SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: #400 Black, Red Ink
PRODUCT USE: Flexographic Ink
PANNIER P/N: Black - I0400-1110, Red - I0400-5110
PRODUCT COLOR: Black, Red
Not recommended for: Consumer Use
Manufacturer/Supplier:
PANNIER CORPORATION
207 SANDUSKY STREET
PITTSBURGH, PA 15212-5823 U.S.A.
24 Hr Emergency Telephone Number: INFOTRAC 1-800-535-5053

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Acute toxicity, Oral (Category 4), H302
Specific target organ toxicity - repeated exposure (Category 2), H373
For the full text of the H-Statements mentioned in this Section, see Section 16.
2.2 GHS Label elements, including precautionary statements
Pictogram

Signal word Warning
Hazard statement(s)
H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statement(s)
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P314 Get medical advice/ attention if you feel unwell.
P501 Dispose of contents/ container to an approved waste disposal plant.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

		OCCUPATIONAL EXPOSURE LIMITS		SEE	VAPOR PRESSURE		WEIGHT
HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	SEC.VI	MM HG	@ TEMP	PERCENT
Diethylene Glycol	111-46-6	N/A	N/A	N/A .	0.0	77°F	BLACK: 40 RED: 50

NO TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372 ARE PRESENT

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures
General advice
Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11
4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2 Special hazards arising from the substance or mixture
Carbon oxides
5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary
5.4 Further information
Cool containers/tanks with water spray

SECTION 6 - ACCIDENTAL RELEASE MEASURES

For personal protection see section 8.
6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
hygroscopic Store under nitrogen. Heat sensitive.
Storage class (TRGS 510): Combustible liquids
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters

Component	CAS-No.	Value	Control parameters Basis
Diethylene glycol	111-46-6	TWA	10.000000mg/m3
USA. Workplace Environmental Exposure Levels (WEEL)			

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment
Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)
data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: viscous liquid	
Colour:	Black, Red
b) Odour	slight
c) Odour Threshold	No data available
d) pH	5.0 - 8 at 500 g/l at 20 °C (68 °F)
e) Melting point/freezing point	
Melting point/range:	-10 °C (14 °F) - lit.
f) Initial boiling point and boiling range	245 °C (473 °F) - lit.
g) Flash point	143 °C (289 °F) - closed cup
h) Evaporation rate	< 0.01 - Butyl acetate
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	
Upper explosion limit:	12.3 %(V)
Lower explosion limit:	2 %(V)
k) Vapour pressure	0.008 hPa (0.006 mmHg) at 25 °C (77 °F)
l) Vapour density	3.66 - (Air = 1.0)
m) Relative density	1.118 g/cm3 at 25 °C (77 °F)
n) Water solubility	completely miscible
o) Partition coefficient:	noctanol/water log Pow: -1.999
p) Auto-ignition temperature	372 °C (702 °F) at 1,013.25 hPa (760.00 mmHg)
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

Surface tension	48.5 mN/m at 25 °C (77 °F)
Relative vapour density	3.66 - (Air = 1.0)

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

No data available
10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Heating in air. Exposure to moisture
10.5 Incompatible materials
Strong oxidizing agents, Strong acids, Zinc
10.6 Hazardous decomposition products
Other decomposition products - No data available In the event of fire: see section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 12,565 mg/kg
LD50 Oral - Human - 1,000 mg/kg
Remarks: Effects due to ingestion may include: Drowsiness Gastrointestinal disturbance Liver disorders Behavioral: Muscle weakness.
LD50 Dermal - Rabbit - 11,890 mg/kg
No data available
Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)
Serious eye damage/eye irritation
Eyes - Rabbit
Result: No eye irritation
Respiratory or skin sensitisation
Maximisation Test (GPMT) - Guinea pig
Result: Did not cause sensitisation on laboratory animals.
(Directive 67/548/EEC, Annex V, B.6.)
Germ cell mutagenicity
No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure.
Oral - Kidney
Aspiration hazard
No data available
Additional Information
Repeated dose toxicity - Rat - Oral - No observed adverse effect level - 100 mg/kg RTECS: ID5950000
Symptoms and signs of poisoning are: Confusion., Dizziness, Kidney injury may occur., Unconsciousness, Convulsions, Nausea, Headache, Vomiting Pulmonary edema. Effects may be delayed.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 75,200 mg/l - 96 h
LC50 - Carassius auratus (goldfish) - 5,000 mg/l - 24 h
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - > 10,000 mg/l - 24 h
(DIN 38412)
12.2 Persistence and degradability
Biodegradability anaerobic - Exposure time 28 d
Result: 90 - 100 % - Readily biodegradable (OECD Test Guideline 301B)
12.3 Bioaccumulative potential
Bioaccumulation Leuciscus idus melanotus - 3 d - 0.05 mg/l
Bioconcentration factor (BCF): 100
12.4 Mobility in soil
No data available
12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6 Other adverse effects
No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused product

SECTION 14 - TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

SECTION 15 - REGULATORY INFORMATION

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
Acute Health Hazard
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components
Diethylene glycol CAS-No. 111-46-6 Revision Date 1989-08-11
New Jersey Right To Know Components
Diethylene glycol CAS-No. 111-46-6 Revision Date 1989-08-11
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - OTHER INFORMATION

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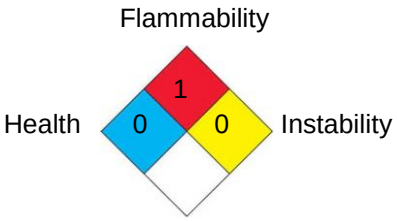
Hazardous Material Information System (HMIS)

HMIS & NFPA Hazard Rating
Legend
* = Chronic Health Hazard

0 = INSIGNIFICANT
1 = SLIGHT

National Fire Protection Association (NFPA)



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Full text of H-Statements referred to under sections 2 and 3.
Acute Tox. Acute toxicity
H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
STOT RE Specific target organ toxicity - repeated exposure

HMIS Rating
Health hazard: 1
Chronic Health Hazard:
Flammability: 1
Physical Hazard 0

NFPA Rating
Health hazard: 0
Fire Hazard: 1
Reactivity Hazard: 0

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