SAFETY DATA SHEET

1. Identification

Product number	198316	
Product identifier	16 OZ MALCO ONE STEP DETAIL SPRAY 1	2PK
Company information	MALCO PRODUCTS 361 FAIRVIEW AVE BARBERTON, OH 44203 United States	
Company phone	General Assistance 330-753-0361	
Emergency telephone US	1-866-836-8855	
Emergency telephone outside US	1-952-852-4646	
Version #	01	
Recommended use	Not available.	
Recommended restrictions	None known.	
2. Hazard(s) identification		
Physical hazards	Flammable aerosols	Category 1
Health hazards	Not classified.	
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
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Signal word	Danger
Hazard statement	Extremely flammable aerosol.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.
Response	Wash hands after handling.
Storage	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Butoxyethanol		111-76-2	1 - 2.5
Butane		106-97-8	1 - 2.5
Ethyl Alcohol		64-17-5	1 - 2.5
Polydimethylsiloxane		63148-62-9	1 - 2.5
Propane		74-98-6	1 - 2.5
Other components below reportabl	e levels		90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Not available.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	

5 5	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
General fire hazards	Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not spray on a naked flame or any other incandescent material. Use only in well-ventilated areas. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not re-use empty containers. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Level 1 Aerosol.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)				
Components	Туре	Value		
2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3		

Components		Туре	(29 CFR 1910.10		Value
·					
	-	DEI			50 ppm
Ethyl Alcohol (CAS 64-17-5	5)	PEL			1900 mg/m3
		סכו			1000 ppm
Propane (CAS 74-98-6)		PEL			1800 mg/m3
					1000 ppm
US. ACGIH Threshold Lim	nit Values				
Components		Туре			Value
2-Butoxyethanol (CAS		TWA			20 ppm
111-76-2)					pp
Butane (CAS 106-97-8)		STEL			1000 ppm
Ethyl Alcohol (CAS 64-17-5	5)	STEL			1000 ppm
US. NIOSH: Pocket Guide	to Chemical Ha	zards			
Components		Туре			Value
· · · · · · · · · · · · · · · · · · ·					
2-Butoxyethanol (CAS 111-76-2)		TWA			24 mg/m3
111-70-2)					5 ppm
Butane (CAS 106-97-8)		TWA			1900 mg/m3
					800 ppm
Ethyl Alcohol (CAS 64-17-5	5)	TWA			1900 mg/m3
	<i></i>	IVVA			1000 ppm
Propane (CAS 74-98-6)		TWA			1800 mg/m3
		1			1000 ppm
					1000 pp
logical limit values					
ACGIH Biological Exposu			Determinent	0	
Components	Value		Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	200 mg/g		Butoxyacetic acid (BAA), with hydrolysis	Creatinine urine	in *
* - For sampling details, ple	asso soo the sour	co docu			
			ment.		
osure guidelines					
US - California OELs: Ski					
2-Butoxyethanol (CAS US - Minnesota Haz Subs		on appli		e absorbed th	rough the skin.
2-Butoxyethanol (CAS			Skin d	esignation app	olies.
US - Tennesse OELs: Ski	n designation				
2-Butoxyethanol (CAS US NIOSH Pocket Guide t		ards: Sł		e absorbed th	rough the skin.
2-Butoxyethanol (CAS US. OSHA Table Z-1 Limit		ninants			rough the skin.
				00,	
2-Butoxvethanol (CAS	111-76-2)		Can be		rough the skin.
2-Butoxyethanol (CAS propriate engineering strols	-	oof gen	Can be eral and local exh	e absorbed th	rough the skin. n.
propriate engineering trols	Explosion-pro	-	eral and local exh	e absorbed the aust ventilatio	-
propriate engineering	Explosion-pro	onal pro	eral and local exh ptective equipme	e absorbed the aust ventilatio	-
propriate engineering trols ividual protection measure	Explosion-pro	onal pro ikely, sa	eral and local exh otective equipme fety glasses with	e absorbed the aust ventilatio	n.
oropriate engineering itrols ividual protection measure Eye/face protection Hand protection	Explosion-pro es, such as perso If contact is li	onal pro ikely, sa	eral and local exh otective equipme fety glasses with	e absorbed the aust ventilatio	n.
oropriate engineering itrols ividual protection measure Eye/face protection Hand protection Skin protection	Explosion-pro es, such as perso If contact is li Wear protect	onal pro ikely, sa ive glov	eral and local exh otective equipme fety glasses with es.	e absorbed the aust ventilatio	n.
oropriate engineering itrols ividual protection measure Eye/face protection Hand protection Skin protection Other	Explosion-pro es, such as perso If contact is li Wear protect Wear suitable	onal pro ikely, sa ive glov e protec	eral and local exh otective equipme fety glasses with res. ctive clothing.	e absorbed thi aust ventilatio ent side shields a	n.
oropriate engineering itrols ividual protection measure Eye/face protection Hand protection Skin protection	Explosion-pro es, such as perso If contact is li Wear protect Wear suitable If engineerin limits (where	onal pro ikely, sa ive glov e protec ig contro applica	eral and local exh otective equipme fety glasses with res. ctive clothing. ols do not maintai	e absorbed thi aust ventilatio ent side shields a n airborne cor ptable level (i	n. re recommended. ncentrations below recommended exposure n countries where exposure limits have no

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Gas.
Form	Aerosol.
Color	off-white
Odor	Citrus
Odor threshold	Not available.
рН	9.5 - 10.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212 °F (100 °C) estimated
Flash point	-156.0 °F (-104.4 °C) Propellant estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	67 - 77 psig @70F estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Specific gravity	0.99 - 1 estimated
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials. Fire or intense heat may cause violent rupture of packages.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.
11. Toxicological informat	ion

Information on likely routes of exposure Ingestion Expected to be a low ingestion hazard. Inhalation No adverse effects due to inhalation are expected. Skin contact No adverse effects due to skin contact are expected.

Eye contact

Acute toxicity

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation. Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

2Butaxyethanol (CAS 111-76-2) Acute Dormal LD50 Guinea pig 230 ml/kg, 24 Hours Rabbit 450 ml/kg, 24 Hours 455 ml/kg, 24 Hours 0.63 ml/kg Rat LD50 Rabbit 400 ppm, 7 Hours Rat CS0 Rabbit 400 ppm, 7 Hours 450 ppm, 4 Hours Oral LD100 Rabbit 695 mg/kg Guinea pig 1200 mg/kg Rat 530 - 2800 mg/kg Guinea pig 1200 mg/kg Rat 530 - 2800 mg/kg Rat 1325 mg/l Acute Inhalation LC50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes 53 %, 120 Minutes 54 %, 120 Minutes 53 %, 120 Minutes 54 %, 120 Minutes 54 %, 120 Minutes 51 %, 130 mg/l, 4 Hours Cral LD50 Mouse 151 % mg/l, 4 Hours Cral LD50 Mouse 151 % mg/l, 4 Hours Cral LD50 Monkey 6000 ppm 79.43 mg/l, 134 Minutes 51 % mg/l, 4 Hours 51 % mg/l, 4 Hours 7800 ml/kg Propane (CAS 74-98-6) Acute Inhalation LC50 Mouse 1237 mg/l, 120 Minutes			
Acute Jormal Dermal 7.3 ml/kg, 4 Hours LD50 Guinea pig 7.3 ml/kg, 4 Hours LD50 Rabbit 450 ml/kg, 24 Hours Ad5 mg/kg, 24 Hours 450 ml/kg, 24 Hours Inhalation Inhalation 63 ml/kg Inhalation 800 pm, 7 Hours 100 pm, 7 Hours Oral Rat 605 mg/kg D10 Guinea pig 605 mg/kg D10 Guinea pig 300 mg/kg LD50 Dog 900 mg/kg LD50 Guinea pig 300 mg/kg LD50 Mouse 300 mg/kg Acute 1237 mg/l, 120 Minutes Inhalation 52 %, 120 Minutes Inhalation 52 %, 120 Minutes LC50 Mouse 3000 pg/li 34 Minutes LC50 Cat 43.68 mg/l, 61 Hours LC50 Mouse 9030 mg/kg LD50 Mouse 9030 mg/kg LD50 Mouse 6000 mg/kg LD50 Mouse 115.9 mg/l, 4 Hours LD50 Mouse 10500 ml/kg Mouse </th <th>Components</th> <th>Species</th> <th>Test Results</th>	Components	Species	Test Results
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Inhalation LC50 Mouse 1237 mg/l, 120 Minutes			
LC50 Mouse 1237 mg/l, 120 Minutes			
-		Mouse	1237 mg/l, 120 Minutes
			52 %, 120 Minutes

Components	Species	Test Results
	Rat	1355 mg/l
		658 mg/l/4h
Skin corrosion/irritation	Prolonged skin contact may	cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may	cause temporary irritation.
Respiratory or skin sensitizatio	n	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected	to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate mutagenic or genotoxic.	product or any components present at greater than 0.1% are
Carcinogenicity	This product is not considere	d to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
IARC Monographs. Overall	Evaluation of Carcinogenicity	,
2-Butoxyethanol (CAS 1 OSHA Specifically Regulate Not listed.	11-76-2) d Substances (29 CFR 1910.1	3 Not classifiable as to carcinogenicity to humans. 1001-1050)
Reproductive toxicity	This product is not expected	to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results
16 OZ MALCO ONE STEP D	DETAIL SPRAY 12	2PK (CAS Mixture)	
Aquatic			
Crustacea	EC50	Daphnia	14940.9736 mg/L, 48 Hours estimated
Fish	LC50	Fish	1051.5981 mg/l, 96 hours estimated
Acute			
Algae	IC50	Algae	2033.7108 mg/L, 72 Hours estimated
Components		Species	Test Results
2-Butoxyethanol (CAS 111-7	'6-2)		
Aquatic			
Fish	LC50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours
Ethyl Alcohol (CAS 64-17-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7700 - 11200 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100.1 mg/l, 96 hours
Polydimethylsiloxane (CAS 6	63148-62-9)		
Aquatic			
Fish	LC50	Channel catfish (Ictalurus punctatus)	2.36 - 4.15 mg/l, 96 hours
sistence and degradability	Not available.		
accumulative potential	Not available.		
Partition coefficient n-octa	nol / water (log k	(ow)	
2-Butoxyethanol		0.83	
Butane Ethyl Alcohol		2.89 -0.31	
Propane		2.36	
bility in soil	Not available.		
er adverse effects	Not available.		
duct name: 16 OZ MALCO ONE	STEP DETAIL SPE	RAY 12PK	SD

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN1950
UN proper shipping name Transport hazard class(es)	Aerosols, flammable
Class	2.1
Subsidiary risk	•
Label(s)	2.1
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

ΙΑΤΑ

IATA	
UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	
Label(s) Packing	2.1
group Environmental	Not applicable.
hazards ERG Code	No.
	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.
Packaging Exceptions	LTD QTY
IMDG	
UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.1
Subsidiary risk	•
Label(s) Packing	2.1
group Environmental	Not applicable.
hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

DOT



15. Regulatory information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication US federal regulations Standard, 29 CFR 1910.1200. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) Immediate Hazard - No Hazard categories Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance Not listed. SARA 311/312 Hazardous No chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Butane (CAS 106-97-8) Propane (CAS 74-98-6) Not regulated. Safe Drinking Water Act (SDWA)

US state regulations			
US. Massachusetts RTK - Substance List			
2-Butoxyethanol (CAS 1	11-76-2)		
Butane (CAS 106-97-8)	,		
Ethyl Alcohol (CAS 64-1) Propane (CAS 74-98-6)	7-5)		
	Community Right-to-Know Act		
2-Butoxyethanol (CAS 1			
Butane (CAS 106-97-8)	- ,		
Ethyl Alcohol (CAS 64-1	7-5)		
Propane (CAS 74-98-6)	nd Community Right-to-Know Law		
2-Butoxyethanol (CAS 1			
Butane (CAS 106-97-8)	11-70-2)		
Ethyl Alcohol (CAS 64-1	7-5)		
Propane (CAS 74-98-6)			
US. Rhode Island RTK Butane (CAS 106-97-8)			
Propane (CAS 74-98-6)			
US. California Proposition 6	65		
WARNING: This product	contains a chemical known to the State of California to cause cancer.		
US - California Proposi	tion 65 - CRT: Listed date/Carcinogenic substance		
Diethanolamine (CA	S 111-42-2) Listed: June 22, 2012		
International Inventories			
Country(s) or region	Inventory name	On inventory (yes/no)*	
Australia	Australian Inventory of Chemical Substances (AICS)	No	
Canada	Domestic Substances List (DSL)	Yes	
Canada	Non-Domestic Substances List (NDSL)	No	
China	Inventory of Existing Chemical Substances in China (IECSC)	No	
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No	
Europe	European List of Notified Chemical Substances (ELINCS)	No	
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No	
Korea	Existing Chemicals List (ECL)	No	
New Zealand	New Zealand Inventory	No	
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes	
*A "Yes" indicates that all compo A "No" indicates that one or more country(s).	nents of this product comply with the inventory requirements administered by th e components of the product are not listed or exempt from listing on the inventor	e governing country(s) y administered by the governing	

country(s).

16. Other information, including date of preparation or last revision

Issue date Version #	03-02-2015 01
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.
Revision Information	Physical and chemical properties: Appearance