## James Law (Chemicals) LTD SAFETY DATA SHEET

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

1.1. Product identifier Trade name or designation of the mixture	Orange Cleaner
Registration number	-
Synonyms	None.
Issue date	16-July-2015 Revision date: 01/11/2019
Version number	02
1.2. Relevant identified uses of the Identified uses	e substance or mixture and uses advised against Preparatory and cleaning products
Uses advised against	No other uses are advised.
1.3. Details of the supplier of the s	afety data sheet
UK	
Company name	James Law (Chemicals Ltd)
Address	Crossley Street Works
	Royal Street, Smallbridge
	Rochdale OL16 2QA
	UK
Telephone	+44(0)1706 644940
Fax	+44(0)1706 644037
e-mail	sales@jameslawchemicals.com
Website	www.jameslawchemicals.com
1.4 Emergency telephone number	+44(0)1706 644940

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Environmental hazards Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.

#### Hazard summary

Risk of serious damage to eyes. Irritating to skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Prolonged exposure may cause chronic effects.

#### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Contains:

2-Butoxyethanol, Amides, coco, N,N-bis(hydroxyethyl), Orange Terpenes, Sodium C10 C16 Alkyl Ethoxy Sulphate

Hazard pictograms



Signal word	Danger				
Hazard statements					
H315	Causes skin irrita	tion.			
H317	May cause an allergic skin reaction.				
H318	Causes serious eye damage.				
H411	Toxic to aquatic life with long lasting effects.				
Precautionary statements					
Prevention					
P102	Keep out of reach	n of children			
P103	Read label before				
P261	Avoid breathing r				
P264	-	oughly after handling			
P272			t be allowed out of the work	place.	
P273	Avoid release to t	-			
P280	Wear protective g	gloves.			
P280	Wear eye/face pr	otection.			
Response					
P101	If medical advice	is needed, have prod	uct container or label at har	ıd.	
P302 + P352		sh with plenty of wate			
P305 + P351 + P338			er for several minutes. Rem	ove contact lenses	, if present
	and easy to do. C	-			
P310	Immediately call	a POISON CENTER/	doctor.		
P321	Specific treatment	nt (see this label).			
P333 + P313	If skin irritation or	rash occurs: Get me	dical advice/attention.		
P362 + P364	Take off contamin	nated clothing and wa	sh it before reuse.		
P391	Collect spillage.				
Storage	Not required				
Disposal					
P501	Dispose of conte	nts/container (in acco	rdance with related regulation	ns)	
Supplemental label information	Dispose of contents/container (in accordance with related regulations). None.				
2.3. Other hazards	None known.				
<b>SECTION 3: Composition/in</b>	formation on ing	gredients			
3.2. Mixtures					
General information					
Chemical name	%	CAS-No / EC No	REACH Registration No.	INDEX No.	Notes
Chemical hame	70	CAS-NO. / EC NO.	REACH Registration No.	INDEA NO.	NULES
2-Butoxyethanol	10 - < 20	111-76-2 203-905-0	01-2119475108-36-xxxx	603-014-00-0	#
		203-905-0			
Classification:		000 01: 1 : 0 104			
CLF	Acute Iox. 4;H	302, Skin Irrit. 2;H31	b, Eye Irrit. 2;H319		
Amides, coco, N,N-bis(hydroxy	yethyl) 5 - < 10	68603-42-9	-	-	
		271-657-0			
Classification:					
CLF	Skin Irrit. 2;H3	15, Eye Dam. 1;H318			
Orange Terpenes	5 - < 10	68647-72-3	-	-	
		232-433-8			
Classification:					
CLP	Flam. Lia. 3:H2	226, Asp. Tox. 1:H304	, Skin Irrit. 2;H315, Skin Se	ns. 1;H317.	
		1;H400, Aquatic Chro		,,	
	-				

Chemical name	% CAS-No. / EC No. REACH Registration No. INDEX No. Notes		
Sodium C10 C16 Alkyl Ethoxy Sulphate <b>Classification:</b>	y 3 - < 5 68585-34-2 01-2119488639-16-xxxx - 500-223-8		
Classification.	Skin Irrit. 2;H315, Eye Dam. 1;H318		
<b>List of abbreviations and symbols</b> CLP: Regulation No. 1272/200			
#: This substance has been as	ssigned Community workplace exposure limit(s).		
Composition comments	The full text for all H-phrases is displayed in section 16.		
SECTION 4: First aid measu	Jres		
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.		
1.1. Description of first aid measur			
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.		
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.		
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.		
Ingestion	Rinse mouth. Get medical attention if symptoms occur.		
I.2. Most important symptoms and effects, both acute and delayed	May cause temporary blindness and severe eye damage. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.		
4.3. Indication of any immediate medical attention and special reatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.		
SECTION 5: Firefighting me	easures		
General fire hazards	No unusual fire or explosion hazards noted.		
5.1. Extinguishing media Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.		
5.2. Special hazards arising rom the substance or mixture	During fire, gases hazardous to health may be formed.		
5.3. Advice for firefighters Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.		
Special fire fighting procedures	Move containers from fire area if you can do so without risk.		
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.		
SECTION 6: Accidental rele	ase measures		
	ve equipment and emergency procedures		
For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Avoid breathing mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised significant spillages cannot be contained. For personal protection, see section 8.		
<b>-</b> .			

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.
6.3. Methods and material for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapours or divert vapour cloud drift. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8. For waste disposal, see section 13 of the SDS.
SECTION 7: Handling and s	storage
7.1. Precautions for safe handling	Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapour. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid

	release to the environment. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Not available.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

#### UK. EH40 Workplace Exposure Limits (WELs)

Components	Туре	Value	
2-Butoxyethanol (111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	123 mg/m3	
		25 ppm	

EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents.

Components	Туре	Value	
2-Butoxyethanol (111-76-2)	STEL	246 mg/m3	
		50 ppm	
	TWA	98 mg/m3	
		20 ppm	

#### **Biological limit values**

#### UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling time
2-Butoxyethanol (111-76-2)	240 mmol/mol	Butoxyacetic acid	Creatinine in urine	Sampling time: End of shift.
Recommended monitoring procedures	Follow standard mo	nitoring procedures.		
Derived no-effect level (DNEL)	Not available.			
Predicted no effect concentrations (PNECs)	Not available.			
8.2. Exposure controls				
Appropriate engineering controls	should be matched or other engineering exposure limits have	to conditions. If appl controls to maintain not been establish	licable, use pro n airborne leve ed, maintain a	hour) should be used. Ventilation rates poess enclosures, local exhaust ventilation, els below recommended exposure limits. If irborne levels to an acceptable level. Eye ple when handling this product.

#### Individual protection measures, such as personal protective equipment

General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Wear safety glasses with side shields (or goggles). Do not get in eyes.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear appropriate chemical resistant clothing. Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Not applicable.
Hygiene measures	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. Contaminated work clothing should not be allowed out of the workplace.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance

, hhere and the	
Physical state	Liquid.
Form	aqueous-organic solution
Colour	Orange.
Odour	Characteristic.
Odour threshold	Not applicable
рН	8.0 - 9.0 estimated
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explo	sive limits
Flammability limit - lower (%)	Not applicable
Flammability limit - upper (%)	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Miscible
Solubility (other)	Not available.
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable
Explosive properties	Not applicable
Oxidizing properties	Not applicable
9.2. Other information	No relevant additional information available.

## SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

## SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.		
Information on likely routes of expo	osure		
Inhalation	Prolonged inhalation may be harmful.		
Skin contact	Causes skin irritation. May cause an allergic skin reaction.		
	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.		
Eye contact	Causes serious eye damage.		
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.		
Symptoms	Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. May cause temporary blindness and severe eye damage.		

#### 11.1. Information on toxicological effects

Acute toxicity	May cause an allergic skin reaction	n.	
Components	Species	Test results	
2-Butoxyethanol (CAS 111-76-	-2)		
Acute			
Dermal			
LD50	Rabbit	> 2000 mg/kg, 24 hours semi-occlusive	
	Rat	> 2000 mg/kg, 24 hours occlusive	
Oral			
LD50	Guinea pig	1414 mg/kg	
NOAEC	Guinea pig	500 mg/kg single dose	
Amides, coco, N,N-bis(hydroxy 68603-42-9)	yethyl) (CAS		
Acute			
Oral			
LD50	Rat	> 5000 mg/kg	
* Estimates for product ma	ay be based on additional component d	ata not shown.	
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye irritation	Causes serious eye damage.		
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.		
Skin sensitisation	May cause an allergic skin reaction.		
Germ cell mutagenicity	Due to partial or complete lack of	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Due to partial or complete lack of	Due to partial or complete lack of data the classification is not possible.	
Reproductive toxicity	Due to partial or complete lack of	data the classification is not possible.	

Specific target organ toxicity - single exposure	Due to partia	Due to partial or complete lack of data the classification is not possible.		
Specific target organ toxicity - repeated exposure	Due to partia	Due to partial or complete lack of data the classification is not possible.		
Aspiration hazard	Due to partia	Due to partial or complete lack of data the classification is not possible.		
Mixture versus substance information	No informatio	No information available.		
Other information	Not available	Not available.		
SECTION 12: Ecological in	formation			
12.1. Toxicity	Toxic to aqua	atic life with long lasting effects.		
Components		Species	Test results	
2-Butoxyethanol (CAS 111-76-2)				
Aquatic				
Fish	LC50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours	
Sodium C10 C16 Alkyl Ethoxy Su 68585-34-2)	lphate (CAS			
Aquatic				
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	2.33 - 4.81 mg/l, 48 hours	
* Estimates for product may b	be based on add	litional component data not shown.		
12.2. Persistence and degradability	No data is av	No data is available on the degradability of this product.		
12.3. Bioaccumulative potential	No data avai	able.		
Partition coefficient				
n-octanol/water (log Kow)				
2-Butoxyethanol	<b>N</b> I ( 1111	0,83		
Bioconcentration factor (BCF)		Not available.		
12.4. Mobility in soil		No data available.		
12.5. Results of PBT and vPvB assessment	Not available	Not available.		
12.6. Other adverse effects		No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		
SECTION 13: Disposal con	siderations			
13.1. Waste treatment methods				
Residual waste	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). Dispose of in accordance with local regulations.			
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.			
EU waste code		The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.		
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.			
Special precautions	Dispose in ac	ccordance with all applicable regulations.		
SECTION 14: Transport inf	ormation			
ADR				
14.1. UN number	UN3077 Environment	ally bazardous substance, solid, n.o.s. (Or		

14.3. Transport hazard class(es)		
Class	9	
Subsidiary risk	-	
Label(s)	9	
	90	
Hazard No. (ADR)		
Tunnel restriction code	E	
14.4. Packing group		
14.5. Environmental hazards	No.	
14.6. Special precautions for	Read safety instructions, SDS and emergency procedures before handling.	
user		
RID		
14.1. UN number	UN3077	
14.2. UN proper shipping	Environmentally hazardous substance, solid, n.o.s. (Orange Terpenes)	
name		
14.3. Transport hazard class(	-	
Class	9	
Subsidiary risk	-	
Label(s)	9	
14.4. Packing group	III	
14.5. Environmental hazards	No.	
14.6. Special precautions for	Read safety instructions, SDS and emergency procedures before handling.	
user		
ADN		
14.1. UN number	UN3077	
14.2. UN proper shipping	Environmentally Hazardous Solid, N.o.s. (Orange Terpenes)	
name		
14.3. Transport hazard class(	es)	
Class	9	
Subsidiary risk	-	
Label(s)	9	
14.4. Packing group	III	
14.5. Environmental hazards	No.	
14.6. Special precautions for	Read safety instructions, SDS and emergency procedures before handling.	
user		
ΙΑΤΑ		
14.1. UN number	UN3082	
14.2. UN proper shipping	Environmentally hazardous substance, liquid, n.o.s. (Orange Terpenes)	
name		
14.3. Transport hazard class(	es)	
Class	9	
Subsidiary risk	-	
14.4. Packing group		
14.5. Environmental hazards	No.	
ERG Code	9L	
14.6. Special precautions for	Read safety instructions, SDS and emergency procedures before handling.	
user	······	
Other information		
Passenger and cargo	Allowed.	
aircraft		
Cargo aircraft only	Allowed.	
IMDG		
14.1. UN number	UN3082	
14.2. UN proper shipping	Environmentally hazardous substance, liquid, n.o.s. (Orange Terpenes)	
name	· · · · · · · · · · · · · · · · · · ·	
14.3. Transport hazard class(es)		
Class	9	
Subsidiary risk	-	

14.5. Environmental hazards

Marine pollutant

EmS

No. F-A, S-F

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**14.6. Special precautions for** Read safety instructions, SDS and emergency procedures before handling. **user** 

This substance/mixture is not intended to be transported in bulk.

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

ADN; ADR; IATA; IMDG; RID



IMDG Regulated Marine Pollutant.

#### **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

General information

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 Not listed.

# Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

#### Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

#### Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use Not regulated.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work Not listed.

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work Not regulated.

#### Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding. Not regulated. Other EU regulations Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances Not regulated. Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. 2-Butoxyethanol (CAS 111-76-2) Directive 94/33/EC on the protection of young people at work Not listed. Other regulations This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product is classified and labelled in accordance with EC directives or respective national laws. Additional information is given in the Material Safety Data Sheet. Young people under 18 years old are not allowed to work with this product according to EU National regulations Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents. No Chemical Safety Assessment has been carried out. 15.2. Chemical safety assessment International Inventories Country(s) or region Inventory name On inventory (yes/no)\* Australia Australian Inventory of Chemical Substances (AICS) Yes Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No China Inventory of Existing Chemical Substances in China (IECSC) Yes European Inventory of New and Existing Chemicals (EINECS) Europe Yes European List of Notified Chemical Substances (ELINCS) Europe No Japan Inventory of Existing and New Chemical Substances (ENCS) No Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes Philippines Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS) United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## **SECTION 16: Other information**

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any statements or	

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

> H226 Flammable liquid and vapour. H302 Harmful if swallowed.

	H304 May be fatal if swallowed and enters airways.
	H315 Causes skin irritation.
	H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H319 Causes serious eye irritation.
	H400 Very toxic to aquatic life.
	H410 Very toxic to aquatic life with long lasting effects.
Revision information	None.
Training information	Follow training instructions when handling this material.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
	MANUFACTURER DISCLAIMER: The information given within this SDS is correct to the best of our knowledge, information and belief at the date of its revision and publication. However, the manufacturer makes no representation, warranty or guarantee as to its accuracy, reliability or completeness, nor assumes any liability for its use. It is the user's responsibility to confirm in

document accuracy if the revision date has exceeded 3 years.

advance that the information is current, applicable and suitable to their circumstances for each particular use. No representative of ours has authority to waive this provision. Please call for