACGIH TLV (United States, 4/2014). TWA: 10 mg/m ³ 8 hours.			
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Section 8. Exposure controls/personal protection

	OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 15 mg/m ³ 8 hours. Form: Total dust
Appropriate engineering controls	: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measu	I <u>res</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: White. Opaque.
Odor	: Orange.
Odor threshold	: Not available.
рН	: 7 to 9
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: >150°C (>302°F) [Product does not sustain combustion.]
Evaporation rate	: Not available.
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Section 9. Physical and chemical properties

Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.998
Solubility	: Partially soluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human		72 hours 300 Micrograms Intermittent	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
crystalline silica, respirable powder	-	1	Known to be a human carcinogen.
titanium dioxide	-	2B	-

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Section 11. Toxicological information

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
crystalline silica, respirable powder	Category 2		Not determined
Distillates (petroleum), hydrotreated light	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

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Name	Result		
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1		

Information on the likely routes of exposure	:	Routes of entry anticipated: Oral, Dermal. Routes of entry not anticipated: Inhalation.
Potential acute health effects	5	
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phy	<u>vsio</u>	cal, chemical and toxicological characteristics
Eye contact	1	No specific data.
Inhalation	:	Adverse symptoms may include the following: wheezing and breathing difficulties asthma
Skin contact	1	No specific data.
Ingestion	1	No specific data.
Delayed and immediate effect	<u>ts:</u>	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	1	Not available.
Potential delayed effects	4	Not available.
Long term exposure Potential immediate effects	:	Not available.
Potential delayed effects		Not available.
Potential chronic health effe	ect	<u>S</u>
Not available.		
General	:	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	1	No known significant effects or critical hazards.
Mutagenicity	1	No known significant effects or critical hazards.
Teratogenicity	1	No known significant effects or critical hazards.
Developmental effects	1	No known significant effects or critical hazards.

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Section 11. Toxicological information

Fertility effects

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
titanium dioxide	-	352	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	-					
	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations		TSCA 8(a) CDR Exempt/Partial exemption: Not determined Not determined.
		Clean Water Act (CWA) 311: sodium hydroxide
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Not listed
Clean Air Act Section 602 Class I Substances	:	Not listed
Clean Air Act Section 602 Class II Substances	:	Not listed
DEA List I Chemicals (Precursor Chemicals)	:	Not listed
DEA List II Chemicals (Essential Chemicals)	:	Not listed
SARA 302/304		
Composition/information	on i	ngredients
No products were found.		
SARA 304 RQ	:	Not applicable.
SARA 311/312		
Classification	:	Immediate (acute) health hazard
Composition/information	on i	ngredients

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Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
crystalline silica, respirable powder	≥10 - <25	No.	No.	No.	Yes.	Yes.
Distillates (petroleum), hydrotreated light	≥5 - <10	No.	No.	No.	Yes.	No.
titanium dioxide	≥0.3 - <1	No.	No.	No.	No.	Yes.
Terpenes and Terpenoids, sweet orange-oil	≥0.1 - <0.3	Yes.	No.	No.	Yes.	No.

State regulations

Massachusetts	: The following components are listed: SILICA, CRYSTALLINE, QUARTZ
New York	: None of the components are listed.
New Jersey	: The following components are listed: TITANIUM DIOXIDE; TITANIUM OXIDE (TiO2); SILICA, QUARTZ; QUARTZ (SiO2)
Pennsylvania	: The following components are listed: TITANIUM OXIDE (TIO2); QUARTZ (SIO2)

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	· · · · ·	Maximum acceptable dosage level
crystalline silica, respirable powder titanium dioxide			No. No.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory		
Australia	÷	Not determined.
Canada	÷	Not determined.
China	i,	Not determined.
Europe	i,	Not determined.
Japan	:	Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	÷	Not determined.
New Zealand	÷	Not determined.
Philippines	÷	Not determined.
Republic of Korea	÷	Not determined.
Taiwan	÷	Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Classification		Justification		
Resp. Sens. 1, H334		Expert judgment		
History				
Date of printing	: 7/6/2016			
Date of issue/Date of revision	: 5/19/2016			
Date of previous issue	: 5/2/2016			
Version	: 1.03			
Key to abbreviations	IATA = International Air T IBC = Intermediate Bulk (IMDG = International Mar LogPow = logarithm of the MARPOL = International	Factor zed System of Classification and Labelling of Chemicals ransport Association Container		
References	: Not available.			

Procedure used to derive the classification

es information that has changed from previously

Notice to reader

Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained 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 caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.