

SECTION 1: IDENTIFICATION

Company Information	KALO, Inc., 13200 Metcalf Ave., Ste. 250, Overland Park, KS 66213
Phone Numbers	800-255-5196 / 913-491-9146 FAX
Website	www.kalo.com
Product Identity	CRUZADO
Reference/Item Number	CRUZ01, CRUZ02, CRUZ30, CRUZ55, CRUZ265
Intended Use	See technical data sheet.
Application Method	See technical data sheet.
24 HOUR EMERGENCY NUMBER/CHEMTREC (USA)	1-800-424-9300
POISON CONTROL CENTER (USA)	1-800-222-1212

SECTION 2: HAZARDS IDENTIFICATION

HAZARD COMMUNICATION STANDARD (HCS) PICTOGRAM(S) AND SIGNAL WORD(S)





DANGER

H290: May be corrosive to metals. Met. Corrosive 1:

Acute Tox. 4: H302: Harmful if swallowed.

Skin Corr. 1B: Causes severe skin burns and eye damage.

Eye Dam. 1: Causes serious eye damage.

P280: Wear protective gloves and eye/face protection.

P264: Wash thoroughly after handling.

Prevention: P260: Do not breathe mist, vapors or spray.

P270: Do not eat, drink or smoke when using this product.

P234: Keep only in original container.

P390: Absorb spillage to prevent material damage.

P301+312: IF SWALLOWED: Call a poison center or doctor/physician if you feel unwell.

P330+331: Rinse mouth. Do not induce vomiting.

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do; continue rinsing.

Response: P310: Immediately call a poison center or doctor/physician.

P304+312: IF INHALED: Call a poison center or doctor/physician if you feel unwell. P340: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P303+361+353: IF ON SKIN (or hair): Remove/take-off immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

Storage: No GHS storage statements.

P501: Dispose of contents/container in accordance with local/national regulations. Disposal:

Product Identity: Cruzado SDS Revision Date: 03/17/2020 Company Name: KALO, Inc.



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is labeled with the following GHS Classifications, as it contains substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations. This product is a proprietary blend. In accordance with paragraph (i) of 1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Ingredient/Chemical Designations: Proprietary blend of surfactants, solvents, water conditioners and diluent

CAS No.: Trade Secret

Weight %: Trade Secret

Notes: [1] Substance classified with a health or environmental hazard. [2] Substance with a workplace exposure limit.

Ingredient/Chemical Designations: Monocarbamide Dihydrogen Sulfate

CAS No.: 21351-39-3
Weight %: 20 – 40%

Notes: [1] Substance classified with a health or environmental hazard. [2] Substance with a workplace exposure limit.

This product contains the following substances that are subject to the reporting requirements of SARA Title III, Section 313.

Ingredient/Chemical Designations: Ethylene Glycol

CAS No.: 107-21-1
Weight %: <0.5%

Notes: [1] Substance classified with a health or environmental hazard. [2] Substance with a workplace exposure limit.

Ingredient/Chemical Designations: n-Butyl Alcohol

CAS No.: 71-36-3
Weight %: 0.5 – 1.5%

Notes: [1] Substance classified with a health or environmental hazard. [2] Substance with a workplace exposure limit.

SECTION 4: FIRST AID MEASURES

[DESCRIPTIONS]

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes: Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If accidentally swallowed, obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

[MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED]

Overview: No adverse symptoms or effects anticipated under normal handling conditions. See Section 2 for further details.

Eyes: Causes serious eye damage.

Skin Causes severe skin burns and eye damage.

Ingestion: Harmful if swallowed.



SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media: Recommended extinguishing media: alcohol resistant foam, CO2, powder, water spray. Do not use water jet.

Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulfur, nitrogen or phosphorus may **Special Hazards:**

also be formed. Keep only in original container. Do not breathe mist, vapors, spray.

Evacuate area. Prevent contamination from run-off of adjacent areas, streams, drinking water and sewers. Do not flush down sewers or other drainage systems. Exposed firefighters must wear standard protective equipment and in enclosed areas self-contained breathing apparatus. **Advice For Firefighters:**

Use water-spray to cool fire-exposed surfaces and personnel.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Keep all sources of ignition away from spill/release. In case of a major spill or spillage in a confined space evacuate the area and **Precautions/Procedures:**

check vapor levels.

Environmental Precautions: Do not allow spills to enter drains or water courses.

Methods and Material For Containment and Cleaning Up:

Precautions For Safe Handling:

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in Section 8. Contain and absorb spillage with non-combustible materials (e.g. sand/earth/vermiculite). Place in closed containers outside buildings and dispose of according to the Waste Regulations (see Section 13). Clean, preferably with a detergent. Do not use solvents. Do not allow spills to enter drains or water courses. If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams, or lakes, the Environmental Protection Agency should also be informed.

SECTION 7: HANDLING AND STORAGE

Do not get in eyes, on skin, or on clothing. Do not breathe vapors or mists. Keep container closed. Use only with adequate

ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and

wash before reuse. Destroy contaminated belts and shoes and other items that cannot be decontaminated. See Section 2 for further details.

Store in tightly closed containers in dry, well-ventilated area, away from excessive heat and incompatibles. **Conditions For Safe Storage:**

See Section 2 for further details.

Incompatible Materials: Oxidizing agents, strong acids, strong bases , susceptible metals such as aluminum, tin lead and zinc.

See technical data sheet. Specific End Use(s):

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

This product contains the following ingredient (at greater than 0.1%) with established limits for exposure under OSHA, ACGIH and/or NIOSH. **Exposure Data:**

CAS No.	Ingredient	Source	Value
0000071-36-3 n-Butyl Alcohol	OSHA	TWA: 100ppm (300mg/m³)	
	ACGIH	TWA: 15ppm / Ceiling: 30ppm	
	NIOSH	C: 50ppm (150mg/m³) [skin]	

This product contains no ingredients (at greater than 0.1%) that are suspected of being or known to be a carcinogen under OSHA, NTP or Carcinogen Data:

[PERSONAL PROTECTIVE EQUIPMENT]

Respiratory: If workers are exposed to concentrations above the exposure limit, they must use the appropriate certified respirators.

Eyes: Wear safety eyewear (e.g. safety spectacles/goggles/visors) to protect against the splash of liquids.

Overalls, which cover the body, arms, and legs, should be worn. Skin should not be exposed. All parts of the body should be washed after Skin:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general **Engineering Controls:**

extraction. If these are not sufficient to maintain concentrations of particulates, and any vapor below occupational exposure limits, suitable

respiratory protection must be worn.

Other Work Practices: See technical data sheet.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear Golden Yellow Liquid
Odor:	Not Measured
Odor Threshold:	Not Measured
pH:	1.8 – 2.2 (0.5% aqueous solution)
Specific Gravity:	1.2 – 1.3 @ 20°C
Flashpoint:	>200°F (>94°C) Tag Closed Cup
Solubility in Water:	Soluble
Viscosity (cSt):	Not Measured
VOC%:	Not Measured
Vapor Pressure (Pa):	Not Measured
Vapor Density:	Not Measured
Melting/Freezing Points:	Not Measured
Initial Boiling Point/Range (°F/°C):	No Established Limit
Flammability (Solid,Gas):	Not Applicable
Upper Flammability/Explosive Limits:	Not Measured
Lower Flammability/Explosive Limits:	Not Measured
Decomposition Temperature:	Not Measured
Auto-Ignition Temperature:	Not Measured
Partition Co-Efficient n-octanol/water (Log Kow):	Not Measured
Evaporation Rate (Ether=1):	Not Measured
Other:	No other relevant information.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Flammable hydrogen may be produced on prolonged contact with metals such as aluminum, tin, lead, and zinc.
Chemical Stability:	Stable under normal ambient and anticipated conditions of use.
Hazardous Reactions:	Flammable hydrogen may be produced on prolonged contact with metals such as aluminum, tin, lead, and zinc.
Conditions To Avoid:	Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.
Incompatible Materials:	Oxidizing agents, strong acids, strong bases , susceptible metals such as aluminum, tin lead and zinc.
Hazardous Decomposition Products:	Not anticipated under normal conditions of use.



SECTION 11: TOXICOLOGICAL INFORMATION

	[ACUTE TOXICITY ESTIMATE]	
Ingredients:	Proprietary Blend of Surfactants, Base Oil and Fatty Acid	
Oral LD50mg/kg:	500.00/Category: 4	
Skin LD50mg/kg:	>5,000.00/Category: NA	
Inhalation Vapor LC50mg/L/4hr:	No Data Available	
Inhalation Dust/Mist LC50mg/L/4hr:	No Data Available	
ITEM	HAZARD	<u>CATEGORY</u>
Acute Toxicity (mouth):	Harmful if swallowed.	4

<u>ITEM</u>	<u>HAZARD</u>	<u>CATEGORY</u>
Acute Toxicity (mouth):	Harmful if swallowed.	4
Acute Toxicity (skin):	Not Applicable	
Acute Toxicity (inhalation):	Not Applicable	
Skin Corrosion/Irritation:	Causes severe skin burns and eye damage.	1B
Eye Damage/Irritation:	Causes serious eye damage.	1
Sensitization (respiratory):	Not Applicable	
Sensitization (skin):	Not Applicable	
Germ Toxicity:	Not Applicable	
Carcinogenicity:	Not Applicable	
Reproductive Toxicity:	Not Applicable	
Specific Target Organ Systemic Toxicity-Single Exposure:	Not Applicable	
Specific Target Organ Systemic Toxicity-Repeated Exposure:	Not Applicable	
Aspiration Hazard:	Not Applicable	

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:	Ecotoxicity studies have not been conducted on this preparation.
Persistence and Degradability:	There is no data available on the preparation itself.
Bioaccumulative Potential:	Not measured.
Mobility In Soil:	No data available.
Results of PBT and vPvB Assess:	This product contains no PBT/vPvB chemicals.
Other Adverse Effects:	No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods:	DO HOL AHOW HILD UTAINS OF WATER COURSES. WASTES AND EMPLIED CONTAINERS SHOULD DE DISPOSED OF HI ACCORDANCE WITH REGULATIONS
	made under the Control of Pollution Act and the Environmental Protection Act. Using information provided in this data sheet
	advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply. Dispose of contents
	in accordance with local and national regulations.



SECTION 14: TRANSPORT INFORMATION

DOT Proper Shipping Name: UN1760, Corrosive Liquids, N.O.S. (monocarbamide dihydrogen sulfate), 8, PG II **DOT Hazard Class: DOT Packing Group:** 8 **DOT Label: IMDG Proper Shipping Name:** UN1760, Corrosive Liquids, N.O.S. (monocarbamide dihydrogen sulfate), 8, PG II **IMDG Hazard Class:** 8 **IMDG Packing Group:** Ш **IMDG Marine Pollutant:** No ICAO/IATA: See Bill of Lading

SECTION 15: REGULATORY INFORMATION

Regulatory Overview:	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act (TSCA):	All ingredients of this product are listed on the TSCA inventory, or are not required to be listed on the TSCA inventory.
WHMIS Classification:	D2B E
U.S. EPA Tier II Hazards:	$\label{eq:fire} \textit{Fire} = \underline{\texttt{NO}} \; / \; \textit{Sudden Release of Pressure} = \underline{\texttt{NO}} \; / \; \textit{Reactive} = \underline{\texttt{NO}} \; / \; \textit{Immediate (acute)} = \underline{\texttt{YES}} \; / \; \textit{Delayed (chronic)} = \underline{\texttt{NO}} \; / \; \textit{NOSCOLUTION} = \underline{\texttt{NOSCOLUTION}} = \texttt{NOSCOLUTI$
EPCRA 302—Extremely Hazardous (0.1%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
EPCRA 311/312—Chemicals and RQs (>0.1%):	Ethylene glycol (5,000.00) / n-Butyl alcohol (5,000.00)
EPCRA 313-Toxic Chemicals (>0.1%):	Ethylene glycol / n-Buty alcohol
Proposition 65–Carcinogens (>0.0%):	1,4-dioxane / Acetaldehyde / Oxirane
Proposition 65–Developmental Toxins (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
Proposition 65–Female Repro Toxins (>0.0%):	Oxirane
Proposition 65–Male Repro Toxins (>0.0%):	Oxirane
N.J. RTK Substances (>1%):	Glycerol / n-Butyl alcohol
PENN RTK Substances (>1%):	Glycerol / n-Butyl alcohol

SECTION 16: OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Company accepts no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations and orders.