SAFETY DATA SHEET

1. Identification

Product number	936
Product identifier	363129 CROWN FINAL STEP
Company information	Crown Equipment Corporation 44 S. Washington Street New Bremen, OH 45869 United States
Company phone	419-629-2311
Emergency telephone US	1-866-836-8855
Emergency telephone outside US	1-952-852-4646
Version #	01
Recommended use	Coating
Recommended restrictions	None known.

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Reproductive toxicity (fertility, the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label damanta		

Label elements



3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	20 - 40
Naphtha (petroleum), hydrotreated light		64742-49-0	20 - 40
n-Hexane		110-54-3	10 - 20
Propane		74-98-6	10 - 20
Cyclohexane		110-82-7	0.1 - 1
Other components below reportable levels			10 - 20

#: This substance has workplace exposure limit(s). *Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures	
Inhalation	If symptoms develop move victim to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Most important symptoms/effects, acute and delayed	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Aspiration may cause pulmonary edema and pneumonitis. Irritant effects. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
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	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
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. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol.

6. Accidental release measures

6. Accidental release meas	sures
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. 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. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Collect spillage. Scoop up used absorbent into drums or other appropriate container. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Environmental manager must be informed of all major releases. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing mist or vapor. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not re-use empty containers. Do not breathe gas. Avoid contact with eyes, skin, and clothing. Avoid contact during pregnancy/while nursing. Do not taste or swallow. When using, do not eat, drink or smoke. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash thoroughly after handling. Do not empty into drains. Observe good industrial hygiene practices.
Conditions for safe storage,	Level 3 Aerosol.
including any incompatibilities	Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in original tightly closed container. Refrigeration recommended. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS). Level 3 Aerosol.

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m3	
		300 ppm	
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3	
		500 ppm	
Propane (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Value	S		
Components	Туре	Value	
Butane (CAS 106-97-8)	STEL	1000 ppm	
Cyclohexane (CAS 110-82-7)	TWA	100 ppm	
n-Hexane (CAS 110-54-3)	TWA	50 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	
Butane (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
Cyclohexane (CAS 110-82-7)	TWA	1050 mg/m3	
		300 ppm	
n-Hexane (CAS 110-54-3)	TWA	180 mg/m3	
		50 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3	
		1000 ppm	

Biological limit values

ACGIH Biological Exposu	re Indices			
Components	Value	Determinant	Specimen	Sampling Time
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedio n, without hydrolysis	Urine	*
* - For sampling details, plea	ase see the source doc	ument.		
Exposure guidelines				
US - California OELs: Skir	designation			
n-Hexane (CAS 110-54 US ACGIH Threshold Limi	/		absorbed throu	igh the skin.
n-Hexane (CAS 110-54	-3)	Can be	absorbed throu	igh the skin.
Appropriate engineering controls	Explosion-proof ger should be equipped			Facilities storing or utilizing this material ety shower.
Individual protection measure	s, such as personal p	rotective equipmer	nt	
Eye/face protection	Wear eye/face prote	ection. Wear safety	glasses with sic	le shields (or goggles).
Hand protection	Wear protective glo	ves. Wear appropria	ate chemical res	sistant gloves.
Skin protection				
Other	Not available.			
Respiratory protection	If permissible levels air-supplied respira		NIOSH mechan	ical filter / organic vapor cartridge or an
Thermal hazards	Wear appropriate th	nermal protective clo	othing, when ne	cessary.
General hygiene considerations		indling the material	and before eatir	ve good personal hygiene measures, such ng, drinking, and/or smoking. Routinely e contaminants.

9. Physical and chemical properties

Appearance	Compressed liquefied gas.
Physical state	Liquid.
Form	Aerosol.
Color	clear colorless
Odor	Solvent.
Odor threshold	Not available.
рН	Not applicable estimated
Melting point/freezing point	Not available.
Initial boiling point and boiling	8.82 °F (-12.88 °C) estimated
range	
Flash point	-156.0 °F (-104.4 °C) Propellant estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	osive limits

Upper/lower flammability or explosive limits

Flammability limit - upper	Not available.
(%)	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	40 - 50 psig @ 70F estimated
Vapor density	Not available.
Relative density	0.657 g/cm3 estimated estimated
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	496.4 °F (258 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.36 g/cm3 estimated
Flammability class	Flammable IA estimated
Heat of combustion	35.39 kJ/g estimated
Heat of combustion (NFPA 30B)	35.39 kJ/g estimated
Percent volatile	83.69 % estimated
Specific gravity	0.657 estimated estimated
VOC (Weight %)	83.64 % 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	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Nitrates. Fluorine. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Fatal if swallowed.
Inhalation	May be fatal if swallowed and enters airways. Narcotic effects. May cause damage to organs by inhalation.
Skin contact	Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death. Irritant effects. May cause central nervous system effects.

Information on toxicological effects

Acute toxicity	Harmful if inhaled. Fatal if swallowed. In high concentrations, vapors are anesthetic and may
-	cause headache, fatigue, dizziness and central nervous system effects. May cause respiratory
	irritation. May be fatal if swallowed and enters airways.

Product	Species	Test Results
363129 CROWN FINAL STE	EP (CAS Mixture)	
Acute		
Dermal		
LD50	Rat	4134 mg/kg
Inhalation		
LC50	Rat	941 mg/l/4h
Oral		
LD50	Rat	
Components	Species	Test Results
Butane (CAS 106-97-8)		
Acute		
Inhalation	Maura	
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes
	Rat	1355 mg/l
Cyclohexane (CAS 110-82-7	7)	
Acute		
Dermal	Dates	5. 0000 mm = //.m
LD50	Rabbit	> 2000 mg/kg
Inhalation LC50	Rat	> 22890 mg/m2 4 Hours
LCOU	Rai	> 32880 mg/m3, 4 Hours
		> 5540 ppm, 4 Hours
	reated light (CAS 64742-49-0)	
Acute		
Dermal LD50	Guinea pig; Rabbit	> 9.4 ml/kg, 24 Hours
ED30	Rabbit	
	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation LC50	Rat	> 5020 mg/m3, 4 Hours
2030	Nat	-
		> 4980 mg/m3
		> 4980 mg/m3, 4 Hours
		> 4.96 mg/l, 4 Hours
		13700 ppm, 4 Hours
Oral		
LD50	Rat	4820 mg/kg
n-Hexane (CAS 110-54-3)		
Acute		
Dermal	Dates	
LD50	Rabbit	> 2000 mg/kg, 4 Hours
		> 5 ml/kg, 4 Hours
Inhalation	Pot	> 5000 ppm - 24 Hours
LC50	Rat	> 5000 ppm, 24 Hours
		> 31.86 mg/l
		73860 ppm, 4 Hours
Oral	- /	
LD50	Rat	24 ml/kg
		24 g/kg
	Wistar rat	49 g/kg

Components	Species	Test Results
Propane (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes
	Rat	1355 mg/l
		658 mg/l/4h
* Estimates for product may	be based on additional component data r	not shown.
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization	n	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	May cause genetic defects.	
Carcinogenicity	May cause cancer. Risk of cancer cannot be excluded with prolonged exposure.	
OSHA Specifically Regulat Not listed.	ed Substances (29 CFR 1910.1001-105	50)
Reproductive toxicity	Suspected of damaging fertility.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Respiratory system. Skin. Central nervous system. Eyes. Peripheral nervous system. May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	May be fatal if swallowed and enters a	airways.
Chronic effects	Prolonged exposure may cause chronic effects. May cause damage to organs through prolonged or repeated exposure.	

12. Ecological information

toxicity	Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.		
Product		Species	Test Results
363129 CROWN FINAL S	TEP (CAS Mixi	ture)	
Aquatic			
Algae	IC50	Algae	9440 mg/L, 72 Hours
Crustacea	EC50	Daphnia	1123 mg/L, 48 Hours
Fish	LC50	Fish	16.3458 mg/L, 96 Hours
Components		Species	Test Results
Cyclohexane (CAS 110-82	2-7)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	23.03 - 42.07 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
* Estimates for product ma	y be based on	additional component data not shown.	
sistence and degradabilit	y No data is	s available on the degradability of this product.	
accumulative potential	al No data available.		
Partition coefficient n-oc	tanol / water (log Kow)	

Partition coefficient n-octanol / water (log Kow)	
Butane	2.89
Cyclohexane	3.44
n-Hexane	3.9
Propane	2.36

Mobility in soil	No data available.
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.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. 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.	
Local disposal regulations	Dispose in accordance with all applicable regulations.	
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.	
US RCRA Hazardous Waste	U List: Reference	
Cyclohexane (CAS 110-8	32-7) U056	
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	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. Do not re-use empty containers.	

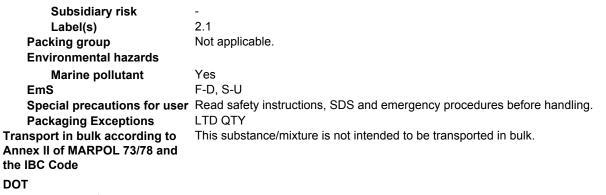
14. Transport information

DOT	
UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
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.
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

IAIA	
UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	Yes
ERG Code	10L
Special precautions for user	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







Marine pollutant



General information

US federal regulations

IMDG Regulated Marine Pollutant.

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)		
Cyclohexane (CAS 110-82-7)	Listed.	
n-Hexane (CAS 110-54-3)	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)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - Yes 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)

Chemical name	CAS number	% by wt.	
n-Hexane	110-54-3	10 - 20	
Cyclohexane	110-82-7	0.1 - 1	
Benzene	71-43-2	0.01 - 0.1	
Ethyl Benzene	100-41-4	0.01 - 0.1	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

n-Hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8) Propane (CAS 74-98-6)

Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Butane (CAS 106-97-8) Cyclohexane (CAS 110-82-7) n-Hexane (CAS 110-54-3) Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act

Butane (CAS 106-97-8) Cyclohexane (CAS 110-82-7) n-Hexane (CAS 110-54-3) Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Butane (CAS 106-97-8) Cyclohexane (CAS 110-82-7) n-Hexane (CAS 110-54-3) Propane (CAS 74-98-6)

US. Rhode Island RTK

Butane (CAS 106-97-8) Cyclohexane (CAS 110-82-7) n-Hexane (CAS 110-54-3) Propane (CAS 74-98-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

•	•		
Benzene (CAS 71-43-2)	Listed: February 27, 1987		
Ethyl Benzene (CAS 100-41-4)	Listed: June 11, 2004		
US - California Proposition 65 - CRT: Listed date/Developmental toxin			
Benzene (CAS 71-43-2)	Listed: December 26, 1997		

- Toluene (CAS 108-88-3)Listed: January 1, 1991US California Proposition 65 CRT: Listed date/Female reproductive toxinToluene (CAS 108-88-3)Listed: August 7, 2009
- US California Proposition 65 CRT: Listed date/Male reproductive toxin Benzene (CAS 71-43-2) Listed: December 26, 1997

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)	Yes
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	Yes
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 components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date	08-16-2015
Version #	01
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. Claire Manufacturing Co. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.