

SAFFTY DATA SHFFT

CHROMATE INDUSTRIAL CORPORATION®

5250-A Naiman Parkway, Solon, OH 44139 • 888-567-2206 • www.chromate.com

FOR CHEMICAL **EMERGENCY**

Call ChemTrec day/night: 1-800-424-9300

1. IDENTIFICATION

PRODUCT NAME: Red Lion Research™ Penetrating Oil

with Graphite

PART NUMBER: 74101

OTHER MEANS OF IDENTIFICATION: Not available.

PRODUCT TYPE: Aerosol.

RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST: Not applicable. DATE PREPARED: May 18, 2015

MANUFACTURER:

CHROMATE INDUSTRIAL CORPORATION

5250-A Naiman Parkway, Solon, OH 44139 • (888) 567-2206

www.chromate.com

EMERGENCY TELEPHONE NUMBER OF THE COMPANY: (888) 567-2206

PRODUCT INFORMATION TELEPHONE NUMBER: (888) 567-2206

REGULATORY INFORMATION TELEPHONE NUMBER: (888) 567-2206

TRANSPORTATION EMERGENCY TELEPHONE NUMBER: (800) 424-9300

NATIONAL POISON CENTER: (800) 222-1222

2. HAZARDS IDENTIFICATION

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the substance or mixture: FLAMMABLE AEROSOLS - Category 1

> GASES UNDER PRESSURE - Compressed gas SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation

and Narcotic effects) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 16%

GHS label elements Hazard pictograms:









Signal word:

Danger

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E - NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED

2. HAZARDS IDENTIFICATION CONTINUED

Hazard statements: Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes serious eye irritation.

Causes skin irritation.

May be fatal if swallowed and enters airways.

May cause respiratory irritation.

May cause drowsiness and dizziness.

May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Use only outdoors or in a

well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling.

Response: Get medical attention if you feel unwell. IF INHALED: Remove victim to fresh air and keep at rest in

a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If

eye irritation persists: Get medical attention.

Storage: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store

in a well-ventilated place.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international

regulations.

Supplemental label elements: DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause

permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known

to the State of California to cause cancer and birth defects or other reproductive harm.

FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep upright in a cool, dry place. Do not discard

empty can in trash compactor.

Hazards not otherwise classfied: None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture: Mixture.

Other means of identitifcation: Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Heavy Naphthenic Petroleum Oil	49.7	64742-52-5
Kerosine, petroleum	15.0	8008-20-6
2-Butoxyethanol	10.0	111-76-2
Mineral Spirits 140-Flash	8.4	64742-88-7
Propane	7.7	74-98-6
Butane	7.3	106-97-8
Heavy Paraffinic Oil	1.2	64742-65-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

4 FIRST-AID MEASURES

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and

remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes

are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get

medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or

waistband.

Skin Contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at

least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove

dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar,

tie, belt or waistband.

4. FIRST AID MEASURES CONTINUED

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Causes serious eye irritation.

Inhalation: Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory

irritation.

Skin contact: Causes skin irritation.

Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth,

throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following: pain or irritation, watering, redness.

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing, nausea or vomiting, headache,

drowsiness/fatigue, dizziness/vertigo, unconsciousness.

Skin contact: Adverse symptoms may include the following: irritation, redness. **Ingestion:** Adverse symptoms may include the following: nausea or vomiting.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been

ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes

are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and

the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged

to any waterway, sewer or drain.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide, carbon

monoxide.

 ${\sf N/A-NOT\,APPLICABLE} \qquad {\sf N/D-NOT\,DETERMINED} \qquad {\sf N/E-NONE\,ESTABLISHED} \qquad {\sf N/R-NOT\,REGULATED} \qquad {\sf N/L-NOT\,LISTED}$

5. FIRE-FIGHTING MEASURES CONTINUED

Special protective actions for fire-fighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED REV 05/18/2015 DD

7. HANDLING AND STORAGE

Precautions for safe handling

Protective measures:

Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not breathe vapor or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED REV 05/18/2015 DD

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Occupational exposure limits

Ingredient name **Exposure limits**

Heavy Naphthenic Petroleum Oil ACGIH TLV (United States, 4/2014).

TWA: 5 mg/m3 8 hours. Form: Inhalable

fraction

NIOSH REL (United States, 10/2013). TWA: 5 mg/m3 10 hours. Form: Mist STEL: 10 mg/m3 15 minutes. Form: Mist OSHA PEL (United States, 2/2013).

TWA: 5 mg/m³ 8 hours.

Kerosine, petroleum NIOSH REL (United States, 10/2013).

TWA: 100 mg/m3 10 hours.

ACGIH TLV (United States, 4/2014).

Absorbed through skin.

TWA: 200 mg/m³, (as total hydrocarbon

vapor) 8 hours.

2-Butoxyethanol ACGIH TLV (United States, 4/2014).

TWA: 20 ppm 8 hours.

NIOSH REL (United States, 10/2013).

Absorbed through skin. TWA: 5 ppm 10 hours. TWA: 24 mg/m³ 10 hours.

OSHA PEL (United States, 2/2013).

Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 240 mg/m³ 8 hours.

Mineral Spirits 140-Flash OSHA PEL (United States, 2/2013).

> TWA: 100 ppm 8 hours. TWA: 400 mg/m³ 8 hours.

NIOSH REL (United States, 10/2013). **Propane**

> TWA: 1000 ppm 10 hours. TWA: 1800 mg/m3 10 hours.

OSHA PEL (United States, 2/2013).

TWA: 1000 ppm 8 hours. TWA: 1800 mg/m³ 8 hours.

Butane NIOSH REL (United States, 10/2013).

> TWA: 800 ppm 10 hours. TWA: 1900 mg/m3 10 hours.

ACGIH TLV (United States, 4/2014). STEL: 1000 ppm 15 minutes.

Heavy Paraffinic Oil ACGIH TLV (United States, 4/2014).

TWA: 5 mg/m3 8 hours. Form: Inhalable

NIOSH REL (United States, 10/2013). TWA: 5 mg/m3 10 hours. Form: Mist STEL: 10 mg/m3 15 minutes. Form: Mist OSHA PEL (United States, 2/2013).

TWA: 5 mg/m3 8 hours.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

Appropriate engineering controls:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED REV 05/18/2015 DD

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state: Liquid

Color: Not available. Odor: Not available Odor threshold: Not available. pH: Not available. Not available. Melting point: **Boiling Point:** Not available.

Flash point: Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]

1 (butyl acetate = 1) **Evaporation rate:**

Flammability (solid, gas): Not available. Lower: 0.7% Lower and upper explosive (flammable) limits: Upper: 10.6%

Vapor pressure: 13.5 kPa (101.325 mm Hg) [at 20°C]

Vapor density: 1.55 [Air = 1]

Relative density: 0.79

Solubility: Not available. Partition coefficient: n-octanol/water: Not available. Auto-ignition temperature: Not available. **Decomposition temperature:** Not available.

Viscosity: Kinematic (room temperature): <0.205 cm²/s (<20.5 cSt)

Kinematic (40°C (104°F)): <0.205 cm²/s (<20.5 cSt)

Aerosol product

Type of aerosol: Spray

Heat of combustion: 0.00003569 kJ/g

10. STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: This product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame).

Incompatible materials: No specific data.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be

produced.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED Page 9 of 15

REV 05/18/2015 DD

Information on toxicological effe	ects					
Acute toxicity						
Product/ingredient name	Result		Species		Dose	Exposure
Heavy Naphthenic Petroleum Oil	LD50 Oral		Rat		>5000 mg/kg	-
Kerosine, petroleum	LD50 Oral		Rat		15 g/kg	-
2-Butoxyethanol	LCLo Inhalation Vapor		Guinea pig		>3.1 mg/l	1 hours
	LD50 Dermal		Guinea	pig	>2000 mg/kg	-
	LD50 Oral		Rat		1300 mg/kg	-
Butane	LC50 Inhalation \	√apor	Rat		658000 mg/m ³	4 hours
Heavy Paraffinic Oil	LD50 Dermal		Rabbit		>5000 mg/kg	-
	LD50 Oral		Rat		>5000 mg/kg	-
Irritation/Corrosion						
Product/ingredient name	Result	Spec	cies	Score	Exposure	Observation
Heavy Naphthenic Petroleum Oil	Skin - Severe irritant	Rabb	oit	-	500	-
					milligrams	
Kerosine, petroleum	Skin - Moderate irritant	Rabb	oit	-	0.5 Mililiters	-
	Skin - Moderate irritant	Rabb	oit	-	24 hours 100	-
					Percent	
	Skin - Severe irritant	Rabb	oit	-	500	-
					milligrams	
2-Butoxyethanol	Eyes - Moderate irritant	Rabb	oit	_	24 hours 100	-
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,				milligrams	
	Eyes - Severe irritant	Rabb	oit	-	100	-
					milligrams	
	Skin - Mild irritant	Rabb	oit	-	500	-
					milligrams	
Sensitization: Not available.						
Mutagenicity: Not available.						
Carcinogenicity: Not available.						
-						
Classification						
Product/ingredient name		OSH	Α	IARC	NTP	
Kerosine, petroleum		-		3	-	
2-Butoxyethanol		-		3	-	

11. TOXICOLOGICAL INFORMATION

Reproductive toxicity: Not available.

Teratogenicity: Not available.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L — NOT LISTED

11. TOXICOLOGICAL INFORMATION CONTINUED

Specific target organ toxicity (single exposure)						
Name	Category	Route of exposure	Target organs			
Heavy Naphthenic Petroleum Oil	Category 3	Not applicable.	Respiratory tract irritation and			
Kerosine, petroleum	Category 3	Not applicable.	Narcotic effects Respiratory tract irritation and Narcotic effects			
2-Butoxyethanol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects			
Mineral Spirits 140-Flash	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects			
Propane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects			
Butane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects			
Heavy Paraffinic Oil	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects			
Specific target organ toxicity (repeated exposure)						
Name	Category	Route of exposure	Target organs			
Heavy Naphthenic Petroleum Oil	Category 2	Not determined	Not determined			
Kerosine, petroleum	Category 2	Not determined	Not determined			
2-Butoxyethanol	Category 2	Not determined	Not determined			
Mineral Spirits 140-Flash	Category 2	Not determined	Not determined			
Propane	Category 2	Not determined	Not determined			
Butane	Category 2	Not determined	Not determined			
Heavy Paraffinic Oil	Category 2	Not determined	Not determined			
Aspiration hazard						
Name	Result					

Information on the likely routes of exposure: Not available.

Mineral Spirits 140-Flash

Propane Butane

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L — NOT LISTED

ASPIRATION HAZARD - Category 1
ASPIRATION HAZARD - Category 1

ASPIRATION HAZARD - Category 1

11. TOXICOLOGICAL INFORMATION CONTINUED

Potential acute health effects

Eye contact: Causes serious eye irritation.

Inhalation: Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory

irritation.

Skin contact: Causes skin irritation.

Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to

mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following: pain or irritation, watering, redness.

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing, nausea or vomiting, headache,

drowsiness/fatigue, dizziness/vertigo, unconsciousness.

Skin contact: Adverse symptoms may include the following: irritation, redness. **Ingestion:** Adverse symptoms may include the following: nausea or vomiting.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Potential chronic health effects: Not available

General: May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route ATE value
Oral 10917.4 mg/kg

12. ECOLOGICAL INFORMATION

Toxicity

Product/ingredient nameResultSpeciesExposure2-ButoxyethanolAcute EC50 >1000 mg/l Fresh waterDaphnia - Daphnia magna48 hoursAcute LC50 800000 μg/l Marine waterCrustaceans - Crangon crangon48 hoursAcute LC50 1250000 μg/l Marine waterFish - Menidia beryllina96 hours

Persistence and degradability

 Product/ingredient name
 Aquatic half-life
 Photolysis
 Biodegradability

 2-Butoxyethanol
 Readily

Bioaccumulative potential: Not available.

Mobility in soil

Soil/water partition coefficient (Koc): Not available.

Other adverse effects: No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

14. TRANSPORT INFORMATION						
	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG	
UN number	UN1950	UN1950	UN1950	UN1950	UN1950	
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS	
Transport hazard class(es)	2.1 FLAMMABLE GAS 2	2.1	2.1	2.1	2.1	
Packing group	-	-	-	-	-	
Environmental hazards	No.	No.	No.	No.	No.	
Additional information	Special provisions LIMITED QUANTITY	Special provisions LIMITED QUANTITY	Special provisions (ERG#126)	Special provisions LIMITED QUANTITY	Emergency schedules (EmS) LIMITED QUANTITY, F-D, S-U	

Special precautions for user: Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes.

The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

15. REGULATORY INFORMATION

U.S. Federal regulations

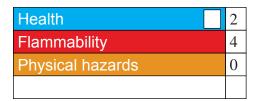
State Regulations

California Prop. 65

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

16. OTHER INFORMATION

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/ user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.