Substance type	Use	MSDS#	Туре	Vendor 1	Vendor 2	Product detail	VOC content	Estimated annual consumption
Solvent	Press cleaning	23	Prepac Auto wash	Baldwin	Baldwin	#87970-002E impregnated blanket wash cloth	0.4 lbs/gal or 48 g/L	20 L solvent contained in 200 auto wash rolls
Solvent	Press cleaning	20	Blanket Wash	Heidelberg	Varn	V-313 Blue	97.77 %wt	26000 L
Solvent	Press cleaning	21	Blanket Wash	Heidelberg	Varn	V-324	98.45 %wt	6300 L
Solvent	Press cleaning	26	Rubber Rejuvenator	United Chemical Service		Rubber Rejuvenator	100% vol	500 L
Solvent	Press cleaning	22	Metering Roller Cleaner	Heidelberg	Nova	Saphira PW-3207A	5.25 lbs/ gal or 629 g/L	5000 L
Ink	Printing	1	Low Tack News BLACK	Sun Chemical	91115191	FFTWH9182043:WOH PROCESS BLACK:TBB2	31.22 %wt	8500 kg
Ink	Printing	2	Low Tack News CYAN	Sun Chemical	91230477	FFVWH5182333:WOH PROCESS CYAN:TBB2	38.98 %wt	9100 kg
Ink	Printing	3	Low Tack News MAGENTA	Sun Chemical	91230557	FFVWH4182334:WOH PROCESS MAGENTA:TBB2	29.34 %wt	8200 kg
Ink	Printing	4	Low Tack News YELLOW	Sun Chemical	91230553	FFVWH2182335:WOH PROCESS YELLOW:TBB2	29.79 %wt	8700 kg
Ink	Printing	5	PS48-09 BLACK	Sun Chemical	91020291	PS48-09:WOH PROCESS Black:TBB2	33.17 %wt	2300 kg
Ink	Printing	6	PS58-05 CYAN	Sun Chemical	90995912	PS58-05:WOHS PROCESS CYAN:TBB2	35.01 %wt	3100 kg
Ink	Printing	7	PS55-04 MAGENTA	Sun Chemical	90995964	PS55-04:WOHS PROCESS MAGENTA:TBB2	31.14 %wt	2300 kg
Ink	Printing	8	PS55-02 YELLOW	Sun Chemical	90996026	PS55-02:WOHS PROCESS YELLOW:TBB2	36.55 %wt	3200 kg
Ink	Printing	9	Cover (UV Coatable)	Sun Chemical	90063348	FFOWH9189951:WOHS PROCESS BLACK:K390	32.25 %wt	800 kg
Ink	Printing	10	Cover (UV Coatable)	Sun Chemical	90063321	FFOWH5189952:WOHS PROCESS BLUE:K390	33.87 %wt	600 kg
Ink	Printing	11	Cover (UV Coatable)	Sun Chemical	90063287	FFOWH2189954:YELLOW WOH PROCESS:K390	42.17 %wt	600 kg
Ink	Printing	12	Cover (UV Coatable)	Sun Chemical	90063306	FFOWH4189953:WOHS PROCESS RED:K390	29.2 %wt	550 kg
Ink	Printing	13	FTCN204400 mt BLACK	Flint			36.53 %wt	26000 kg
Ink	Printing	14	FTCN224400 mt CYAN	Flint			38.06 %wt	27400 kg
Ink	Printing	15	FTCN244400 mt MAGENTA	Flint			36.96 %wt	24600 kg
Ink	Printing		FTCN274400 mt YELLOW	Flint			43.4 %wt	26000 kg
Ink	Printing	17	FTCN203090 It BLACK	Flint			33.64 %wt	7000 kg
Ink	Printing	18	FTCN223090 It CYAN	Flint			39.28 %wt	9300 kg
Ink	Printing	19	FTCN243090 It MAGENTA	Flint			42.38 %wt	7000 kg
Ink	Printing	33	FTCN273090 It YELLOW	Flint			42.83 %wt	9700 kg
Fountain	Wetting agent	24	Fountain Solution	Fuji	Anchor	Emerald Premium KDHP 20357	0.8lbs / gal or	1
Solution	wetting agent			i uji			96g/L	11200 kg
Fountain Solution	Wetting agent	25	Fountain Solution	Fuji	Anchor	Emerald Premium MXEH-M 2018	1.96 lbs/gal or 235g/L	1700 kg
Oil	Applied to blanket at press start up	27	Flash Oil	Sun Chemical	30001129	200-383 NC 400 Flash oil	0%	90 L
Silicone	Applied to finished products to prevent sticking	28	Silicone		Anchor	Silicone Emulsion DVQ 7841	0.04 lbs/gal or 5 g/L	1250 L
Pre press chemistry	Plate developper	29	News Developer	Fuji	Fuji	LP-DZ	0%	3000 L
Pre press chemistry	Extend useful life of plate developer solution	30	News Developer Replenisher	Fuji	Fuji	LP-DRZ	0%	3600 L
Pre press chemistry	Developer solution neutralizer	31	Neutralizer Solution	Fuji	Fuji	Meta Aid - CA10	0%	2000 L
Pre press chemistry	Finishing applied to protect prior to printing plates	32	Plate finisher Gum	Fuji	Fuji	FN- 6PS	29.28g/L	1300 L

Material Safety Data Sheet

1. Product and company identification

Product code : 3000112

Product name : 200-383 N C 400 FLASH OIL

Material uses : Printing. Colorant.

Manufacturer/ Distributor : Sun Chemical Limited 10 West Drive

L6T 4Y4

Brampton, Ontario

In case of emergency : (800) 424-9300 (U.S.)

(703) 527-3887 (International)

Regulatory information : Canada: (905) 796-2222

US: (201) 933-4500

 Other information
 : (513) 830-8500

 Date of revision
 : 1/26/2011.

2. Hazards identification

Physical state : Liquid.

:

WHMIS (Classification)Not controlled under WHMIS (Canada).Emergency overviewNo known significant effects or critical hazards.

Routes of entry Dermal contact. Inhalation.

Potential acute health effects

Eyes : May cause mild eye irritation.Skin : May cause mild skin irritation.

Inhalation : No known significant effects or critical hazards.Ingestion : No known significant effects or critical hazards.

Potential chronic health effects(Long term exposure)

Carcinogenic effects : No known significant effects or critical hazards.

Mutagenic effects : No known significant effects or critical hazards.

Teratogenicity / : No known significant effects or critical hazards.

Reproductive toxicity

See toxicological information (Section 11)

3. Composition/information on ingredients

No hazardous ingredient

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

12- December- 2013 en - US *Page: 1/5*

4. First aid measures

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact

: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

Inhalation

: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.

Ingestion

: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training.

5. Fire-fighting measures

Flammability of the product

: In a fire or if heated, a pressure increase will occur and the container may burst.

Products of combustion

Extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Not suitable

Suitable

: None known.

: No specific data.

Special exposure hazards

: 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.

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.

Flammability (OSHA criteria)

: IIIB

Flash point

: Lowest known value: >93.3°C (200°F) (Closed cup)

6. Accidental release measures

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8).

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).

Methods for cleaning up

: Stop leak if without risk. Move containers from spill area. 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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see Section 8). 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.

12- December- 2013 en - US Page: 2/5

7. Handling and storage

Storage

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Special remarks on fire hazards

: Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. (Soybean oil)

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Engineering measures

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protection

Eyes

: 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 or dusts.

Skin

: 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.

Respiratory

: 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.

Hands

: 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.

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.

9. Physical and chemical properties

Physical state : Liquid.

Color : Not available.

Taste : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Boiling/condensation point: Lowest known value: 288°C (550°F)

Melting/freezing point : Not available.

Flash point : Lowest known value: >93.3°C (200°F) (Closed cup)

VOC : 0°

Auto-ignition temperature : Lowest known value: 444.85°C (832.7°F) (Soybean oil).

Flammable limits : Not available.

Vapor pressure : Not available.

12- December- 2013 en - US *Page: 3/5*

Physical and chemical properties 9.

: 0.923 g/cm³ (7.7 lbs/gal) Density

Solubility : Not available. **Viscosity** : Not available.

Vapor density : Highest known value: >1 (Air = 1) (Soybean oil). **Evaporation rate** : <1 (Soybean oil) compared with butyl acetate

Molecular weight : Not applicable. Molecular formula : Not applicable. **Critical temperature** : Not available. Ionicity (in water) : Not available. **Dispersibility properties** : Not available. : Not available. Physical/chemical properties comments

10. Stability and reactivity

Stability and reactivity : The product is stable.

Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should

products not be produced.

Hazardous polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.

: Not applicable. Reactivity - Light

11. Toxicological information

Acute toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Chronic toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Synergistic products : Not available.

12. Ecological information

: No known significant effects or critical hazards. **Environmental effects**

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available. Partition coefficient: n-: Not available.

octanol/water

Bioconcentration factor : Not available. **Mobility** : Not available. : Not available. Toxicity of the products of

biodegradation

Other adverse effects

: No known significant effects or critical hazards.

en - US 12- December- 2013 Page: 4/5

13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Refer to protective measures listed in sections 7 and 8. Empty containers or liners may retain some product residues.

14. Transport information

Not regulated.

15. Regulatory information

WHMIS (Classification) : Not controlled under WHMIS (Canada).

CANADA INVENTORY (DSL) : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other information

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



References : Not available.

Other special considerations : Not available.

Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

200-383

12- December- 2013 en - US Page: 5/5

FUJIFILM Canada Inc. **Material Safety Data Sheet**



Section 1. Chemical Product and Company Identification

Product Name: Silicone Emulsion DVQ

Manufacturer Code: ANCHOR 7841 **Product Code:** 784155 7841275 Manufacturer

Distributor

FUJIFILM Canada Inc. FUJIFILM Hunt Chemicals U.S.A., Inc.

600 Suffolk Court 40 Boroline Road

Allendale, NJ 07401-032 Misssissauga, Ontario L5R 4G4

HEALTH Emergency #: 800-424-9300 Emergency #: CANUTEC (613) 996-6666

FUJIFILM Canada Inc. (905) 890-6611 Prepared By: **Telephone:**

mm/dd/yy Graphic arts product **Product Use: Preparation Date:** 6/29/09

Section 2. Hazards Identification

Emergency Overview

In the event of an emergency, refer to the information contained within this document. Avoid contact with spilled materials. Wear recommended safety equipment when handling any chemical product. Dike or absorb spills to keep material and run-off from entering sewer or waterways. Consult all material safety data sheets.

Irritant to eyes, skin, mucous membranes and respiratory tract. Ingestion of product may cause nausea and vomiting.

Ingredient Information:

None known

Effects of Chronic Exposure:

Prolonged or repeated skin contact may cause allergic skin reaction and dermatitis.

HMIS rating: Health 2 Protection C Flammability 1 Reactivity 0 WHMIS Class: D2-B Health 2 Flammability 1 Reactivity 0 Specific Hazards None NFPA rating:

Hazard Rating: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe C = Gloves, Goggles and Apron

Routes Of Entry: Skin contact, eye contact, inhalation, ingestion

Conditions Aggravated by Exposure: Not available

784155 7841275 Page 1 of 4

Section 3. 1	LOZONO OUG	Ingradiants
Section 5.	TAZALUOUS	myreatents

INGREDIENT	CAS NUMBER	WEIGHT %
Polyethylene glycol	25322-68-3	3-7
Glycols, polyethylene mono(trimethylnonyl)	60828-78-6	0.5-1.5
Polydimethylsiloxane	63148-62-9	30-40
Ditallow polyethoxyamido ammonium methylsulfate	68410-69-5	1-5

Section 4. First Aid Measures

Eyes Flush with cool water for 15 minutes. Obtain medical attention.

Skin Wash with soap and water for 15 minutes. Obtain medical attention.

Induce vomiting on medical advice. Never give anything by mouth to a person rapidly losing consciousness, unconscious or convulsing and should vomiting occur naturally, lean victim forward to reduce the risk of

aspiration. Obtain prompt medical attention.

Inhalation Remove to fresh air. Obtain medical attention.

Section 5. Fire Fighting Measures

Flammability: No If Yes, Under Which Conditions? Not applicable Flashpoint and Method (° C): >93 Autoignition Temperature: Not applicable Upper Flammable Limit (% By Volume): Not applicable

Explosion Data

Sensitivity To Impact: Not applicable Sensitivity To Static Discharge: Not applicable

Means of Extinction: Unsuitable Extinguishing Media:

Use water spray, foam, CO₂ or dry chemical fire fighting apparatus. Not available

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool nearby containers and structures exposed to the fire. Dike and collect media used to fight fire.

Hazardous Combustion Products:

See decomposition products

Section 6. Accidental Release Measures

Leak and spill procedure: Ventilate area. Wear appropriate personal protective equipment. Stop source of material release. Keep unwanted personnel away from spill zone. Prevent spills from spreading using an inert material as a dam. Do not flush area with water. Absorb spilled product with inert material. If required contact local or provincial agencies. Wash contaminated clothing before reuse and discard contaminated leather shoes. Product soaked absorbent should be placed in a sealed container for disposal in accordance to local, provincial or federal regulations.

Page 2 of 4 784155 7841275

Section 7. Handling and Storage

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing mist or vapours. Do not swallow. Handle in areas with adequate ventilation. Wear appropriate personal protective equipment during handling. Wash thoroughly after handling. Keep containers closed when not in use.

Storage:

Store in a cool, dry, well ventilated place. Keep containers closed when not in use.

Section 8. Exposure Controls and Personal Protection

Engineering Controls: Local mechanical exhaust ventilation recommended.

Protective Equipment

Eves: Chemical resistant safety goggles

Respirator: If TLV is exceeded use a respirator with appropriate cartridges

Skin Protection: Neoprene gloves and apron

Other: Eyewash station

Exposure Limits - check with provincial authority for applicability ACGIH CEL **ACGIH TWA** ACGIH STEL Polyethylene glycol not established not established not established Glycols, polyethylene mono(trimethylnonyl) not established not established not established Polydimethylsiloxane not established not established not established Ditallow polyethoxyamido ammonium methylsulfate not established not established not established

Section 9. Physical and Chemical Properties

Physical State:Liquid, opaque, bluepH:6.7Odour:Mild odourSpecific Gravity:0.99Odour Threshold:Not availableSolubility in Water100%

Vapour Density: Not available

Vapour Pressure (mm Hg): ~ 17 @20C

Coefficient of Water

Not available

0.04

Not available

Evaporation Rate: Not available Oil Distribution VOC lb/gal Freezing Point (°C):

Melting Point (°C): Not available

Section 10. Stability and Reactivity

Hazardous Polymerization: Hazardous polymerization will not occur if product is used and stored as directed.

Materials and Conditions to Avoid: Strong oxidizers, strong acids, strong bases. Keep away from excess heat.

Reactivity and Conditions:

Addition of bleaches (sodium hypochlorite) can result in the release of hazardous gases causing severe respiratory irritation.

Decomposition Products: CO₂, CO, NOx

Conditions of Chemical Instability: Product is stable if used and stored as directed

Page 3 of 4 784155 7841275

Section 11. Toxicological Information

LD50 (oral rat): Not available Synergistic Materials: None known

Irritancy: Skin, eye, respiratory tract and mucous membrane irritant

Sensitization: Not known to be a sensitizer

Teratogenicity: Not known to be a teratogen

Carcinogenicity: Not known to be carcinogenic

Reproductive Toxicity: Not known to be a reproductive toxin

Mutagenicity: Not known to be a mutagen

Ingredients LD50 (Oral Rat) LC50 (Species) LD50 (species)

Polyethylene glycol 28 g/kg not available Glycols, polyethylene mono(trimethylnonyl) 7460 uL/kg not available Polydimethylsiloxane >17 gm/kg not available Ditallow polyethoxyamido ammonium methylsulfate not available not available

Section 12. Ecological Information

Ecotoxicity Data: Not available Chemical fate Data: Not available

Section 13. Disposal Considerations

Consult appropriate municipal, provincial and federal regulatory agencies to determine proper disposal procedures.

Section 14. Transportation Information

Proper Shipping Name: Not regulated

Shipping Class: Not applicable Product Identification No: Not applicable

Packing Group: Not applicable Other Instructions: Check transportation labels

Section 15. Regulatory Information

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulation (CPR) and the MSDS contains all of the information required by the CPR.

Section 16. Other Information

This MSDS has been prepared to meet WHMIS requirements and is believed to be correct. The information should be used to make an independent determination of the methods to safeguard workers and the environment.

Page 4 of 4 784155 7841275



900078122

Material Safety Data Sheet

Version 1 Issuing Date: 26-Jun-2012

LP-DZ News Developer

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name LP-DZ News Developer

Product code 900078122

Product Use Plate Developer - Newsprint.

Manufactured by Distributed in the USA by

FUJIFILM Hunt Chemicals U.S.A., Inc. FUJIFILM North American Corporation,

40 Boroline Road Graphic Systems Division Allendale, NJ 07401-0320 200 Summit Lake Drive Valhalla, NY 10595-1356

Distributed in Canada by FUJIFILM Canada, Inc.

600 Suffolk Ct.

Mississauga, Ontario L5R 4G4 **Distributed Internationally by**

FUJIFILM Hunt Chemicals U.S.A., Inc.

40 Boroline Road

Allendale, NJ 07401-0320

MSDS are available at the following http://www.fujifilmusa.com/msds

website(s): http://www.fujifilm.ca/msds/search.do

Company Phone Number U.S.A: 800-473-3854 Canada: 800-263-5018

Emergency telephone Transport-CHEMTREC Inside NA: 800-424-9300

Transport CHEMTREC Outside NA: 703-527-3877 Transport-CANUTEC Inside Canada: 613-996-6666

Medical (24 hour)-Prosar: 877-935-7387

2. HAZARDS IDENTIFICATION

WARNING!

Irritating to eyes and skin

Appearance clear light yellow Physical State @20°C liquid Odor No information available

Potential Health Effects

Issuing date: 26-Jun-2012

Principle Routes of Exposure Inhalation, Skin contact, Eye contact.

Acute toxicity

Irritating to eyes. May cause redness, itching, and pain. **Eyes**

Skin Irritating to skin.

Inhalation May cause irritation of respiratory tract.

Ingestion May be harmful if swallowed.

Chronic Effects

Chronic toxicity Avoid repeated exposure.

Aggravated Medical Conditions None known.

See Section 12 for additional Ecological Information. **Environmental hazard**

Canada

WHMIS Statement This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations (CPR) and the MSDS contains all the information required by the

CPR.

WHMIS Hazard Class D2B Toxic materials



3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	
WATER	7732-18-5	80-100%	
POLYOXYETHYLENE NAPHTHYLETHER	35545-57-4	3-7%	

4. FIRST AID MEASURES

General advice If symptoms persist, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, Skin contact

call a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. If symptoms persist, call a physician.

If swallowed, do not induce vomiting - seek medical advice. Ingestion

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable.

> 201 °F / > 94 °C Flash point

Use CO2, dry chemical, or foam. Suitable Extinguishing Media

Hazardous Combustion Products Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge none

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do

not breathe fumes.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear.

NFPA Health Hazard 2 Flammability 1 Stability 0 Physical and chemical

hazards -

Issuing date: 26-Jun-2012

HMIS Health Hazard 2 Flammability 1 Physical Hazard 0 Personal protection B

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with

skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Environmental precautions Do not allow material to contaminate ground water system. Should not be released into the

environment. Prevent further leakage or spillage if safe to do so. Prevent product from

entering drains.

Prevent further leakage or spillage if safe to do so. **Methods for Containment**

Use personal protective equipment. Cover liquid spill with sand, earth or other Methods for cleaning up

> noncombustible absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. After cleaning, flush away traces with

water.

Other information Refer to protective measures listed in Sections 7 and 8.

7. HANDLING AND STORAGE

Advice on safe handling and storage

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid

breathing vapors or mists. Ensure adequate ventilation.

Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly

Issuing date: 26-Jun-2012

labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

NIOSH IDLH: Immediately Dangerous to Life or Health

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 **Other Exposure Guidelines**

(11th Cir., 1992).

Engineering Measures Showers

> Eyewash stations Ventilation systems

Personal Protective Equipment

Flammability Limits in Air

Tightly fitting safety goggles. Face-shield. **Eye/Face Protection**

Wear protective gloves/clothing. Skin and body protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved Respiratory protection

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene measures Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes and clothing.

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. For environmental protection, remove and wash all contaminated protective

equipment before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Not available **Appearance** clear, light yellow Odor

Odor Threshold Not available Physical State @20°C liauid

12.3 Ηg

Not available **Specific Gravity** 1.02 **Molecular Weight**

Flash point > 201 °F / > 94 °C **Autoignition temperature** Not available Boiling point/boiling range Not available Melting point/range Not available

Oxidizing Properties Not available **Explosive Property Details** Not available **Water Solubility** completely soluble Partition coefficient Not available **Evaporation rate** Not available **Vapor Pressure** Not available

Vapor density Not available **Density** Not available EPA VOC (lb/gal) EPA VOC (g/l)

Viscosity, dynamic Not available

Not available

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

Issuing date: 26-Jun-2012

Conditions to Avoid Excessive heat. Freezing.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Product Information

Irritation

Eyes Irritating to eyes. May cause redness, itching, and pain.

Skin Irritating to skin.

Inhalation May cause irritation of respiratory tract.

Sensitization None known.

Mutagenic Effects None known.

Reproductive Toxicity None known.

Teratogenicity None known.

Chronic toxicity Avoid repeated exposure.

Component Information

Chronic toxicity

Carcinogenicity None known.

Target Organ Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity effectsThe environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

TDG Not regulated

15. REGULATORY INFORMATION

·

WHMIS Statement This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations (CPR) and the MSDS contains all the information required by the

Issuing date: 26-Jun-2012

CPR.

16. OTHER INFORMATION

Prepared By FUJIFILM Environment, Health and Safety, phone: 800-473-3854

Issuing date: 26-Jun-2012

Revision Note Disclaimer

No information available.

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

material or in any process, unless specified in the text.



900078123

Material Safety Data Sheet

Version 1 Issuing Date: 26-Jun-2012

LP-DRZ News Developer Replenisher

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name LP-DRZ News Developer Replenisher

Product code 900078123

Product Use Plate Developer - Newsprint.

Manufactured by Distributed in the USA by

FUJIFILM Hunt Chemicals U.S.A., Inc. FUJIFILM North American Corporation,

40 Boroline Road Graphic Systems Division Allendale, NJ 07401-0320 200 Summit Lake Drive Valhalla, NY 10595-1356

Distributed in Canada by FUJIFILM Canada, Inc.

600 Suffolk Ct.

Mississauga, Ontario L5R 4G4 **Distributed Internationally by**FUJIFILM Hunt Chemicals U.S.A., Inc.

40 Boroline Road Allendale, NJ 07401-0320

MSDS are available at the following http://www.fujifilmusa.com/msds website(s): http://www.fujifilm.ca/msds/search.do

Company Phone Number U.S.A: 800-473-3854 Canada: 800-263-5018

Emergency telephone Transport-CHEMTREC Inside NA: 800-424-9300

Transport CHEMTREC Outside NA: 703-527-3877 Transport-CANUTEC Inside Canada: 613-996-6666

Medical (24 hour)-Prosar: 877-935-7387

2. HAZARDS IDENTIFICATION

WARNING!

Irritating to eyes and skin

Appearance clear light yellow Physical State @20°C liquid Odor No information available

Potential Health Effects

Principle Routes of Exposure Inhalation, Skin contact, Eye contact.

Acute toxicity

Eyes Irritating to eyes. May cause redness, itching, and pain.

Skin Irritating to skin.

Inhalation May cause irritation of respiratory tract.

Ingestion May be harmful if swallowed.

Chronic Effects

Chronic toxicity Avoid repeated exposure.

Aggravated Medical Conditions None known.

Environmental hazard See Section 12 for additional Ecological Information.

Canada

WHMIS Statement This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations (CPR) and the MSDS contains all the information required by the

Issuing date: 26-Jun-2012

CPR.

WHMIS Hazard Class D2B Toxic materials

E Corrosive material



3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
WATER	7732-18-5	80-100%
POLYOXYETHYLENE NAPHTHYLETHER	35545-57-4	3-7%
DIPOTASSIUM SILICATE	10006-28-7	1-5%

4. FIRST AID MEASURES

General advice If symptoms persist, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

oxygen. If symptoms persist, call a physician.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable.

Flash point $> 201 \, ^{\circ}\text{F} \, / > 94 \, ^{\circ}\text{C}$

Suitable Extinguishing Media Use CO2, dry chemical, or foam.

Hazardous Combustion Products Carbon oxides.

Explosion Data

Inhalation

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge none

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

not breathe fumes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear.

NFPA Health Hazard 2 Flammability 1 Stability 0 Physical and chemical

hazards -

Issuing date: 26-Jun-2012

HMIS Health Hazard 2 Flammability 1 Physical Hazard 0 Personal protection B

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with

skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Environmental precautionsDo not allow material to contaminate ground water system. Should not be released into the

environment. Prevent further leakage or spillage if safe to do so. Prevent product from

entering drains.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning upUse personal protective equipment. Cover liquid spill with sand, earth or other

noncombustible absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. After cleaning, flush away traces with

water.

Other information Refer to protective measures listed in Sections 7 and 8.

7. HANDLING AND STORAGE

Advice on safe handling and

storage

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation.

Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly

Issuing date: 26-Jun-2012

labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

NIOSH IDLH: Immediately Dangerous to Life or Health

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 **Other Exposure Guidelines**

(11th Cir., 1992).

Showers **Engineering Measures**

> Eyewash stations Ventilation systems

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Wear protective gloves/clothing. Skin and body protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved Respiratory protection

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene measures Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes and clothing.

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. For environmental protection, remove and wash all contaminated protective

equipment before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance clear, light yellow Odor Not available

Odor Threshold Not available Physical State @20°C liquid

13.10 Ηg

1.03 Not available **Specific Gravity Molecular Weight** > 201 °F / > 94 °C Not available **Autoignition temperature** Flash point Boiling point/boiling range Not available Melting point/range Not available

Flammability Limits in Air Not available

Not available Not available **Oxidizing Properties Explosive Property Details** Water Solubility completely soluble Partition coefficient Not available **Evaporation rate** Not available **Vapor Pressure** Not available Not available Not available Vapor density Density EPA VOC (q/I) 0

EPA VOC (lb/qal) n

Viscosity, dynamic Not available

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Issuing date: 26-Jun-2012

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases. Metals.

Conditions to Avoid Excessive heat. Freezing.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Product Information

Irritation

Eyes Irritating to eyes. May cause redness, itching, and pain.

Skin Irritating to skin.

Inhalation May cause irritation of respiratory tract.

Sensitization None known.

Mutagenic Effects None known.

Reproductive Toxicity None known.

Teratogenicity None known.

Chronic toxicity Avoid repeated exposure.

Component Information

Chronic toxicity

Carcinogenicity None known.

Target Organ Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Do not re-use empty containers.

US EPA Waste Number D002

14. TRANSPORT INFORMATION

TDG

Proper Shipping Name Corrosive liquid, basic, inorganic, n.o.s.

UN/ID No UN3266
Hazard Class 8
Packing Group III

Description UN3266, Corrosive liquid, basic, inorganic, n.o.s (DIPOTASSIUM SILICATE), 8, PG III

15. REGULATORY INFORMATION

WHMIS Statement

This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations (CPR) and the MSDS contains all the information required by the

Issuing date: 26-Jun-2012

CPR.

16. OTHER INFORMATION

Prepared By FUJIFILM Environment, Health and Safety, phone: 800-473-3854

Issuing date: 26-Jun-2012

Revision Note No information available.

Disclaimer The information provided on this MSDS is correct to the best of our knowledge, information and

belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

material or in any process, unless specified in the text.



Material Safety Data Sheet

MetaAid-CA10 Neutralizer Solution

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material IdentityCompany:Product Name: MetaAid-CA10Metafix, Inc.General or Generic ID: Acid solution1925 46th Avenue, Lachine (Montreal), Quebec, H8TID number: A109252P1, Canada. Tel: 514-633-8663

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)	LD50 (oral rat)	LC50	Exposure limit TWA
Water	7732-18-5	88-92	>90 ml/kg	Not available	Not available
Citric acid	77-92-9	8-12	11700mg/kg	Not available	Not available

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eve:

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

Skin:

Can cause severe skin irritation. Symptoms may include redness and burning of skin, and other skin damage.

Swallowing:

Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, and diarrhea). Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.

Inhalation:

Inhalation of fumes may irritate or burn nose, throat and lungs.

Symptoms of Exposure:

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways).

Target Organ Effects:

No data.

Developmental Information:

No data.

Cancer Information:

Not known to cause cancer. Not listed as carcinogen by IARC, NTP or OSHA.

Other Health Effects:

No data.

Primary Route(s) of Entry: Skin contact.

4. FIRST AID MEASURES:

Eyes:	If person is not breathing, begin artificial respiration.

Metafix, Inc. MetaAid-CA10

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin:

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Inhalation:

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet.

If breathing is difficult, administer oxygen.

Swallowing:

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended

Note to Physicians:

Supportive care. Treatment based on judgment of the physician in response to reactions of the patient. May aggravate pre-existing respiratory conditions.

5. FIRE FIGHTING MEASURES:

Flash Point:	Non-flammable
Explosive Limit:	Not applicable.
Auto ignition Temperature:	No data.
Hazardous Products of Combustion:	May form carbon dioxide and sulphur dioxide.
Fire and Explosion Hazards:	None
Extinguishing Media:	Not applicable
Fire Fighting Instructions:	Not applicable
NFPA Rating:	Not determined.

6. ACCIDENTAL RELEASE MEASURES.

Small Spill:

Absorb liquid on vermiculite, floor absorbent or other absorbent material Wipe up as much as possible and put in containers for recovery or disposal. Dike and neutralize balance of spill with alkaline (e.g. soda ash) solution. Do not allow run-off into natural water sources.

Large Spill:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shovelled into containers. Per good environmental management practices, prevent run-off to sewers, streams and other bodies of water.

Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly.

7. HANDLING AND STORAGE

Wear all recommended personal protective clothing when handling. Avoid contact with eyes. Wash thoroughly after handling. Minimize dust generation.

Avoid breathing fumes. Minimize skin contact. Wash with soap and water before eating, drinking, smoking or using toilet facilities.

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapour, liquid, and/or solid), all hazard precautions, given in the data sheet, must be observed.

Metafix, Inc. MetaAid-CA10

8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

Eve Protection:

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.).

Skin Protection:

Wear resistant gloves (consult your safety equipment supplier). To prevent skin contact, wear impervious clothing and boots.

Exposure Guidelines:

No exposure limits established.

Respiratory Protections:

If overexposure has been determined or documented, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier.). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls:

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

9. PHYSICAL AND CHEMICAL PROPERTIES.

Boiling Point (for product)	> 212.0 F (100.0 C) @ 760 mmHg
Vapour Pressure (for product)	< 17.500 mmHg @ 68.00 F
Specific Vapour Density	Not available
Liquid Density	1.09 g/ml@ 77.00 F or 25.00 C
State	Liquid
Physical Form:	Homogeneous solution
Color.	Bronze
Odour	No data.
рН	1.9
Solubility in water	Complete

10. STABILITY AND REACTIVITY

Hazardous Polymerization: Product will not undergo hazardous polymerization. Hazardous Decomposition: May form: carbon dioxide and sulphur dioxide if heated.

Chemical Stability: Stable.

Incompatibility: Avoid contact with strong bases.

11. TOXICOLOGICAL INFORMATION

No data.

12. ECOLOGICAL INFORMATION

No data.

13. DISPOSAL CONSIDERATION

Waste Management Information: Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description: NON-REGULATED BY D.O.T.

Container : 5 GAL jug NOS Component: None

RQ (Reportable Quantity) - 49 CFR 172.101. Not applicable

Metafix, Inc. MetaAid-CA10

15. REGULATORY INFORMATION

US Federal Regulations:

TSCA (Toxic Substances Control Act) Status: complies

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a): None listed

SARA 302 Components - 40 CFR 355 Appendix A: None

SARA 313 Components - 40 CFR 372.65: None.

Section 311/312 Hazard Class - 40 CFR 370.2:

Acute (X) Chronic (X) Fire() Reactive() Pressure()

16. OTHER INFORMATION

This MSDS was elaborated on	May 28 th , 2009
Revised on	Feb 9 th , 2010
Revised on	June 29 th , 2011

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.



Material Safety Data Sheet

Version 1 Issuing Date: 27-Jun-2012

FN-6 PS Plate Finisher Gum

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name FN-6 PS Plate Finisher Gum

Product code 900019364

Product Use Plate Finisher for PS Plate Processes.

Manufactured by

FUJIFILM Hunt Chemicals U.S.A., Inc. FUJIFILM

40 Boroline Road

Allendale, NJ 07401-0320

Distributed in the USA by

FUJIFILM North American Corporation,

Graphic Systems Division 200 Summit Lake Drive Valhalla, NY 10595-1356

Distributed in Canada by

FUJIFILM Canada, Inc.

600 Suffolk Ct.

Mississauga, Ontario L5R 4G4 **Distributed Internationally by**

FUJIFILM Hunt Chemicals U.S.A., Inc.

40 Boroline Road

Allendale, NJ 07401-0320

MSDS are available at the following http://www.fujifilmusa.com/msds

website(s): http://www.fujifilm.ca/msds/search.do

Company Phone Number U.S.A: 800-473-3854 Canada: 800-263-5018

Emergency telephone Transport-CHEMTREC Inside NA: 800-424-9300

Transport CHEMTREC Outside NA: 703-527-3877 Transport-CANUTEC Inside Canada: 613-996-6666

Medical (24 hour)-Prosar: 877-935-7387

2. HAZARDS IDENTIFICATION

WARNING!

Irritating to eyes and skin Harmful by inhalation

May be harmful if absorbed through skin May cause allergic skin reaction

Appearance light brown Physical State @20°C liquid Odor sweet

Potential Health Effects

Principle Routes of Exposure Inhalation, Skin contact, Eye contact.

Acute toxicity

Eyes Irritating to eyes. May cause redness, itching, and pain.

Skin Irritating to skin. May be harmful if absorbed through skin. Repeated or prolonged skin

contact may cause allergic reactions with susceptible persons.

Inhalation Harmful by inhalation.

Ingestion May be harmful if swallowed.

Chronic Effects

Chronic toxicity May cause central nervous system depression. Repeated or prolonged contact causes

sensitization, asthma and eczemas.

Aggravated Medical Conditions None known.

Environmental hazard See Section 12 for additional Ecological Information.

Canada

WHMIS Statement This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations (CPR) and the MSDS contains all the information required by the

Issuing date: 27-Jun-2012

CPR.

WHMIS Hazard Class D2A Very toxic materials



3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
WATER	7732-18-5	70-90%
STARCH DERIVATIVE	9049-76-7	10-20%
GUM ARABIC	9000-01-5	1-5%
BENZYL ALCOHOL	100-51-6	1-5%
STARCH PHOSPHATE	11120-02-8	0.5-1.5%
PROPYLENE GLYCOL	57-55-6	0.5-1.5%

4. FIRST AID MEASURES

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. **Eve contact**

Skin contact Get medical attention if irritation develops and persists. Wash off immediately with plenty of

water.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable.

Flash point > 201 °F / > 94 °C

Suitable Extinguishing Media Use CO2, dry chemical, or foam.

Hazardous Combustion Products Carbon oxides. Phosphorus oxides.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge none

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear.

NFPA Health Hazard 2 Flammability 1 Stability 0 Physical and chemical

hazards -

Issuing date: 27-Jun-2012

HMIS Health Hazard 2 Flammability 1 Physical Hazard 0 Personal protection B

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Use personal protective equipment. Avoid contact with skin, eyes and clothing. Evacuate

personnel to safe areas. Keep people away from and upwind of spill/leak.

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into **Environmental precautions**

surface water or sanitary sewer system. Prevent product from entering drains.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other Methods for cleaning up

noncombustible absorbent material. Take up mechanically and collect in suitable container

for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Advice on safe handling and

storage

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid

breathing vapors or mists. Ensure adequate ventilation.

Technical measures/Storage

conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly

labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Issuing date: 27-Jun-2012

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
BENZYL ALCOHOL				10 ppm TWA
PROPYLENE GLYCOL				10 mg/m ³ TWA

NIOSH IDLH: Immediately Dangerous to Life or Health

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 Other Exposure Guidelines

(11th Cir., 1992).

Showers **Engineering Measures**

> Eyewash stations Ventilation systems

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before

re-use. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance light brown Odor sweet **Odor Threshold** Not available liquid Physical State @20°C

3.2 pН **Specific Gravity** 1.10

Molecular Weight Not available Flash point > 201 °F / > 94 °C **Autoignition temperature** Not available Boiling point/boiling range 212 °F / 100 °C Melting point/range Not available

Flammability Limits in Air Not available

Not available Not available **Explosive Property Details Oxidizing Properties** completely soluble Not available **Water Solubility Partition coefficient Evaporation rate** Not available **Vapor Pressure** Not available Not available Not available Vapor density **Density**

EPA VOC (lb/gal) 0.244 EPA VOC (g/l) 29.28

Viscosity, dynamic 15 cps

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

Conditions to Avoid Excessive heat. Freezing.

Issuing date: 27-Jun-2012

Hazardous Polymerization

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Product Information

Irritation

Eyes Irritating to eyes. May cause redness, itching, and pain.

Skin Irritating to skin. May be harmful if absorbed through skin. Repeated or prolonged skin

contact may cause allergic reactions with susceptible persons.

Inhalation Harmful by inhalation.

Sensitization None known.

Mutagenic Effects None known.

Reproductive Toxicity None known.

Teratogenicity None known.

Chronic toxicity May cause central nervous system depression. Repeated or prolonged contact causes

sensitization, asthma and eczemas.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
GUM ARABIC	16 g/kg (Rat)		
BENZYL ALCOHOL	1230 mg/kg (Rat)	2000 mg/kg (Rabbit)	8.8 mg/L (Rat)4 h
PROPYLENE GLYCOL	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	

Chronic toxicity

Carcinogenicity None known.

Target Organ Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
BENZYL ALCOHOL		Pimephales promelas: 460 mg/L at 96 h	
PROPYLENE GLYCOL		Pimephales promelas: 51400 mg/L at 96 h Pimephales promelas: 710 mg/L at 96 h	1000: 48 h Daphnia magna mg/L EC50 Static

Chemical Name	Octonol Water Partition Coefficient (log pow)	
BENZYL ALCOHOL	1.1	

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

TDG Not regulated

15. REGULATORY INFORMATION

WHMIS Statement This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations (CPR) and the MSDS contains all the information required by the

Issuing date: 27-Jun-2012

CPR.

16. OTHER INFORMATION

Prepared By FUJIFILM Environment, Health and Safety, phone: 800-473-3854

Issuing date: 27-Jun-2012

Revision Note No information available.

Disclaimer The information provided on this MSDS is correct to the best of our knowledge, information and

belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

material or in any process, unless specified in the text.



14909 N. Beck Road Plymouth, MI 48180

For Product Questions call: (270) 737-1500 For Health and Safety Questions call: (734) 781-4600

24 Hour Emergency Spill Contact call: (800) 424-9300 Chemtrec (US/Canada)

Material Safety Data Sheet

I. PRODUCT AND COMPANY IDENTIFICATION

Product Name: RETAIL NEWS HIGH SPEED YELLOW

Product Code: FTCN273090 MSDS Code: MSD-01011189

Revision Number:

Revision Date: 2013-07-02 14:14:22

II. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name%Straight-Run Middle Distillate (Petroleum)1 - 52,2,4-Trimethyl-1,3-pentanediol diisobutyrate0.5 - 1.5

Please see Section VIII for product and component exposure guidelines. Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

HAZARDS IDENTIFICATION

HMIS Rating Health: 1 Flammability: 1 Reactivity: 0

This product falls under the following WHMIS class:

This product is not controlled. Ce produit n'est pas contrôlé.

Immediate (Acute) Health Effects by Route of Exposure

Inhalation: Can cause minor respiratory irritation.

Skin Contact: Can cause minor skin irritation, defatting, and dermatitis.

Eye Contact: Can cause moderate irritation, tearing and reddening, but not likely to

permanently injure eye tissue.

Ingestion: No hazard in normal industrial use.

Long-Term (Chronic) Health Effects

Reproductive andNo data available to indicate product or any components present at greater than

Developmental: 0.1% may cause birth defects.

Mutagenicity: No data available to indicate product or any components present at greater than

0.1% is mutagenic or genotoxic.

Skin Contact:

Ingredients of this product appear on the following OSHA identified carcinogen lists at >= 0.1% by

weight (yes/no):

OSHA No NTP No IARC 1 & 2A No NIOSH No

RETAIL NEWS HIGH SPEED YELLOW

Page 1 of 4

IV. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer

oxygen. If not breathing, give artificial respiration and have a trained individual

administer oxygen.

Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt Eyes:

the head to prevent chemical from transferring to the uncontaminated eye. Get

immediate medical attention.

Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

Ingestion: No hazard in normal industrial use. Do not induce vomiting. Seek medical

attention if symptoms develop. Provide medical care provider with this MSDS.

V. FIRE FIGHTING MEASURES

Flammability Combustible at elevated temperatures NFPA IIIB (NFPA description only; not to

Summary: be used for shipping purposes)

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires.

Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a

stream of water into the hot burning liquid.

Fire and/or Material may be ignited only if preheated to temperatures above the high flash **Explosion Hazards:**

point, for example in a fire. It has been reported that diarylide pigments may be subject to breakdown at temperatures above 200C (392F). This decomposition may produce monoazo dyes and 3,3'dichlorobenzidine. 3,3'dichlorobenzidine is a suspect human carcinogen. In the majority of printing inks and coatings systems, temperatures are lower and this thermal breakdown does not occur. It

is recommended that diarylide pigments not be used under conditions where

thermal breakdown can occur.

Fire Fighting Do not enter fire area without proper protection including self-contained Methods and breathing apparatus and full protective equipment. Fight fire from a safe Protection:

distance and a protected location due to the potential of hazardous vapors and

decomposition products. Use methods for the surrounding fire.

Hazardous Combustion **Products:**

Carbon dioxide, Carbon monoxide

Flash Point: 93 C (200 F) and greater Firepoint: Firepoint not determined.

Upper 6.0

Flammable/Explosive Limit. % in air:

Lower 1.2

Flammable/Explosive Limit, % in air:

VI. ACCIDENTAL RELEASE MEASURES

Personal No health affects expected from the clean-up of this material if contact can be **Precautions and** avoided. Follow personal protective equipment recommendations found in

Section VIII of this MSDS **Equipment:**

VII. HANDLING AND STORAGE

Handling Mildly irritating material. Avoid unnecessary exposure. Do not get in eyes, on

Precautions: skin or clothing.

Wash thoroughly after handling.

Ground and bond containers when transferring material

As with all chemicals, good industrial hygiene practices should be followed

when handling this material.

Remove contaminated clothing and wash before reuse.

Avoid contact with material, avoid breathing dusts or fumes, use only in a well

ventilated area.

Storage Conditions: Store in a cool dry place. Isolate from incompatible materials. Keep away from

heat, sparks, and flame. Keep container closed when not in use.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Use local exhaust ventilation or other engineering controls to minimize

Measures: exposures and maintain operator comfort.

Respiratory No respiratory protection required under normal conditions of use.

Protection:

Eye Protection: Wear safety glasses with side shields when handling this product. Have an eye

wash station available.

Skin Protection: Wear protective gloves. Inspect gloves at regular intervals and replace as

necessary. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when

leaving work.

Gloves: Wear impervious material no specific details available.

Exposure Guidelines:

Chemical Name	OSHA Exposure Limits	ACGIH TLV - TWA	ACGIH STEL	IDLH
Straight-Run Middle Distillate (Petroleum)		No TLV	No STEL	Not on list
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate		No TLV	No STEL	Not on list

If this product is provided in a dry powder state it should be considered a nuisance dust (PEL 10 mg/m3).

If the processing of this product produces a mist it should be considered to be an oil mist with a PEL of 5 mg/m3.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid, semi-solid, or solid Solubility in Water: Not determined Volatiles, % by wt: 45.36 Volatiles, % by vol: 53.14 **Volatile Organic Chemicals % by wt:** 42.83 **Volatile Organic Chemicals % by vol:** 50.73 VOC lb/gal 3.39 VOC lb/gal (less water): 3.47 Solids % by weight: 54.64 Solids % by volume 46.86 **Specific Gravity:** 0.95 Bulk Density (Lb/Gal): 7.91

RETAIL NEWS HIGH SPEED YELLOW

X. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Temperatures above the high flash point of this combustible material in

combination with sparks, open flames, or other sources of ignition.

Materials to Avoid/Chemical Incompatibility: Strong oxidizing agents.

XI. TOXICOLOGICAL INFORMATION

Component Toxicology Data (NIOSH):

Chemical Name LD50/LC50

Straight-Run Middle Distillate (Petroleum)

Oral LD50 Rat 5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat

1700 mg/m3 4 h

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate Oral LD50 Rat >3200 mg/kg

XII. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product:

Spent or discarded material is not expected to be a hazardous waste.

Disposal Methods: Dispose in accordance with Federal, State, Provincial and Local regulations.

Material may be compatible with industrial waste incineration or inclusion in a fuel blending program. This characterization is subject to approval by your waste

management contractor. This material should be recycled if possible.

XIII. REGULATORY INFORMATION

TSCA StatusAll ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Chemical NameCAS #RegulationPercentageAluminum sulfate10043-01-3CERCLA0.2Not on listHAP

 Hydrotreated light distillate
 64742-47-8
 NPRI (Cdn)
 5.17

 D and C Red No. 9
 5160-02-1
 PROP 65
 0.04

 Not on list
 SARA 313

Not on list SARA 313
Not on list SARA EHS

The following items require export notification for TSCA Chemical Name

Chemical Name TSCA 12b list section

Not on list

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains information required by the Controlled Products Regulations.

XIV. ADDITIONAL INFORMATION

Disclaimer: Flint Group has prepared this Material Safety Data Sheet ("MSDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this MSDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this MSDS shall not constitute a warranty with respect thereto.

RETAIL NEWS HIGH SPEED YELLOW