

Common Name: COMMERCIAL SOLUTIONS FORMULA 409 CLEANER DEGREASER DISINFECTANT

Manufacturer: CLOROX

SDS Revision Date: 6/8/2017

SDS Format: GHS-US

Item Number(s): 161G29, 1CH09, 5JC09

Manufacturer Model Number(s):

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THE CLOROX COMPANY

SAFETY DATA SHEET

ISSUING DATE: JANUARY 5, 2015

REVISION DATE: JUNE 8, 2017

REVISION NUMBER: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION



AND OF THE COMPANY/UNDERTAKING

PRODUCT IDENTIFIER:

PRODUCT NAME:

CLOROX COMMERCIAL SOLUTIONS (R*) FORMULA 409 (R*) CLEANER DEGREASER
DISINFECTANT

OTHER MEANS OF IDENTIFICATION:

EPA REGISTRATION NUMBER: 67619-10

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:
RECOMMENDED USE: GENERAL PURPOSE CLEANER, DEGREASER, AND DISINFECTANT
USES ADVISED AGAINST: NO INFORMATION AVAILABLE

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

SUPPLIER ADDRESS:
CLOROX PROFESSIONAL PRODUCTS COMPANY
1221 BROADWAY
OAKLAND, CA 94612

PHONE: 1-510-271-7000

EMERGENCY TELEPHONE NUMBER:

EMERGENCY PHONE NUMBERS:
FOR MEDICAL EMERGENCIES CALL: 1-800-446-1014
FOR TRANSPORTATION EMERGENCIES, CALL CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION



CLASSIFICATION:
THIS MIXTURE IS CONSIDERED HAZARDOUS BY THE 2012 OSHA HAZARD COMMUNICATION
STANDARD (29 CFR 1910.1200).

SKIN CORROSION/IRRITATION: CATEGORY 3

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS:

EMERGENCY OVERVIEW:

SIGNAL WORD: WARNING

HAZARD STATEMENTS: CAUSES MILD SKIN IRRITATION

NO PICTOGRAM REQUIRED.

APPEARANCE: CLEAR

PHYSICAL STATE: THIN LIQUID

ODOR: FLORAL, CITRUS

PRECAUTIONARY STATEMENTS - PREVENTION: NONE

PRECAUTIONARY STATEMENTS - RESPONSE:
IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE.

PRECAUTIONARY STATEMENTS - STORAGE: NONE

PRECAUTIONARY STATEMENTS - DISPOSAL: NONE

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC): NOT APPLICABLE

UNKNOWN TOXICITY:
0.2% OF THE MIXTURE CONSISTS OF INGREDIENT(S) OF UNKNOWN TOXICITY

OTHER INFORMATION: VERY TOXIC TO AQUATIC LIFE WITH LONG-LASTING EFFECTS.

INTERACTIONS WITH OTHER CHEMICALS: NONE KNOWN.

3. COMPOSITION/INFORMATION ON INGREDIENTS



CHEMICAL NAME	CAS-NO	WEIGHT %	TRADE SECRET
LAURAMINE OXIDE	1643-20-5	0.5 - 1.5	*
N-ALKYL (40% C12, 50% C14, 10% C16) DIMETHYL BENZYL AMMONIUM CHLORIDE	68424-85-1	0.2 - 0.4	*

* THE EXACT PERCENTAGE (CONCENTRATION) OF COMPOSITION HAS BEEN WITHHELD AS A TRADE SECRET

4. FIRST AID MEASURES



FIRST AID MEASURES:

GENERAL ADVICE: SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.

EYE CONTACT:

HOLD EYE OPEN AND RINSE SLOWLY AND GENTLY WITH WATER FOR 15 - 20 MINUTES. REMOVE CONTACT LENSES, IF PRESENT, AFTER THE FIRST 5 MINUTES, THEN CONTINUE RINSING EYE. CALL A POISON CONTROL CENTER OR DOCTOR FOR TREATMENT ADVICE.

SKIN CONTACT:

TAKE OFF CONTAMINATED CLOTHING. RINSE SKIN IMMEDIATELY WITH PLENTY OF WATER FOR 15-20 MINUTES. CALL A POISON CONTROL CENTER OR DOCTOR FOR TREATMENT ADVICE.

INHALATION: MOVE TO FRESH AIR. IF BREATHING IS AFFECTED, CALL A DOCTOR.

INGESTION:

CALL A POISON CONTROL CENTER OR DOCTOR IMMEDIATELY FOR TREATMENT ADVICE. HAVE PERSON SIP A GLASSFUL OF WATER IF ABLE TO SWALLOW. DO NOT INDUCE VOMITING UNLESS TOLD TO DO SO BY A POISON CONTROL CENTER OR DOCTOR. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

MOST IMPORTANT SYMPTOMS/EFFECTS: MILD IRRITATION OF EYES AND SKIN.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

NOTES TO PHYSICIAN: TREAT SYMPTOMATICALLY.

5. FIRE-FIGHTING MEASURES



SUITABLE EXTINGUISHING MEDIA:

USE EXTINGUISHING MEASURES THAT ARE APPROPRIATE TO LOCAL CIRCUMSTANCES AND THE SURROUNDING ENVIRONMENT.

UNSUITABLE EXTINGUISHING MEDIA:

CAUTION: USE OF WATER SPRAY WHEN FIGHTING FIRE MAY BE INEFFICIENT.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: NO INFORMATION AVAILABLE

EXPLOSION DATA:

SENSITIVITY TO MECHANICAL IMPACT: NONE

SENSITIVITY TO STATIC DISCHARGE: NONE

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: AVOID CONTACT WITH EYES AND SKIN.
OTHER INFORMATION: REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS 7 AND 8.

ENVIRONMENTAL PRECAUTIONS:

ENVIRONMENTAL PRECAUTIONS:
SEE SECTION 12 FOR ADDITIONAL ECOLOGICAL INFORMATION

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

METHODS FOR CONTAINMENT:
PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO.

METHODS FOR CLEANING UP:
ABSORB AND CONTAINERIZE. WASH RESIDUAL DOWN TO SANITARY SEWER. CONTACT THE
SANITARY TREATMENT FACILITY IN ADVANCE TO ASSURE ABILITY TO PROCESS
WASHED-DOWN MATERIAL.

7. HANDLING AND STORAGE



PRECAUTIONS FOR SAFE HANDLING:

HANDLING:
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.
AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. DO NOT EAT, DRINK, OR SMOKE
WHEN USING THIS PRODUCT.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

STORAGE:
KEEP CONTAINERS TIGHTLY CLOSED IN A DRY, COOL, AND WELL-VENTILATED PLACE.

INCOMPATIBLE PRODUCTS: NONE KNOWN.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



CONTROL PARAMETERS:

EXPOSURE GUIDELINES:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	NIOSH IDLH
LAURAMINE OXIDE 1643-20-5	NONE	NONE	NONE
N-ALKYL (40% C12, 50% C14, 10% C16) DIMETHYL BENZYL AMMONIUM CHLORIDE 68424-85-1	NONE	NONE	NONE

ACGIH TLV:
AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS - THRESHOLD LIMIT
VALUE.

OSHA PEL:
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION - PERMISSIBLE EXPOSURE
LIMITS.

NIOSH IDLH: IMMEDIATELY DANGEROUS TO LIFE OR HEALTH.

APPROPRIATE ENGINEERING CONTROLS:

ENGINEERING MEASURES:

SHOWERS
EYEWASH STATIONS
VENTILATION SYSTEMS

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION:

IF SPLASHES ARE LIKELY TO OCCUR, WEAR SAFETY GLASSES WITH SIDE-SHIELDS.
NONE REQUIRED FOR CONSUMER USE.

SKIN AND BODY PROTECTION: NO SPECIAL PROTECTIVE EQUIPMENT REQUIRED.

RESPIRATORY PROTECTION:

IF IRRITATION IS EXPERIENCED, NIOSH/MSHA APPROVED RESPIRATORY PROTECTION SHOULD BE WORN. POSITIVE-PRESSURE SUPPLIED AIR RESPIRATORS MAY BE REQUIRED FOR HIGH AIRBORNE CONTAMINANT CONCENTRATIONS. RESPIRATORY PROTECTION MUST BE PROVIDED IN ACCORDANCE WITH CURRENT LOCAL REGULATIONS.

HYGIENE MEASURES:

REMOVE AND WASH CONTAMINATED CLOTHING BEFORE RE-USE. AVOID CONTACT WITH SKIN, EYES, OR CLOTHING. DO NOT EAT, DRINK, OR SMOKE WHEN USING THIS PRODUCT.

9. PHYSICAL AND CHEMICAL PROPERTIES



PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE: THIN LIQUID

APPEARANCE: CLEAR

COLOR: CLEAR

ODOR: FLORAL, CITRUS

ODOR THRESHOLD: NO INFORMATION AVAILABLE

PROPERTY	VALUES	REMARKS/ METHOD
PH	9 - 11.5	NONE KNOWN
MELTING/FREEZING POINT	NO DATA AVAILABLE	NONE KNOWN
BOILING POINT/RANGE	NO DATA AVAILABLE	NONE KNOWN
FLASH POINT	NO DATA AVAILABLE	NONE KNOWN
EVAPORATION RATE	NO DATA AVAILABLE	NONE KNOWN
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE	NONE KNOWN
FLAMMABILITY LIMITS IN AIR:		
UPPER FLAMMABILITY LIMIT	NO DATA AVAILABLE	NONE KNOWN
LOWER FLAMMABILITY LIMIT	NO DATA AVAILABLE	NONE KNOWN
VAPOR PRESSURE	NO DATA AVAILABLE	NONE KNOWN
VAPOR DENSITY	NO DATA AVAILABLE	NONE KNOWN
SPECIFIC GRAVITY	APPROX. 1.0	NONE KNOWN
WATER SOLUBILITY	SOLUBLE IN WATER.	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
KINEMATIC VISCOSITY	NO DATA AVAILABLE	NONE KNOWN
DYNAMIC VISCOSITY	NO DATA AVAILABLE	NONE KNOWN
EXPLOSIVE PROPERTIES	NOT EXPLOSIVE	
OXIDIZING PROPERTIES	NO DATA AVAILABLE	
OTHER INFORMATION:		
SOFTENING POINT	NO DATA AVAILABLE	
VOC CONTENT (%)	NO DATA AVAILABLE	
PARTICLE SIZE	NO DATA AVAILABLE	
PARTICLE SIZE DISTRIBUTION	NO DATA AVAILABLE	

10. STABILITY AND REACTIVITY



REACTIVITY: NO DATA AVAILABLE.

CHEMICAL STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS: NONE UNDER NORMAL PROCESSING.

CONDITIONS TO AVOID: NONE KNOWN.

INCOMPATIBLE MATERIALS: NONE KNOWN.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE KNOWN BASED ON INFORMATION SUPPLIED.

11. TOXICOLOGICAL INFORMATION



INFORMATION ON LIKELY ROUTES OF EXPOSURE:

PRODUCT INFORMATION:

INHALATION: EXPOSURE TO VAPOR OR MIST MAY IRRITATE RESPIRATORY TRACT.

EYE CONTACT: MAY CAUSE EYE IRRITATION.

SKIN CONTACT: PROLONGED CONTACT MAY CAUSE IRRITATION.

INGESTION:

INGESTION MAY CAUSE IRRITATION TO MUCOUS MEMBRANES AND GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA.

INFORMATION ON TOXICOLOGICAL EFFECTS:

SYMPTOMS: MAY CAUSE REDNESS AND TEARING OF THE EYES AND SKIN REDNESS.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

SENSITIZATION: NO INFORMATION AVAILABLE.

MUTAGENIC EFFECTS: NO INFORMATION AVAILABLE.

CARCINOGENICITY: CONTAINS NO INGREDIENT LISTED AS A CARCINOGEN.

REPRODUCTIVE TOXICITY: NO INFORMATION AVAILABLE

STOT - SINGLE EXPOSURE: NO INFORMATION AVAILABLE.

STOT - REPEATED EXPOSURE: NO INFORMATION AVAILABLE.

CHRONIC TOXICITY: NO KNOWN EFFECT.

TARGET ORGAN EFFECTS:

RESPIRATORY SYSTEM, EYES, SKIN, GASTROINTESTINAL TRACT (GI).

ASPIRATION HAZARD: NO INFORMATION AVAILABLE.

NUMERICAL MEASURES OF TOXICITY PRODUCT INFORMATION:

THE FOLLOWING VALUES ARE CALCULATED BASED ON CHAPTER 3.1 OF THE GHS DOCUMENT: NOT APPLICABLE.

12. ECOLOGICAL INFORMATION



ECOTOXICITY: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

PERSISTENCE AND DEGRADABILITY: NO INFORMATION AVAILABLE.

BIOACCUMULATION: NO INFORMATION AVAILABLE.

OTHER ADVERSE EFFECTS: NO INFORMATION AVAILABLE.

13. DISPOSAL CONSIDERATIONS



DISPOSAL METHODS:

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

CONTAMINATED PACKAGING:

DO NOT REUSE EMPTY CONTAINERS. DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

14. TRANSPORT INFORMATION



DOT: NOT REGULATED

TDG: NOT REGULATED

ICAO: NOT REGULATED

IATA: NOT REGULATED

IMDG/IMO: NOT REGULATED

15. REGULATORY INFORMATION



CHEMICAL INVENTORIES:

TSCA:

ALL COMPONENTS OF THIS PRODUCT ARE EITHER ON THE TSCA 8(B) INVENTORY OR OTHERWISE EXEMPT FROM LISTING.

DSL/NDL: ALL COMPONENTS ARE ON THE DSL OR NDL.

TSCA: UNITED STATES TOXIC SUBSTANCES CONTROL ACT SECTION 8(B) INVENTORY

DSL/NDL: CANADIAN DOMESTIC SUBSTANCES LIST/NON-DOMESTIC SUBSTANCES LIST

U.S. FEDERAL REGULATIONS:

SARA 313:

SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA). THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS WHICH ARE SUBJECT TO THE REPORTING REQUIREMENTS OF THE ACT AND TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PART 372.

SARA 311/312 HAZARD CATEGORIES:

ACUTE HEALTH HAZARD: YES

CHRONIC HEALTH HAZARD: NO

FIRE HAZARD: NO

REACTIVE HAZARD: NO

SUDDEN RELEASE OF PRESSURE 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, DOES NOT CONTAIN ANY SUBSTANCES REGULATED AS HAZARDOUS SUBSTANCES UNDER THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) (40 CFR 302) OR THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) (40 CFR 355). THERE MAY BE SPECIFIC REPORTING REQUIREMENTS AT THE LOCAL, REGIONAL, OR STATE LEVEL PERTAINING TO RELEASES OF THIS MATERIAL.

EPA STATEMENT:

THIS CHEMICAL IS A PESTICIDE PRODUCT REGISTERED BY THE ENVIRONMENTAL PROTECTION AGENCY AND IS SUBJECT TO CERTAIN LABELING REQUIREMENTS UNDER FEDERAL PESTICIDE LAW. THESE REQUIREMENTS DIFFER FROM THE CLASSIFICATION CRITERIA AND HAZARD INFORMATION REQUIRED FOR SAFETY DATA SHEETS AND FOR WORKPLACE LABELS OF NON-PESTICIDE CHEMICALS. FOLLOWING IS THE HAZARD INFORMATION AS REQUIRED ON THE PESTICIDE LABEL:

CAUTION:

CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING. AVOID CONTACT WITH FOODS.

U.S. STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

THIS PRODUCT DOES NOT CONTAIN ANY PROPOSITION 65 CHEMICALS.

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

CHEMICAL NAME	NEW JERSEY	MASSACHUSETTS	PENNSYLVANIA	RHODE ISLAND	ILLINOIS
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ETHANOLAMINE	X	X	X		X
141-43-5					

INTERNATIONAL REGULATIONS:

CANADA:

WHMIS HAZARD CLASS: D2B TOXIC MATERIALS

16. OTHER INFORMATION



NFPA:

HEALTH HAZARD	1
FLAMMABILITY	0
INSTABILITY	0
PHYSICAL AND CHEMICAL HAZARDS	

HMIS:

HEALTH HAZARD	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION B	

PREPARED BY:

PRODUCT STEWARDSHIP
23 BRITISH AMERICAN BLVD.
LATHAM, NY 12110

1-800-572-6501

PREPARATION/REVISION DATE: JANUARY 5, 2015

REVISION DATE: JUNE 8, 2017

REVISION NOTE: UPDATED TO REMOVE GREEN DYE.

REFERENCE: 1050911/166962.001

GENERAL DISCLAIMER:

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