KANO LABORATORIES, INC. SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: FLOWAY

Product Use: External Engine Cleaner for Industrial Use

Manufacturer: Kano Laboratories, Inc.

1000 E. Thompson Lane Nashville, TN 37211

Emergency Phone Number: Chemtrec 1 (800) 424-9300

Manufacturer Phone Number: (615) 833-4101

Website: www.kanolaboratories.com

SDS Date of Preparation: October 5th, 2016

SECTION 2: HAZARDS IDENTIFICATION

GHS / HAZCOM 2012 Classification:

Health	Physical
Skin Irritation Category 2	Flammable Liquid Category 3
Eye Irritation Category 2A	
Specific Target Organ Toxicity – Single Exposure	
Category 3 (Narcotic)	
Aspiration Toxicity Category 1	

Label Elements

Danger!







Flammable liquid and vapor.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Prevention:

Keep away from heat, parks, open flames and hot surfaces. No smoking.

Keep container tightly closed.

Ground or bond container and receiving equipment

Use explosion-proof electrical, ventilating and lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves and eye protection.

Wash thoroughly after handling.

Avoid breathing mist, vapors and spray.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Response:

In case of fire: Use carbon dioxide, dry chemical or foam to extinguish.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

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

Continue rinsing.

If eye irritation persists: Get medical attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER.

Do NOT induce vomiting.

Storage:

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal:

Dispose of contents or container in accordance with local or national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	%
Aliphatic Petroleum Distillate	64742-47-8	50-90
Dipropylene glycol n-butyl ether	29911-27-1	5-15
Docusate sodium	577-11-7	1-<3
Non-Hazardous Ingredients	Proprietary	1-15

SECTION 4: FIRST AID MEASURES

Eye Contact: Rinse thoroughly with water for several minutes, holding the eye lids open to be sure the material is washed out. Get medical attention if irritation persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use.

Inhalation: Remove victim to fresh air. If irritation or symptoms develop, get medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or drowsy person. Get immediate medical attention.

Most important symptoms and effects, acute and delayed: Causes eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, nausea and vomiting. Harmful or fatal if swallowed. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

Indication of immediate medical attention and special treatment, if needed: If swallowed, get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use carbon dioxide, dry chemical or foam. Water may be ineffective but can be used to cool containers and structures.

Specific Hazards Arising from the Chemical: Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Never use welding or cutting torch on or near containers (even empty) because product can ignite explosively. Combustion may produce oxides of carbon, organic compounds, smoke and fumes.

Special Protective Equipment and Precautions for Fire-fighters: Wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, Protective equipment, and Emergency procedures: Wear appropriate protective clothing as described in Section 8. Evacuate and ventilate the area with explosion proof equipment. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc.

Environmental hazards: Avoid release to the environment. Report spills and releases as required to appropriate authorities.

Methods and Materials for Containment and Cleaning up: Cover with an inert absorbent material and collect into an appropriate container for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash exposed skin thoroughly with soap and water after use. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.

Other Precautions: Do not cut, braze, solder, grind or weld empty containers. Do not reuse containers. Follow all SDS precautions in handling empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry, well-ventilated location away from oxidizing agents and other incompatible materials. Keep containers closed when not in use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Chemical Name	Exposure Limits
Aliphatic Petroleum Distillate	500 ppm OSHA PEL-TWA
	100 ppm ACGIH TLV-TWA
Dipropylene glycol n-butyl ether	None Established
Docusate sodium	None Established
Non-Hazardous Ingredients	None Established

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain concentrations below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

Personal Protective Equipment:

Respiratory Protection: If needed, a NIOSH approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Hand Protection Impervious gloves are recommended when needed to avoid skin contact.

Eye Protection: Chemical safety goggles recommended.

Skin Protection: Impervious clothing as required to prevent skin contact and contamination of personal clothing.

Hygiene measures: Suitable eye wash and washing facilities should be available in the work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:Clear liquidOdor:SolventOdor Threshold:Not availablepH:Not applicable

Melting/Freezing Point: Not available Boiling Point/Range: >°F

Flash Point: 109°F (43°C) CC Evaporation Rate: Less than 1
Flammability: (Solid, Gas) Not applicable Flammability Limits: LEL: 0.7%
UEL: 5.6%

Vapor Pressure:Not availableVapor Density:Greater than 1Relative Density:0.80Solubilities:Negligible in WaterPartition Coefficient:Not availableAutoignitionNot Determined

(N-Octanol/Water)

Decomposition Not available **Viscosity:** Not available

Temperature:

SECTION 10: STABILITY AND REACTIVITY

Temperature:

Reactivity: None known.

Chemical Stability: Stable under normal conditions of storage or use.

Possibility of Hazardous Reactions: None known.

Conditions to avoid: Avoid heat, sparks, flames and all other sources of ignition.

Incompatible Materials: Avoid strong oxidizing agents, acids and bases.

Hazardous decomposition products: Decomposition may produce oxides of carbon, organic compounds, smoke

and fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye: Causes eye irritation with redness, tearing and stinging. Corneal injury is possible if not promptly removed.

Skin: Causes irritation with redness and swelling. Prolonged or repeated contact may result in defatting and dermatitis.

Inhalation: Inhalation of vapors or mists may cause upper respiratory tract irritation and central nervous system depression. Symptoms may include coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea, vomiting, depressed respiration and heart rate, heart rhythm irregularities and unconsciousness.

Ingestion: Swallowing may cause gastrointestinal irritation with abdominal pain, nausea, vomiting and diarrhea and central nervous system depression with symptoms including headache, dizziness, intoxication, weakness, respiratory failure, convulsions, cardiovascular collapse and pulmonary edema. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

Chronic Hazards: Prolonged or repeated exposure may cause damage to the central nervous system, blood, kidney and liver.

Carcinogen Status: None of the components of this are listed as a carcinogen by OSHA, IARC or NTP.

Acute toxicity:

Acute Toxicity Estimate: Oral >2000 mg/kg, Dermal >2000 mg/kg, Inhalation >5 mg/L

Aliphatic Petroleum Distillate: Oral rat LD50 >5000 mg/kg; Inhalation Rat LC50 >5.28 mg/L; Dermal rabbit LD50

>2000 mg/kg.

Dipropylene glycol n-butyl ether: Oral rat LD50 >2000 mg/kg; Dermal rabbit LD50 >2000 mg/kg

Docusate sodium: Oral rat LD50 >2100 mg/kg; Dermal rabbit LD50 >10000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Aliphatic Petroleum Distillate: 96 hr LL50 Oncorhynchus mykiss 18 mg/L, 48 hr EL50 1.9 mg/L, 72 hr EL50 Pseudokirchnerella subcapitata 10-30 mg/L

Dipropylene glycol n-butyl ether: 96 hr LC50 Oncorhynchus mykiss >100 mg/L; 48 hr EC50 daphnia magna >100 mg/L; 72 hr EC50 Pseudokirchneriella subcapitata >1000 mg/L

Docusate sodium: 96 hr LC50 Danio rerio 49 mg/L; 48 hr EC50 daphnia magna 6.6 mg/L; 72 hr EC50 Desmodesmus subspicatus 82.5 mg/L

Persistence and Degradability: Aliphatic petroleum distillate is not readily biodegradable. Docusate sodium and dipropylene glycol n-butyl ether are readily biodegradable.

Bioaccumulative Potential: Docusate sodium has am estimated BCF of 1.13 Dipropylene glycol n-butyl ether has an estimated BCF of <100.

Mobility in Soil: Aliphatic petroleum distillate has a low mobility in soil.

Other Adverse Effects: None known

SECTION 13: DISPOSAL INFORMATION

Disposal instructions: Dispose of product in accordance with all local, state/provincial and federal regulations.

Contaminated packaging: Offer rinsed packaging material to local recycling facilities.

SECTION 14: TRANSPORT INFORMATION

	UN	Proper shipping name	Hazard	Packing	Environmental
	Number		Class	Group	Hazard
DOT <119		Excepted from Hazmat			
gallons					
DOT >119	UN1268	Petroleum Distillates, n.o.s.	3	PG III	
gallons					
DOT / 49CFR	UN1268	Petroleum Distillates, n.o.s.	3	PG III	Yes
IMDG	UN1268	Petroleum Distillates, n.o.s.	3	PG III	Yes
IATA	UN1268	Petroleum Distillates, n.o.s.	3	PG III	Yes

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: Floway is not subject to CERCLA release reporting, however, releases would be reportable as an oil spill. Many states have more stringent reporting requirements. Report spills and other releases as required under federal, state and local regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Acute Health, Fire Hazard

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

SECTION 16: OTHER INFORMATION

HMIS Ratings: Health - 2 Flammability - 2 Reactivity - 0 **NFPA Ratings:** Health - 2 Flammability - 2 Reactivity - 0

SDS Revision History: Converted to GHS format - all sections revised.

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