

SAFETY DATA SHEET



HR Multiple black

according to EC Nr. 1907/2006

Date: 12/2015

Replaced version: 08.19.2019

Date of impression: 03.12.2015

SECTION 1: DESIGNATION OF PRODUCT AND COMPANY

1.1 Identification of the substance or preparation

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1.2 Use of the substance/preparation

Ink for industrial ink jet printers.

1.3 Company/undertaking identification

Pannier Corporation
207 Sandusky Street
Pittsburgh, PA 15212 USA
Phone : 412-323-4900
<http://www.pannier.com>
e-mail: sales@pannier.com

1.4 Emergency telephone:

Infotrac 24-Hour Emergency Response Number : 1-800-535-5053

SECTION 2: HAZARD IDENTIFICATION

Physical hazards	Flammable liquids	Category 2
Health hazards	Serious eye damage/eye irritation	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	not classified.	

Label elements



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Signal word

Danger

Hazard statement

Highly flammable liquid and vapor. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/Bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment. P242 - Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.

Response

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.

P370 + P378 In case of fire: Use sand, carbon dioxide (CO₂) or dry chemical to extinguish.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Prolonged or repeated skin contact may cause drying, cracking, or irritation. May produce an allergic reaction.

Supplemental information

Contains tinting agent. May produce an allergic reaction.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ethanol		64-17-5	<80
Cyclohexanone		108-94-1	<10
Acetone		67-64-1	<7.5
Black colorant		Proprietary	<7.5
Amines, C12-18-alkyl, bis[2,4-dihydro-4-[(2-hydroxy-5-nitr ophenyl)azo]-5-methyl-2-phenyl-3H pyrazol-3-onato(2-)]cobaltate		85203-44-7	<1
Sodium bis[2,4-dihydro-4-[(2-hydroxy-5-nitr ophenyl)azo]-5-methyl-2-phenyl-3H -pyrazol-3-onato(2-)]cobaltate		71839-88-8	<1

SECTION 4: FIRST AID MEASURES

Inhalation

Move person to fresh air immediately.

If symptoms persist, get immediate medical attention.

Skin contact

In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Wash clothing separately before reuse.

Get medical attention, if needed.

Eye contact

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Get medical attention immediately.

Ingestion

Rinse mouth out with water. If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Get medical attention immediately.

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Most important symptoms/effects, acute and delayed

Not available

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media

Suitable extinguishing media: sand, carbon dioxide (CO₂) or dry chemical.

Unsuitable extinguishing media

Not available

Specific hazards arising from the chemical

Not applicable

Special protective equipment and precautions for firefighters

Firefighters should wear full protective clothing including self-contained breathing apparatus. Avoid runoff into storm sewers and ditches which lead to waterways.

Fire-fighting equipment/instructions

Move containers from fire area if you can do it without risk.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin. Avoid inhalation of vapors or mists. Do not touch or walk through spilled material. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment to minimize exposure to skin and eye. In the case of vapor formation use a respirator with an approved filter.

Methods and materials for containment and cleaning up

Not available.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Wear personal protective equipment.

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Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetone (CAS 67-64-1)	PEL	2400 mg/m ³ 1000 ppm
Cyclohexanone (CAS 108-94-1)	PEL	200 mg/m ³ 50 ppm
Ethanol (CAS 64-17-5)	PEL	1900 mg/m ³ 1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Acetone (CAS 67-64-1)	STEL TWA	750 ppm 500 ppm
Cyclohexanone (CAS 108-94-1)	STEL TWA	50 ppm 20 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	590 mg/m ³ 250 ppm
Cyclohexanone (CAS 108-94-1)	TWA	100 mg/m ³ 25 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm

Biological limit values

ACGIH biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
Cyclohexanone (CAS 108-94-1)	80 mg/l	1,2-Cyclohexan ediol, with Hydrolysis	Urine	*

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	8 mg/l	Cyclohexanol, with hydrolysis	Urine	*
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* - For sampling details, please see the source document.

Exposure guidelines

US. ACGIH Threshold Limit Values

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

CYCLOHEXANONE (CAS 108-94-1)

Can be absorbed through the skin.

US. Minnesota Hazardous Substances List (Minn. Rules 5206.0400).

Cyclohexanone (CAS 108-94-1)

Skin designation applies.

US. NIOSH: Pocket Guide to Chemical Hazards

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

Appropriate engineering controls

Not available

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible).

Eye wash fountain and emergency showers are recommended.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

Thermal hazards

Not available.

General hygiene considerations

Do not get this material in contact with skin. Avoid contact with skin, eyes and clothing.

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When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state not available

Color black

Odor solvent

Odor threshold not available

pH not available

Melting point/freezing point not available

Initial boiling point and

Boiling range not available

Flash point 41.0°F (5.0°C) Setaflash Closed Cup

Evaporation rate not available

Flammability (solid, gas) not available

Upper/lower flammability or explosive limits

Flammability limit – lower (%) not available

Flammability limit - upper (%) not available

Explosive limit - lower (%) not available

Explosive limit - upper (%) not available

Vapor pressure not available

Solubility(ies)

Solubility (water) not available

Partition coefficient
(n-octanol/water) not available

Auto-ignition temperature not available

Decomposition temperature not available

Viscosity not available

Other information for other VOC regulatory data/information see
Section 15.

VOC (Weight %) 789 g/l

SECTION 10: STABILITY AND REACTIVITY

Reactivity not available

Chemical stability stable at normal conditions

Possibility of hazardous reactions none known

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Conditions to avoid	heat, flames and sparks.
Incompatible materials	not available
Hazardous decomposition products	not available

SECTION 11: TOXICOLOGICAL INFORMATION

Symptoms related to the physical, chemical and toxicological characteristics

Not available

Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Causes serious eye damage

Respiratory or skin sensitization

Respiratory sensitization

Based on available data, the classification criteria are not met

Skin sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met

IARC Monographs. Overall Evaluation of Carcinogenicity

Cyclohexanone (CAS 108-94-1): 3 not classifiable as to carcinogenicity to humans.

Reproductive toxicity

Based on available data, the classification criteria are not met.

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Specific target organ toxicity

Single exposure: based on available data, the classification criteria are not met.

Specific target organ toxicity

Repeated exposure: based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met

Further information

Complete toxicity data are not available for this specific formulation. Refer to Section 2 for potential health effects and Section 4 for first aid measures.

Components	Species	Test results
Acetone (CAS 67-64-1)		
Acute		
Dermal LD50	Rabbit	20000 mg/kg 20 ml/kg
Inhalation LC50	Rat	76 mg/l, 4 Hours 50.1 mg/l, 8 Hours
Oral LD50	Mouse Rabbit Rat	3000 mg/kg 5340 mg/kg 5800 mg/kg
Other LD50	Mouse Rat	1297 mg/kg 5500 mg/kg
Ethanol (CAS 64-17-5)		
Acute		
Inhalation LC50	Mouse Rat	39 mg/l, 4 Hours 20000 ppm, 10 Hours
Oral LD50	Dog Guinea pig Mouse Rat	5.5 g/kg 5.6 g/kg 3450 mg/kg 6.2 g/kg

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Other
LD50

Mouse
Rat

933 mg/kg
1440 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Aquatic toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

LC50/96h/rainbow trout =<100 mg/l and >10 mg/l.

Ecotoxicity

Components		Species	Test results
Acetone (CAS 67-64-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
Cyclohexanone (CAS 108-94-1)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	481 - 578 mg/l, 96 hours
Ethanol (CAS 64-17-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Persistence and degradability		not available	
Bioaccumulative potential		not available	
Partition coefficient n-octanol / water (log Kow)			
Acetone		-0.24	
Cyclohexanone		0.81	
Ethanol		-0.31	
Mobility in soil		not available	
Other adverse effects		not available	

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SECTION 13: DISPOSAL CONSIDERATIONS

Disposal instructions

Do not dispose of together with general office waste. Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Ensure collection and disposal with an appropriately licensed waste contractor.

SECTION 14: TRANSPORT INFORMATION

DOT

UN number	UN 1263
UN proper shipping name	Paint, flammable (Ethanol, Acetone)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packaging group	II
Special precautions for user	not available
DOT supplemental information	DOT classification only applies to shipments within the US and Puerto Rico.

IATA

UN number	UN 1263
UN proper shipping name	Paint, flammable (Etanol, Acetone)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	no
Special precautions for user	not available

IMDG

UN number	UN 1263
UN proper shipping name	Paint, flammable (Ethanol, Acetone)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	no
EmS	not available
Special precautions for user	not available

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ADR

Proper shipping name

Paint, flammable (Ethanol, Acetone)

Hazard class

3

UN number

UN 1263

Packing group

II

DOT



IATA; IMDG



ADR



SECTION 15: REGULATORY INFORMATION

US federal regulations

US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1) Listed

Cyclohexanone (CAS 108-94-1) Listed

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SARA 304 Emergency release notification

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate hazard	yes
Delayed hazard	no
Fire hazard	yes
Pressure hazard	no
Reactivity hazard	no

SARA 302 Extremely hazardous substance

Not listed

SARA 311/312

no

Hazardous chemical

Other federal regulations

Safe Drinking Water Act (SDWA) not regulated

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1) 6532

US state regulations

US. Massachusetts RTK - Substance List

Acetone (CAS 67-64-1)
Cyclohexanone (CAS 108-94-1)
Ethanol (CAS 64-17-5)

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

Acetone (CAS 67-64-1)
Cyclohexanone (CAS 108-94-1)
Ethanol (CAS 64-17-5)

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

Acetone (CAS 67-64-1)

Cyclohexanone (CAS 108-94-1)

Ethanol (CAS 64-17-5)

US. Rhode Island RTK

Acetone (CAS 67-64-1)

Cyclohexanone (CAS 108-94-1)

US. California Proposition 65

Not listed

Other information

VOC content (less water, less exempt compounds) = 789 g/L (U.S. requirement, not for emissions)

VOC data based on formulation (Organic compounds minus solids)

Regulatory information

All chemical substances in this product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

SECTION 16: OTHER INFORMATION

Disclaimer

This Safety Data Sheet document is provided without charge to customers. Data is the most current known at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit

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RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds