

SAFETY DATA SHEET

1. Identification

Product identifier	Upside Down Marking Paints-Safety Red	
Other means of identification		
Product code	18200	
Recommended use	Coating	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier	/Distributor information	
Manufactured or sold by:		
Company name	CRC Industries, Inc.	
Address	885 Louis Dr.	
	Warminster, PA 18974 US	
Telephone		
General Information	215-674-4300	
Technical	800-521-3168	
Assistance		
Customer Service	800-272-4620	
24-Hour Emergency	800-424-9300 (US)	
(CHEMTREC)	703-527-3887 (International)	
Website	www.crcindustries.com	
2. Hazard(s) identification		
Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
Health hazards	Aspiration hazard	Category 1

Category 3

OSHA defined hazards

Environmental hazards

Label elements



Hazardous to the aquatic environment,

long-term hazard

Not classified.

Signal word	Danger
Hazard statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.
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. Do not apply while equipment is energized. Pressurized container: Do not pierce or burn, even after use. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid release to the environment.
Response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.
Storage	Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

Supplemental information

55% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	20 - 30
Calcium carbonate		1317-65-3	10 - 20
n-Butane		106-97-8	10 - 20
Propane		74-98-6	10 - 20
Solvent naphtha (petroleum), light aliph.		64742-89-8	10 - 20
Distillates (petroleum), hydrotreated light		64742-47-8	3 - 5

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	Wash off with soap and water. Get medical attention if irritation develops and persists. Take off contaminated clothing and wash before reuse.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion	Call a physician or poison control center immediately. 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.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and 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	
Suitable extinguishing media	Small Fires: Powder. Dry sand. Carbon dioxide (CO2). Water spray.
	Large Fires: Alcohol resistant foam. Water spray.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
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	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. 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.
General fire hazards	Extremely flammable aerosol.
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. 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	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. Isolate area until gas has dispersed. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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. For waste disposal, see section 13 of the SDS.
Environmental precautions	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	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. Do not re-use empty containers. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid release to the environment. Do not empty into drains. For product usage instructions, please see the product label.
Conditions for safe storage, including any incompatibilities	Level 3 Aerosol.
	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 a well-ventilated place. Store away from

incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

US. OSHA Table Z-1 Limit	s for Air Contaminants (29 CFR 1910. ²	1000)	
Components	Туре	Value	Form
Calcium carbonate (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
Propane (CAS 74-98-6)	PEL	15 mg/m3 1800 mg/m3 1000 ppm	Total dust.
US. ACGIH Threshold Lim	it Values		
Components	Туре	Value	
n-Butane (CAS 106-97-8)	STEL	1000 ppm	
US. NIOSH: Pocket Guide	to Chemical Hazards		
Components	Туре	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	TWA	100 mg/m3	
n-Butane (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm	
ological limit values	No biological exposure limits noted f	or the ingredient(s).	
propriate engineering ntrols	Good general ventilation (typically 10 should be matched to conditions. If a or other engineering controls to mair exposure limits have not been estab	applicable, use process enclosu ntain airborne levels below reco	res, local exhaust ventilation, mmended exposure limits. If
lividual protection measure	s, such as personal protective equipn	nent	
Eye/face protection	Wear safety glasses with side shield	s (or goggles).	
Skin protection			
Hand protection	Wear protective gloves such as nitril	e or rubber.	
Other	Wear appropriate chemical resistant	clothing.	
Respiratory protection	In case of insufficient ventilation, we determine actual employee exposure		nt. Air monitoring is needed to
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.	
neral hygiene nsiderations	When using, do not eat, drink or smo as washing after handling the materi wash work clothing and protective ed	al and before eating, drinking, a	ind/or smoking. Routinely

Physical state Liquid. Material name: Upside Down Marking Paints-Safety Red

Appearance

Form	Aerosol.	
Color	Red.	
Odor	Aromatic.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	-47.2 °F (-44 °C)	
Flash point	-2.2 °F (-19 °C)	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not available.	
Upper/lower flammability or exp	losive limits	
Flammability limit - lower (%)	1.5 %	
Flammability limit - upper (%)	10.9 %	
Vapor pressure	2237.8 hPa estimated	
Vapor density	> 1 (air = 1)	
Relative density	0.77 - 0.85	
Solubility (water)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	410 °F (210 °C) estimated	
Decomposition temperature	Not available.	
Viscosity (kinematic)	Not available.	
Percent volatile	75 %	

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	Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials	Acids. 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	May be fatal if swallowed and enters airways.	
Inhalation	Prolonged inhalation may be harmful.	
Skin contact	Prolonged skin contact may cause temporary irritation.	
Eye contact	Direct contact with eyes may cause temporary irritation.	
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.	

Information on toxicological effects

Acute toxicity

May be fatal if swallowed and enters airways.

Product	Species	Test Results
Upside Down Marking Paint	ts-Safety Red	
Acute		
Dermal		
LD50	Rabbit	26913.1016 mg/kg estimated
Inhalation		
LC50	Rat	6351.3516 mg/l, 4 hours estimated

Product	Species	Test Results
Oral		
LD50	Rat	82136.3438 mg/kg estimated
Chronic		
Oral		
LD50	Mouse	1699.3467 g/kg estimated
* Estimates for product may b	e based on additional component data not shown.	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation	on.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritati	on.
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cause skin sensitizat	ion.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not expected to be hazardous by OSHA criteria.	
Reproductive toxicity	This product is not expected to cause reproductive o	r developmental effects.
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	Prolonged inhalation may be harmful.	

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects. Ad			ation in aquatic organisms is expected	
Product		Species	Test Results	
Upside Down Marking Paints	-Safety Red			
Acute				
Crustacea	EC50	Daphnia	6176.4707 mg/l, 48 hours estimated	
Fish	LC50	Fish	12080.6436 mg/l, 96 hours estimated	
Components		Species	Test Results	
Distillates (petroleum), hydro	treated light	(CAS 64742-47-8)		
Acute				
	EC50	Invertebrate (saltwater)	4720 mg/l, 96 hours	
Aquatic				
Acute				
Fish	LC50	Bluegill (Lepomis macrochirus)	1740 mg/l, 96 hours	
		Fathead minnow (Pimephales promelas)	45 mg/l, 96 hours	
* Estimates for product may I	be based on	additional component data not shown.		
Persistence and degradability	No data is	s available on the degradability of this product.		
Bioaccumulative potential	No data available.			
Partition coefficient n-octa	nol / water (log Kow)		
n-Butane		2.89		
Propane	Nie dete e	2.36		
Mobility in soil		No data available.		
Other adverse effects		adverse environmental effects (e.g. ozone depl endocrine disruption, global warming potential)		
13. Disposal consideratio	ons			
Disposal of waste from residues / unused products	is conside can be re	erial and its container must be disposed of as ha ered a RCRA ignitable waste, D001. Consult au cycled. Contents under pressure. Do not punct o drain into sewers/water supplies. Do not cont	thorities before disposal. Empty conta ure, incinerate or crush. Do not allow t	

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, limited quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
	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	304
Packaging bulk	None
ΙΑΤΑ	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, limited quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	10L
	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.
IMDG	
UN number	UN1950
UN proper shipping name	AEROSOLS, LIMITED QUANTITY
Transport hazard class(es)	
Class	2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety
	instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Exp	oort Notification (40 CFR 707, Subpt. D)
Not regulated.	
SARA 304 Emergency r	elease notification
Not regulated.	
US. OSHA Specifically F	Regulated Substances (29 CFR 1910.1001-1050)
Not listed.	
US EPCRA (SARA Title	III) Section 313 - Toxic Chemical: Listed substance
Not listed.	
CERCLA Hazardous Su	bstance List (40 CFR 302.4)
Not listed.	
CERCLA Hazardous Su	bstances: Reportable quantity
Not listed.	
	ulting in the loss of any ingredient at or above its RQ require immediate notification to the National 00-424-8802) and to your Local Emergency Planning Committee.

Material name: Upside Down Marking Paints-Safety Red 1051 Version #: 01 Issue date: 09-30-2013

Not regulated.		
	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)	3)	
Safe Drinking Water Act (SDWA)	Not regulated.	
Food and Drug Administration (FDA)	Not regulated.	
Superfund Amendments ar	nd Reauthorization Act of 1986 (SARA)	
Section 311/312 Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No	
SARA 302 Extremely hazardous substance	No	
state regulations		
US. New Jersey RTK - Subs	stances: Listed substance	
Calcium carbonate (CAS n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)		
US. Massachusetts RTK - S	Substance List	
Calcium carbonate (CAS n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)	,	
US. Pennsylvania RTK - Ha	zardous Substances	
Calcium carbonate (CAS Distillates (petroleum), h n-Butane (CAS 106-97-8 Propane (CAS 74-98-6) US. Rhode Island RTK	ydrotreated light (CAS 64742-47-8)	
n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)	3)	
US. California Proposition (WARNING: This product	65 t contains a chemical known to the State of California to cause cancer.	
US - California Proposi	ition 65 - CRT: Listed date/Carcinogenic substance	
Ethylbenzene (CAS	100-41-4) Listed: June 11, 2004	
atile organic compounds (V EPA	OC) regulations	
Aerosol coatings (40 CFR 59, Subpt. E)	Compliant	
State		
Aerosol coatings	This product is regulated as a Ground Traffic and Marking Coating. a sale in all 50 states.	This product is compliant for
Maximum increme reactivity (MIR)	ntal 0.58	
ernational Inventories		
Country(s) or region	Inventory name	On inventory (yes/no
Australia	Australian Inventory of Chemical Substances (AICS)	I
Canada	Domestic Substances List (DSL)	Y
	Non-Domestic Substances List (NDSL)	I
Canada		
China	Inventory of Existing Chemical Substances in China (IECSC)	
	European Inventory of Existing Commercial Chemical Substances (EINECS)	
China	European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS)	
China Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	
China Europe Europe	European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS)	ן ו ץ
China Europe Europe Japan	European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS)	

Country(s) or region

United States & Puerto Rico

Inventory name

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	09-30-2013
Prepared by	Allison Cho
Version #	01
Further information	Not available.
HMIS® ratings	Health: 1* Flammability: 4 Physical hazard: 0 Personal protection: B
NFPA ratings	Health: 1 Flammability: 4 Instability: 0
Disclaimer	The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.



SAFETY DATA SHEET

1. Identification

Product identifier	Upside Down Marking Paints-Safety Red	
Other means of identification		
Product code	18200	
Recommended use	Coating	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier	/Distributor information	
Manufactured or sold by:		
Company name	CRC Industries, Inc.	
Address	885 Louis Dr.	
	Warminster, PA 18974 US	
Telephone		
General Information	215-674-4300	
Technical	800-521-3168	
Assistance		
Customer Service	800-272-4620	
24-Hour Emergency	800-424-9300 (US)	
(CHEMTREC)	703-527-3887 (International)	
Website	www.crcindustries.com	
2. Hazard(s) identification		
Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
Health hazards	Aspiration hazard	Category 1

Category 3

OSHA defined hazards

Environmental hazards

Label elements



Hazardous to the aquatic environment,

long-term hazard

Not classified.

Signal word	Danger		
Hazard statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.		
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. Do not apply while equipment is energized. Pressurized container: Do not pierce or burn, even after use. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid release to the environment.		
Response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.		
Storage	Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.		
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.		
Hazard(s) not otherwise classified (HNOC)	None known.		

Supplemental information

55% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	20 - 30
Calcium carbonate		1317-65-3	10 - 20
n-Butane		106-97-8	10 - 20
Propane		74-98-6	10 - 20
Solvent naphtha (petroleum), light aliph.		64742-89-8	10 - 20
Distillates (petroleum), hydrotreated light		64742-47-8	3 - 5

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	Wash off with soap and water. Get medical attention if irritation develops and persists. Take off contaminated clothing and wash before reuse.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion	Call a physician or poison control center immediately. 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.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and 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	
Suitable extinguishing media	Small Fires: Powder. Dry sand. Carbon dioxide (CO2). Water spray.
	Large Fires: Alcohol resistant foam. Water spray.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
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	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. 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.
General fire hazards	Extremely flammable aerosol.
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. 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	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. Isolate area until gas has dispersed. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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. For waste disposal, see section 13 of the SDS.
Environmental precautions	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	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. Do not re-use empty containers. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid release to the environment. Do not empty into drains. For product usage instructions, please see the product label.
Conditions for safe storage, including any incompatibilities	Level 3 Aerosol.
	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 a well-ventilated place. Store away from

incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

US. OSHA Table Z-1 Limit	s for Air Contaminants (29 CFR 1910. ²	1000)	
Components	Туре	Value	Form
Calcium carbonate (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
Propane (CAS 74-98-6)	PEL	15 mg/m3 1800 mg/m3 1000 ppm	Total dust.
US. ACGIH Threshold Lim	it Values		
Components	Туре	Value	
n-Butane (CAS 106-97-8)	STEL	1000 ppm	
US. NIOSH: Pocket Guide	to Chemical Hazards		
Components	Туре	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	TWA	100 mg/m3	
n-Butane (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm	
ological limit values	No biological exposure limits noted f	or the ingredient(s).	
propriate engineering ntrols	Good general ventilation (typically 10 should be matched to conditions. If a or other engineering controls to mair exposure limits have not been estab	applicable, use process enclosu ntain airborne levels below reco	res, local exhaust ventilation, mmended exposure limits. If
lividual protection measure	s, such as personal protective equipn	nent	
Eye/face protection	Wear safety glasses with side shield	s (or goggles).	
Skin protection			
Hand protection	Wear protective gloves such as nitril	e or rubber.	
Other	Wear appropriate chemical resistant	clothing.	
Respiratory protection	In case of insufficient ventilation, we determine actual employee exposure		nt. Air monitoring is needed to
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.	
neral hygiene nsiderations	When using, do not eat, drink or 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.		

Physical state Liquid. Material name: Upside Down Marking Paints-Safety Red

Appearance

Form	Aerosol.	
Color	Red.	
Odor	Aromatic.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	-47.2 °F (-44 °C)	
Flash point	-2.2 °F (-19 °C)	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not available.	
Upper/lower flammability or exp	losive limits	
Flammability limit - lower (%)	1.5 %	
Flammability limit - upper (%)	10.9 %	
Vapor pressure	2237.8 hPa estimated	
Vapor density	> 1 (air = 1)	
Relative density	0.77 - 0.85	
Solubility (water)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	410 °F (210 °C) estimated	
Decomposition temperature	Not available.	
Viscosity (kinematic)	Not available.	
Percent volatile	75 %	

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	Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials	Acids. 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	May be fatal if swallowed and enters airways.	
Inhalation	Prolonged inhalation may be harmful.	
Skin contact	Prolonged skin contact may cause temporary irritation.	
Eye contact	Direct contact with eyes may cause temporary irritation.	
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.	

Information on toxicological effects

Acute toxicity

May be fatal if swallowed and enters airways.

Product	Species	Test Results
Upside Down Marking Paint	ts-Safety Red	
Acute		
Dermal		
LD50	Rabbit	26913.1016 mg/kg estimated
Inhalation		
LC50	Rat	6351.3516 mg/l, 4 hours estimated

Product	Species	Test Results
Oral		
LD50	Rat	82136.3438 mg/kg estimated
Chronic		
Oral		
LD50	Mouse	1699.3467 g/kg estimated
* Estimates for product may b	e based on additional component data not shown.	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not expected to be hazardous by OSHA criteria.	
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	May be fatal if swallowed and enters airways.	
Chronic effects	Prolonged inhalation may be harmful.	

12. Ecological information

Ecotoxicity	Harmful to	Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected		
Product		Species	Test Results	
Upside Down Marking Paints	-Safety Red			
Acute				
Crustacea	EC50	Daphnia	6176.4707 mg/l, 48 hours estimated	
Fish	LC50	Fish	12080.6436 mg/l, 96 hours estimated	
Components		Species	Test Results	
Distillates (petroleum), hydro	treated light	(CAS 64742-47-8)		
Acute				
	EC50	Invertebrate (saltwater)	4720 mg/l, 96 hours	
Aquatic				
Acute				
Fish	LC50	Bluegill (Lepomis macrochirus)	1740 mg/l, 96 hours	
		Fathead minnow (Pimephales promelas)	45 mg/l, 96 hours	
* Estimates for product may I	be based on	additional component data not shown.		
Persistence and degradability	No data is	available on the degradability of this product.		
Bioaccumulative potential	No data available.			
Partition coefficient n-octa	nol / water (log Kow)		
n-Butane		2.89		
Propane	2.36			
Mobility in soil	No data available.			
Other adverse effects		adverse environmental effects (e.g. ozone depl endocrine disruption, global warming potential)		
13. Disposal consideratio	ns			
Disposal of waste from residues / unused products	is conside can be re	rial and its container must be disposed of as ha red a RCRA ignitable waste, D001. Consult au cycled. Contents under pressure. Do not punct o drain into sewers/water supplies. Do not cont	thorities before disposal. Empty conta ure, incinerate or crush. Do not allow t	

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, limited quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
	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	304
Packaging bulk	None
ΙΑΤΑ	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, limited quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	10L
	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.
IMDG	
UN number	UN1950
UN proper shipping name	AEROSOLS, LIMITED QUANTITY
Transport hazard class(es)	
Class	2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety
	instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Exp	port Notification (40 CFR 707, Subpt. D)
Not regulated.	
SARA 304 Emergency r	elease notification
Not regulated.	
US. OSHA Specifically F	Regulated Substances (29 CFR 1910.1001-1050)
Not listed.	
US EPCRA (SARA Title	III) Section 313 - Toxic Chemical: Listed substance
Not listed.	
CERCLA Hazardous Su	bstance List (40 CFR 302.4)
Not listed.	
CERCLA Hazardous Su	bstances: Reportable quantity
Not listed.	
	sulting in the loss of any ingredient at or above its RQ require immediate notification to the National 00-424-8802) and to your Local Emergency Planning Committee.

Material name: Upside Down Marking Paints-Safety Red 1051 Version #: 01 Issue date: 09-30-2013

Not regulated.		
	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)	3)	
Safe Drinking Water Act (SDWA)	Not regulated.	
Food and Drug Administration (FDA)	Not regulated.	
Superfund Amendments ar	nd Reauthorization Act of 1986 (SARA)	
Section 311/312 Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No	
SARA 302 Extremely hazardous substance	No	
state regulations		
US. New Jersey RTK - Subs	stances: Listed substance	
Calcium carbonate (CAS n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)		
US. Massachusetts RTK - S	Substance List	
Calcium carbonate (CAS n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)	,	
US. Pennsylvania RTK - Ha	zardous Substances	
Calcium carbonate (CAS Distillates (petroleum), h n-Butane (CAS 106-97-8 Propane (CAS 74-98-6) US. Rhode Island RTK	ydrotreated light (CAS 64742-47-8)	
n-Butane (CAS 106-97-8 Propane (CAS 74-98-6)	3)	
US. California Proposition (WARNING: This product	65 t contains a chemical known to the State of California to cause cancer.	
US - California Proposi	ition 65 - CRT: Listed date/Carcinogenic substance	
Ethylbenzene (CAS	100-41-4) Listed: June 11, 2004	
atile organic compounds (V EPA	OC) regulations	
Aerosol coatings (40 CFR 59, Subpt. E)	Compliant	
State		
Aerosol coatings	This product is regulated as a Ground Traffic and Marking Coating. a sale in all 50 states.	This product is compliant for
Maximum increme reactivity (MIR)	ntal 0.58	
ernational Inventories		
Country(s) or region	Inventory name	On inventory (yes/no
Australia	Australian Inventory of Chemical Substances (AICS)	I
Canada	Domestic Substances List (DSL)	Y
	Non-Domestic Substances List (NDSL)	I
Canada		
Canada China	Inventory of Existing Chemical Substances in China (IECSC)	
	European Inventory of Existing Commercial Chemical Substances (EINECS)	
China	European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS)	
China Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	
China Europe Europe	European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS)	ן ו ץ
China Europe Europe Japan	European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS)	

Country(s) or region

United States & Puerto Rico

Inventory name

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	09-30-2013
Prepared by	Allison Cho
Version #	01
Further information	Not available.
HMIS® ratings	Health: 1* Flammability: 4 Physical hazard: 0 Personal protection: B
NFPA ratings	Health: 1 Flammability: 4 Instability: 0
Disclaimer	The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.