



Signal Word:	Danger
Hazard Statement:	Combustible liquid. Causes serious eye irritation. May cause cancer.
Precautionary Statements	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Response:	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 advice/attention. IF exposed or concerned: Get medical advice/attention. In case of fire: Use... to extinguish.
Storage:	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Hazard(s) not otherwise classified (HNOC):	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Glycol ether solvent	112-34-5	20 - <50%
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate	85828-89-3	20 - <50%
Acid Red 357	73507-64-9	1 - <5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

Inhalation:	Move to fresh air.
Skin Contact:	Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.



Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First-aid Responders: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Most important symptoms/effects, acute and delayed

Symptoms: Respiratory tract irritation.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Methods and material for containment and cleaning up:**

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions:

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage**Handling****Technical measures (e.g. Local and general ventilation):**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Safe handling advice:

Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Contact avoidance measures:

No data available.

Hygiene measures:

Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke.

Storage**Safe storage conditions:**

Store locked up. Store in a well-ventilated place. Store in a cool place.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection**Control Parameters****Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
Glycol ether solvent - Inhalable fraction and vapor.	TWA	10 ppm	US. ACGIH Threshold Limit Values (03 2013)
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p - Inhalable fraction. - as Cr(VI)	TWA	0.0002 mg/m3	US. ACGIH Threshold Limit Values (03 2018)
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p - Inhalable fraction. - as Cr(III)	TWA	0.003 mg/m3	US. ACGIH Threshold Limit Values (03 2018)
	TWA	0.003 mg/m3	US. ACGIH Threshold Limit Values (03 2018)
Chromium, 2-[2-(4,5-dihydro-	STEL	0.0005	US. ACGIH Threshold Limit Values (03 2018)



3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazanyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p - Inhalable fraction. - as Cr(VI)		mg/m3	
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazanyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p - as Cr	PEL	0.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	PEL	0.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	PEL	1 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazanyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p	Ceiling	0.1 mg/m3	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Acid Red 357 - Inhalable fraction. - as Cr(III)	TWA	0.003 mg/m3	US. ACGIH Threshold Limit Values (03 2018)
Acid Red 357 - as Cr	PEL	0.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	Type	Exposure Limit Values	Source
2-Propoxyethanol (Glycol ether)	TWA	25 ppm 110 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Glycol ether solvent - Inhalable fraction and vapor.	TWA	10 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Chromium	TWA	0.5 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Chromium - as Cr	TWA	0.5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Chromium	TWA	0.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

Chemical name	Type	Exposure Limit Values	Source
Glycol ether solvent - Inhalable fraction and vapor.	TWA	10 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazanyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p - as Cr	TWA	0.01 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	0.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)



Acid Red 357 - as Cr	TWA	0.5 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
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Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p (Total chromium: Sampling time: End of shift at end of work week.)	25 µg/l (Urine)	ACGIH BEI (03 2013)
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p (Total chromium: Sampling time: Increase during shift.)	10 µg/l (Urine)	ACGIH BEI (03 2013)

Exposure guidelines

Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p	US. ACGIH Threshold Limit Values	Can be absorbed through the skin.
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Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear suitable protective clothing.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.



Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Orange
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	> 62 °C > 143 °F(Tag closed cup)
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	1
Solubility(ies)	
Solubility in water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Heat, sparks, flames.
Incompatible Materials:	Strong acids. Strong bases.



Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: May be harmful in contact with skin. Causes mild skin irritation.

Eye contact: Causes serious eye irritation.

Ingestion: May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Glycol ether solvent LD 50 (Rat): 3,306 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Glycol ether solvent LD 50 (Rabbit): 2,764 mg/kg

Inhalation

Product:

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation



Product: No data available.

Specified substance(s):
Glycol ether solvent in vivo (Rabbit): Slightly irritating

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
Glycol ether solvent Rabbit, 24 - 72 hrs: Highly irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Glycol ether solvent LC 50 (Bluegill (*Lepomis macrochirus*), 96 h): 1,300 mg/l Mortality**Aquatic Invertebrates****Product:** No data available.**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Specified substance(s):**

Glycol ether solvent Log Kow: 0.56

Mobility in soil: No data available.



Other adverse effects: No data available.

13. Disposal considerations

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

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

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p	10 lbs.
Acid Red 357	10 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Fire Hazard
 Immediate (Acute) Health Hazards
 Delayed (Chronic) Health Hazard
 Flammable (gases, aerosols, liquids, or solids)
 Serious eye damage or eye irritation
 Carcinogenicity

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Glycol ether solvent	
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p	10 lbs.
Acid Red 357	10 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Glycol ether solvent	10000 lbs
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p	10000 lbs
Acid Red 357	10000 lbs

SARA 313 (TRI Reporting)

<u>Chemical Identity</u>
Glycol ether solvent
Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p
Acid Red 357

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

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

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

Glycol ether solvent

Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p

Ethyl lactate

Acid Red 357

US. Massachusetts RTK - Substance List**Chemical Identity**

Ethyl lactate

US. Pennsylvania RTK - Hazardous Substances**Chemical Identity**

Glycol ether solvent

Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p

Ethyl lactate

Acid Red 357

US. Rhode Island RTK**Chemical Identity**

Chromium, 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)diazenyl]benzoate 2-[2-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-p

Acid Red 357

International regulations**Montreal protocol**

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC:

Regulatory VOC (less water and exempt solvent) : 286 g/l

VOC Method 310 : 28.58 %

**Inventory Status:**

Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Taiwan Chemical Substance Inventory:	One or more components in this product are not listed on or exempt from the Inventory.



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

Revision Date: 04/30/2019

Version #: 2.0

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

