Sun Chemical Corporation 510 Country Club Drive



Bensenville USA IL 60106

RECOGNITION SYSTEMS INC. 30 HARBOR PARK DRIVE PORT WASHINGTON, NY 11050 USA

November 28, 2017

Save Money! Be Green! Receive MSDS electronically! Email your request to regulatory.emsds@sunchemical.com

Ayez une pensée pour l'environnement ! Gagnez du temps et de l'argent ! Recevez vos FDS par voie électronique! Envoyez vos demandes à regulatory.emsds@sunchemical.com

Ahorra dinero! Cuida el medio ambiente! Recibe las Hojas de Seguridad por correo electrónico! Envoyez vos demandes a regulatory.emsds@sunchemical.com

Sparen Sie Geld! Handeln Sie umweltbewußt! Fordern Sie Sicherheitsdatenblätter in elektronischer Form an. Richten Sie Ihre E-Mail an: regulatory.emsds@sunchemical.com

Risparmia soldi! Sii ecologico! Ricevi MSDS in formato elettronico! Invia la tua richiesta all'indirizzo regulatory.emsds@sunchemical.com

Poupe dinheiro! Seja verde! Receba as F.D.S. electronicamente! Envie o seu pedido para o email regulatory.emsds@sunchemical.com



SAFETY DATA SHEET

Section 1. Identification

Product code	: 90183811/10-01121/FB59
GHS product identifier	: A:Fast Wash II:FB59

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Colorant; Printing ink related material; Printing ink.

Manufacturer / Distributor	:	Sun Chemical Corporation North American Inks 135 West Lake Street Northlake, IL 60164 US: +1 708 236 3798
Emergency telephone number (with hours of operation)		+1 (800) 424-9300 (U.S.) (24 hours) +1 (703) 527-3887 (International) (24 hours)
Other information	:	+1 708 236 3798

Section 2. Hazards identification

28- November- 2017	en - US	Page: 1/10
Hazards not otherwise classified	: Prolonged or repeated contact may dry skin and cause irritation.	
Supplemental label elements	: Avoid contact with skin and clothing. Wash thoroughly after handling.	
Disposal	: Dispose of contents and container in accordance with all local, regional, natio international regulations.	nal and
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.	
Response	 IF SWALLOWED: Immediately call a POISON CENTER or physician. Do No vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothin skin with water or shower. 	
Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, surfaces, sparks, open flames and other ignition sources. No smoking. Use proof electrical, ventilating, lighting and all material-handling equipment. Use sparking tools. Take precautionary measures against static discharge. Keep tightly closed.	explosion- only non-
Precautionary statements		
Hazard statements	: Highly flammable liquid and vapor. May be fatal if swallowed and enters airwa	iys.
Signal word	: Danger	
<u>GHS label elements</u> Hazard pictograms		
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 2 ASPIRATION HAZARD - Category 1	
OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication 3 (29 CFR 1910.1200). ELAMMARIE LIQUES - Cotagon 2 	Standard

28- November- 2017

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

Ingredient name	CAS number	%
Light Aliphatic Solvent Naphtha octane	64742-89-8 111-65-9	> 80 1 - 2.5
heptane	142-82-5	1 - 2.5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health	<u>effects</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: May be fatal if swallowed and enters airways.

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

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ontainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

	-	-
Precautions for safe handling		
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in a segregated and approved area. 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. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
octane	ACGIH TLV (United States, 3/2016). TWA: 300 ppm 8 hours. OSHA PEL (United States, 6/2016). TWA: 2350 mg/m ³ 8 hours. TWA: 500 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). STEL: 1800 mg/m ³ 15 minutes. STEL: 375 ppm 15 minutes. TWA: 1450 mg/m ³ 8 hours. TWA: 300 ppm 8 hours.
heptane	ACGIH TLV (United States, 3/2016). STEL: 2050 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1640 mg/m ³ 8 hours. TWA: 400 ppm 8 hours. OSHA PEL (United States, 6/2016). TWA: 2000 mg/m ³ 8 hours. TWA: 500 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). STEL: 2000 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 1600 mg/m ³ 8 hours. TWA: 400 ppm 8 hours.

Section 8. Exposure controls/personal protection

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection meas	<u>ures</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. 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. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

28- November- 2017	en - US	Page: 5/10
Flammability (solid, gas)	: Not available.	
Evaporation rate	: Highest known value: 3.18 (heptane) Weighted average: 1.07compared with acetate	ı butyl
VOC % (w/w)	: 98.58	
Flash point	: 17°C	
Boiling point	: Lowest known value: 94°C (201°F)	
Melting point	: Not available.	
рН	: Not tested	
Odor threshold	: Not applicable.	
Odor	: Characteristic.	
Color	: Clear.	
Physical state	: Liquid.	
<u>Appearance</u>		

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	: Lower: 1.4% Upper: 7.6%
Vapor pressure	: 2.1 kPa (16 mm Hg) [room temperature]
Vapor density	: >1 [Air = 1]
Density	: 0.76 g/cm³ (6.342 lbs/gal)
Solubility	: Not tested
Partition coefficient: n- octanol/water	: Not applicable.
Auto-ignition temperature	: 280 to 470°C (536 to 878°F)
Decomposition temperature	: Not applicable.
Viscosity	: Kinematic (40°C): <0.205 cm ² /s (<20.5 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
octane	LC50 Inhalation Gas.	Rat	25260 ppm	4 hours	
	LC50 Inhalation Vapor	Rat	118 g/m³	4 hours	
heptane	LC50 Inhalation Vapor	Rat	103 g/m³	4 hours	
Conclusion/Summary	: No known significant effects	or critical hazards			
Irritation/Corrosion					
Conclusion/Summary					
Skin	: No known significant effects	or critical hazards			
Eyes	: No known significant effects or critical hazards.				
Respiratory	: No known significant effects or critical hazards.				
<u>Sensitization</u>					
Conclusion/Summary					
Skin	: No known significant effects	or critical hazards			
Respiratory	: No known significant effects or critical hazards.				
<u>Mutagenicity</u>					
Conclusion/Summary	: No known significant effects	or critical hazards			
Carcinogenicity					

Section 11. Toxicological information

:

Conclusion/Summary
Reproductive toxicity
Conclusion/Summary

: No known significant effects or critical hazards.

Teretegenieity

<u>Teratogenicity</u>

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

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
octane heptane	0,	Not applicable.	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Light Aliphatic Solvent Naphtha octane	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
heptane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	:	May be fatal if swallowed and enters airways.
Symptoms related to the phys		al, chemical and toxicological characteristics
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	:	Adverse symptoms may include the following: nausea or vomiting
Delayed and immediate effect	S	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
General	 Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.

28- November- 2017

Section 11. Toxicological information

Teratogenicity Developmental effects Fertility effects : No known significant effects or critical hazards.

: No known significant effects or critical hazards.

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
heptane	Acute LC50 375000 μg/l Fresh water	Fish - Tilapia mossambica	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
octane	5.18	-	high
heptane	4.66	-	high

Mobility in soil

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

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

Section 13. Disposal considerations

Disposal methods
 The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	ΙΑΤΑ		
UN number	UN1993	UN1993	UN1993	UN1993	UN1993		
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (CONTAINS: PETROLEUM DISTILLATES)	FLAMMABLE LIQUID, N.O.S. (CONTAINS: PETROLEUM DISTILLATES)	FLAMMABLE LIQUID, N.O.S. (CONTAINS: PETROLEUM DISTILLATES)	FLAMMABLE LIQUID, N.O.S. (CONTAINS: PETROLEUM DISTILLATES)	FLAMMABLE LIQUID, N.O.S. (CONTAINS: PETROLEUM DISTILLATES)		
Transport hazard class(es)	3	3	3	3	3		
Packing group	11	11	11	П	11		
Environmental hazards	No.	No.	No.	Yes.	No.		
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).	-	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.		

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

TSCA 8(b) inventory U.S. Federal regulations : Listed

: TSCA 8(a) PAIR: heptane; Dipropylene Glycol Methyl Ether

<u>SARA 313</u>

	Product name	CAS number	%
Supplier notification	None identified.		
Toxics in Packaging (CONEG)	: In compliance.		
Canada inventory	: All components are listed or exempted.		
International regulations			
International lists	 Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory (ENCS): Not determined. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted. Turkey inventory: All components are listed or exempted. 		
	Europe Inventory: Please contact your supplier to get the information.		

Section 16. Other information

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

motory	
Date of issue/Date of revision	: 10/20/2017
Date of previous issue	: 10/20/2017
Version	: 4.01
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	: Not available.

Indicates information that has changed from previously issued version.

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.

10-01121

History