



DEPARTMENT OF THE NAVY
NAVAL UNDERSEA WARFARE CENTER DIVISION
610 DOWELL STREET
KEYPORT, WASHINGTON 98345-7610

5090

Ser 17/278-13

OCT 18 2013

Ms. Chris Smith, WPLCS Coordinator
Washington State Department of Ecology
Northwest Regional Office, Water Quality - Industrial Unit
3190 160th Avenue Southeast
Bellevue, WA 98008-5452



SUBJECT: APPLICATION FOR A STATE WASTE DISCHARGE PERMIT TO
DISCHARGE INDUSTRIAL WASTEWATER TO A PUBLICLY-OWNED
TREATMENT WORKS

Enclosed please find a completed "Application for a State
Waste Discharge Permit to Discharge Industrial Wastewater to a
Publicly-Owned Treatment Works (POTW)" as required by Special
Condition S8 of the State Waste Discharge Permit Number ST-7353
dated April 29, 2009. All sections have been completed as
required.

As part of this permit update, we are requesting the
following:

a. That the requirement to monitor sample point 002
(manhole outside building 94 - combined industrial and domestic
wastewater) for ammonia-nitrogen be deleted because we have no
control over the concentration of ammonia-nitrogen at the Naval
Undersea Warfare Center Division, Keyport.

b. That sample point 3 (X-Ray Developer at the building
38 Support Shop) be deleted, this developer has been removed.

Point of contact for this matter is Mr. Reinout van Beynum at
360-396-5435 or reinout.vanbeynum@navy.mil.

Sincerely,

J. W. BARNICK
Head, Infrastructure Services
Division
By direction of the Commander



Application for a State Waste Discharge Permit to Discharge Industrial Wastewater to a Publicly-Owned Treatment Works (POTW)



This application is for a state waste discharge permit for a discharge of industrial wastewater to a publicly-owned treatment works (POTW) as required by Chapter 90.48 RCW and Chapter 173-216 WAC. It is designed to provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, and the flow characteristics of the discharge.

Ecology may request additional information to clarify the conditions of this discharge. The applicant should reference information previously submitted to Ecology that applies to this application in the appropriate section.

SECTION A. GENERAL INFORMATION

1. Applicant Name: JEFFREY BARNICK
2. Facility Name: NAVAL UNDERSEA WARFARE CENTER DIVISION, KEYPORT
(if different from Applicant)
3. Applicant Mail Address: 610 DOWELL STREET, BLDG 206
Street
KEYPORT, WA 98345
City/State Zip
4. Facility Location Address: 610 DOWELL STREET, BLDG 825
(if different from 3 above) Street
KEYPORT, WA 98345
City/State Zip
5. UBI No. 600-560-216
Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a Master Business Application to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.
6. Latitude/longitude of the facility as decimal degrees (NAD83/WGS84):
47.676389 / 122.601389

FOR OFFICE USE ONLY		Check One: New/Renewal <input type="checkbox"/> Modification <input type="checkbox"/>	
Date Application Received _____	Date Fee Paid _____	Application/ Permit No. _____	Date Application Accepted _____

7. Person to contact who is familiar with the information contained in this application:

REINOUT VAN BEYNUM

Name

ENVIRONMENTAL ENGINEER

Title

360-396-5435

Telephone number

360-396-7767

Fax number

8. Check One:



Permit Renewal (including renewal of temporary permits)

Does this application request a greater amount of wastewater discharge, a greater amount of pollutant discharge, or a discharge of different pollutants than specified in the last permit application for this facility? ☐ YES ☒ NO

For permit renewals, the current permit is an attachment, by reference, to this application.



Permit Modification

Existing Unpermitted Discharge

Proposed Discharge

Anticipated date of discharge: CURRENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations.

Signature



Date

10/18/13

HEAD, INFRASTRUCTURES
SERVICES DIVISION

Title

JEFFREY W. BARNICK

Printed Name

*Applications must be signed as follows: corporations, by a principal executive officer of at least the level of vice-president; partnership, by a general partner; sole proprietorship, by the proprietor. If these titles do not apply to your organization, the person who makes budget decisions for this facility must sign the application.

The application signatory may delegate signature authority for submittals required by the permit, such as monthly reports, to a suitable employee. You can delegate this authority to a qualified individual or to a position, which you expect to fill with a qualified individual. If you wish to delegate signature authority, please complete the following:

Signature of delegated employee

Date

HEAD, ENV. SERVICES BRANCH

Title or function at the facility

CARL T. HASELMAN

Printed name

SECTION B. PRODUCT INFORMATION

1. Briefly describe all manufacturing processes and products, and/or commercial activities, at this facility. Provide the applicable Standard Industrial Category (SIC) and the North American Industry Classification System (NAICS) Code(s) for each activity (see *North American Industrial Classification System*, 2007 ed.). You can find the 1997 NAICS codes and the corresponding 1987 Standard Industry Category (SIC) codes at (<http://www.census.gov/epcd/naics/frames3.htm>).

Description: SEE ATTACHMENT B1

2. List raw materials and products used at his facility:

Type	RAW MATERIALS	Quantity
<i>Grapes (Example)</i>		<i>1,000 tons per year</i>
SEE ATTACHMENT B2		
Type	PRODUCTS	Quantity
<i>Grape Juice(Example)</i>		<i>300,000 gallons per year</i>

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

1. For each process listed in B.1. that generates wastewater, list the process, assign the waste stream a name and an ID # and describe whether it is a batch or continuous flow.

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process
SEE ATTACHMENT C1			

2. On a separate sheet, produce a schematic drawing showing production processes, water flow through the facility, wastewater treatment devices and waste streams as named above. The drawing should indicate the source of intake water and show the operations contributing wastewater to the effluent. The treatment units should be labeled. Construct a water balance by showing average flows between intakes, operations, treatment units, and points of discharge to the POTW. *(See the example on page 16 of this application form.)*
3. What is the maximum daily wastewater discharge flow? 166,833 gallons/day
- What is the maximum average monthly wastewater discharge flow (daily flows averaged over a month)? 99,036 gallons/day
4. Describe any planned wastewater treatment improvements or changes in wastewater disposal methods, and the schedule for these improvements. *(Use additional sheets, if necessary and label as attachment C4.)*
- NONE

5. If production processes are subject to seasonal variations, provide the following information. The combined value for each month should equal the estimated total monthly flow. Please indicate the proper flow unit by checking one of the following boxes:

☐ gallons per day

☐ gallons per month

☐ million gallons per month

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
NONE												
Estimated Total Monthly Flow (GPD)												

6. How many hours a day does this facility typically operate? 10

How many days a week does this facility typically operate? 5

How many weeks per year does this facility typically operate? 51

7. List all incidental materials, such as oil, paint, grease, solvents, and cleaners, that are used or stored on site (*list only those with quantities greater than 10 gallons for liquids and 50 pounds for solids*). For solvents and solvent-based cleaners, include a copy of the material safety data sheet and estimate the quantity used. (*Use additional sheets, if necessary, and label as attachment C.7.*)

Materials/Quantity Stored: SEE ATTACHMENT C7

8. Some types of facilities are required to have spill or waste control plans. Does this facility have:
- | | Yes | No |
|--|-------------------------------------|-------------------------------------|
| a. A spill prevention, control, and countermeasure plan (40 CFR 112)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. An Oil Spill Contingency Plan (chapter 173-182 WAC)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. An emergency response plan (per WAC 173-303-350)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. A runoff, spillage, or leak control plan (per WAC 173-216-110(f))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Any spill or pollution prevention plan required by local, state or federal authorities? If yes specify: <u>P2 PLAN REQUIRED BY 40CFR264.73 & 264.75</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. A solid waste control plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. A Slug Discharge Control Plan (40 CFR 403.8(f)(2)(v))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SECTION D. WATER CONSUMPTION AND WATER LOSS

1. Potable water source(s):

☒ ☐ Public System (Specify) KITSAP PUD #1

☒ ☐ Private Well

☐ Surface Water

a. Water Right Permit Number: N/A

b. Legal Description of Water Source

 $\frac{1}{4}$ S, $\frac{1}{4}$ E, 36, Section, 26 TWN, 01 R

2. Potable water use

a. Indicate total water use

Gallons per day (average) 128,000

Gallons per day (maximum) 145,971

b. Is water metered?

☒ YES ☐ NO

SECTION E. WASTEWATER INFORMATION

1. How are the water intake and effluent flows measured?

Intake: METERED AT WELLHEAD

Effluent METERED AT IWTP OUTFALL AND POTW INFALL

2. Describe the collection method for the samples analyzed below. (*i.e.*, grab, 24-hour composite). Applicants must collect grab samples (not composites) for analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and Enterococci (previously known as fecal streptococcus at § 122.26 (d)(2)(iii)(A)(3)), or volatile organics.

GRAB SAMPLES, ONE FOR EACH BATCH TREATED

3. Has the effluent been analyzed for any other parameters than those identified in question E.4.? ☒ YES ☐ NO
If yes, attach results and label as attachment E.4. This data must clearly show the date, method and location of sampling. (*Note: Ecology may require additional testing.*) See Attachment E6.

4. Provide measurements or range of measurements for treated wastewater prior to discharge to the POTW for the parameters with an "X" in the left column. If you obtain the application from the internet, contact Ecology's regional office to see if testing for a subset of these parameters is permissible. All analyses (except pH) must be conducted by a laboratory registered or accredited by Ecology (WAC 173-216-125). If this is an application for permit renewal, provide data for the last year for those parameters that are routinely measured. For parameters measured only for this application, place the values under "Maximum." Report the values with units as specified in the parameter name or in the detection level.

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table unless Ecology approves an alternate method or the method used produces measurable results in the sample and EPA has listed it as an EPA approved method in 40 CFR Part 136. If the Permittee uses an alternative method as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th , 20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	BOD (5 day)					SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
X	Total suspended solids	4	36	19	4	SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
	Total dissolved solids					SM 2540 C	
	Conductivity (micromhos/cm)					SM 2510 B	
	Ammonia-N as N					SM 4500-NH ₃ C	/0.3 mg/L
X	pH	7.4	8.1	7.78	4	SM 4500-H	0.1 standard units
	Fecal coliform (organisms/100 mL)					SM 9221 E or 9222 D	
	Total coliform (organisms/100 mL)					SM 9221 B or 9222 B	
	Dissolved oxygen					SM 4500-O C/G	
	Nitrate + nitrite-N as N					SM 4500-NO ₃ E	100 µg/L
	Total kjeldahl N as N					SM 4500-N _{org} C/E/FG	300 µg/l
	Ortho-phosphate-P as P					SM 4500-P E/F	10 µg/l
	Total-phosphorous-P as P					SM 4500-P E/P/F	10 µg/l
	Total Oil & grease					EPA 1664A	1.4/5 mg/l
	NWTPH - Dx					Ecology NWTPH Dx	250/250 µg/l
	NWTPH - Gx					Ecology NWTPH Gx	250/250 µg/l
	Calcium					EPA 200.7	10 µg/l
	Chloride					SM 4500-Cl C	0.15 µg/l
	Fluoride					SM 4500-F E	.025/0.1 mg/l
	Magnesium					EPA 200.7	10/50 µg/l
	Potassium					EPA 200.7	700/ µg/l
	Sodium					EPA 200.7	29/ µg/l
	Sulfate					SM 4500-SO ₄ C/D	/200 µg/l
	Arsenic(total)					EPA 200.8	0.1/0.5 µg/l

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th , 20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	Barium (total)					EPA 200.8	0.5/2 µg/l
X	Cadmium (total)	0.01	0.03	0.02	4	EPA 200.8	.05/.25 µg/l
X	Chromium (total)	<0.01	0.10	0.04	4	EPA 200.8	0.2/1 µg/l
X	Copper (total)	<0.01	0.02	0.01	4	EPA 200.8	0.4/2 µg/l
X	Lead (total)	<0.01	0.01	0.01	4	EPA 200.8	0.1/.5 µg/l
	Mercury (total) pg/L					EPA 1631E	0.2/0.5 pg/l
	Molybdenum (total)					EPA 200.8	0.1/0.5 µg/l
X	Nickel (total)	0.08	0.15	0.11	4	EPA 200.8	0.1/0.5 µg/l
	Selenium (total)					EPA 200.8	1/1 µg/l
X	Silver (total)	<0.01	<0.01	<0.01	4	EPA 200.8	.04/2 µg/l
X	Zinc (total)	0.02	0.06	0.04		EPA 200.8	0.5/2.5 µg/l

6. Does this facility use any of the following chemicals as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater? ☒ YES ☐ NO

(The number in the column next to the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.)

If yes, specify how the chemical is used and the quantity used or produced: SEE ATTACHMENT E6

METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total	7440-36-0	Nickel, Total	7440-02-0
Arsenic, Total	7440-38-2	Selenium, Total	7782-49-2
Beryllium, Total	7440-41-7	Silver, Total	7440-22-4
Cadmium, Total	7440-43-9	Thallium, Total	7440-28-0
Chromium (hex) dissolved	18540-29-9	Zinc, Total	7440-66-6
Chromium, Total	7440-47-3		
Copper, Total	7440-50-8	Cyanide, Total	57-12-5
Lead, Total	7439-92-1	Cyanide, Weak Acid Dissociable	
Mercury, Total	7439-97-6)	Phenols, Total	

PESTICIDES			
Aldrin	309-00-2	Endrin	72-20-8
alpha-BHC	319-84-6	Endrin Aldehyde	7421-93-4
beta-BHC	319-85-7	Heptachlor	76-44-8
gamma-BHC	58-89-9	Heptachlor Epoxide	1024-57-3
delta-BHC	319-86-8	PCB-1242	53469-21-9
Chlordane	57-74-9	PCB-1254	11097-69-1
4,4'-DDT	50-29-3	PCB-1221	11104-28-2
4,4'-DDE	72-55-9	PCB-1232	11141-16-5
4,4' DDD	72-54-8	PCB-1248	12672-29-6
Dieldrin	60-57-1	PCB-1260	11096-82-5
alpha-Endosulfan	959-98-8	PCB-1016	12674-11-2
beta-Endosulfan	33213-65-9	Toxaphene	8001-35-2
Endosulfan Sulfate	1031-07-8		

VOLATILE COMPOUNDS			
Acrolein	107-02-8		
Acrylonitrile	107-13-1	1,1-Dichloroethylene	75-35-4
Benzene	71-43-2	1,2-Dichloropropane	78-87-5
Bromoform	75-25-2	1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene)	542-75-6
Carbon tetrachloride	56-23-5	Ethylbenzene	100-41-4
Chlorobenzene	108-90-7	Methyl bromide (Bromomethane)	74-83-9
Chloroethane	75-00-3	Methyl chloride (Chloromethane)	74-87-3
2-Chloroethylvinyl Ether	110-75-8	Methylene chloride	75-09-2
Chloroform	67-66-3	1,1,2,2-Tetrachloroethane	79-34-5
Dibromochloromethane	124-48-1	Tetrachloroethylene	127-18-4
1,2-Dichlorobenzene	95-50-1	Toluene (108-88-3)	
1,3-Dichlorobenzene	(541-73-1)	1,2-Trans-Dichloroethylene (Ethylene dichloride)	156-60-5
1,4-Dichlorobenzene	106-46-7	1,1,1-Trichloroethane	71-55-6
Dichlorobromomethane	75-27-4	1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3	Trichloroethylene	79-01-6
1,2-Dichloroethane	107-06-2	Vinyl chloride	75-01-4

ACID COMPOUNDS			
2-Chlorophenol	95-57-8	4-nitrophenol	100-02-7
2,4-Dichlorophenol	120-83-2	Parachlorometa cresol (4-chloro-3-methylphenol)	59-50-7
2,4-Dimethylphenol	105-67-9	Pentachlorophenol	87-86-5
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	534-52-1	Phenol	108-95-2
2,4 dinitrophenol	51-28-5	2,4,6-Trichlorophenol	88-06-2
2-Nitrophenol	88-75-5		

BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene	83-32-9	3,3-Dichlorobenzidine	91-94-1
Acenaphthylene	208-96-8	Diethyl phthalate	84-66-2
Anthracene	120-12-7	Dimethyl phthalate	131-11-3
Benzidine	92-87-5	Di-n-butyl phthalate)	84-74-2
Benzyl butyl phthalate	85-68-7	2,4-dinitrotoluene	121-14-2
Benzo(a)anthracene	56-55-3	2,6-dinitrotoluene	606-20-2
Benzo(b)fluoranthene (3,4-benzofluoranthene)	205-99-2	Di-n-octyl phthalate	117-84-0
Benzo(j)fluoranthene	205-82-3	1,2-Diphenylhydrazine (as <i>Azobenzene</i>)	122-66-7
Benzo(k)fluoranthene (11,12-benzofluoranthene)	207-08-9	Fluoranthene	206-44-0
Benzo(r,s,t)pentaphene	189-55-9	Fluorene	86-73-7
Benzo(a)pyrene	50-32-8	Hexachlorobenzene	118-74-1
Benzo(ghi)Perylene	191-24-2	Hexachlorobutadiene	87-68-3
Bis(2-chloroethoxy)methane	111-91-1	Hexachlorocyclopentadiene	77-47-4
Bis(2-chloroethyl)ether	111-44-4	Hexachloroethane	67-72-1
Bis(2-chloroisopropyl)ether	39638-32-9	Indeno(1,2,3-cd)Pyrene	193-39-5
Bis(2-ethylhexyl)phthalate	117-81-7	Isophorone	78-59-1
4-Bromophenyl phenyl ether	101-55-3	3-Methyl cholanthrene	56-49-5
2-Chloronaphthalene	91-58-7	Naphthalene	91-20-3
4-Chlorophenyl phenyl ether	7005-72-3	Nitrobenzene	98-95-3
Chrysene	218-01-9	N-Nitrosodimethylamine	62-75-9
Dibenzo (a,j)acridine	224-42-0	N-Nitrosodi-n-propylamine	621-64-7
Dibenzo (a,h)acridine	226-36-8	N-Nitrosodiphenylamine	86-30-6
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	53-70-3	Perylene	198-55-0
Dibenzo(a,e)pyrene	192-65-4	Phenanthrene	85-01-8
Dibenzo(a,h)pyrene	189-64-0	Pyrene	129-00-0
		1,2,4-Trichlorobenzene	120-82-1

7. Are any other pesticides, herbicides or fungicides used at this facility? ☒ YES ☐ NO

If yes, specify the material and quantity used:

Herbicides: Roundup and Finale

Pesticides: Tempo Ultra, Drione, Borid, Contrac Blox, Termidor

8. Are there other pollutants that you know of or believe to be present? ☐ YES ☒ NO

If yes, specify the pollutants and their concentration if known
(attach laboratory analyses if available as Attachment E8):

9. Is the wastewater being discharged, or proposed for discharge, to the POTW designated as a dangerous waste according to the procedures in Chapter 173-303 WAC?

☐ YES ☒ NO ☐ DON'T KNOW

10. If the answer to question 9 above is yes, how did the waste designate as a dangerous waste (check appropriate box)?

For Listed and TCLP Characteristic Wastes only, also provide the Dangerous Waste Number(s).

Listed Waste ☐ Dangerous Waste Number(s) _____

Characteristic Wastes Dangerous Waste Number(s) _____

Ignitable ☐

Reactive ☐

Corrosive ☐

TCLP ☐

State Only Dangerous Wastes Dangerous Waste Number(s) _____

Toxicity ☐

Persistent ☐

For questions about waste designation under the *Dangerous Waste Regulations*, Chapter 173-303 WAC, contact Ecology's Hazardous Waste and Toxics Program at:

Northwest Regional Office - Bellevue	(425) 649-7000
Southwest Regional Office - Lacey	(360) 407-6300
Central Regional Office - Yakima	(509) 575-2490
Eastern Regional Office - Spokane	(509) 329-3400

SECTION F. SEWER INFORMATION

1. Is an inspection and sampling manhole or similar structure available on-site? ☒ YES ☐ NO
*If yes, attach a map or hand drawing of the facility that shows the location of these structures
(Label as attachment F1 or this may be combined with map in H8, if H8 is applicable to your
facility.)*

SECTION G. OTHER PERMITS

1. List all environmental control permits or approvals needed for this facility; for example, air emission permits.

PSCAA AIR PERMIT

STORMWATER DISCHARGE PERMIT

PERMIT FOR THE STORAGE AND TREATMENT OF DANGEROUS WASTE

SECTION H. STORMWATER

1. Do you have coverage under the Washington State Industrial Stormwater NPDES General Permit? ☒ YES ☐ NO

If yes, please list the permit number here. WAR 05A 64F

- If no, have you applied for a Washington State Stormwater Industrial Stormwater General Permit? ☐ YES ☐ NO

If you answered no to both questions above, complete the following questions 2 through 5.

2. Does your facility discharge stormwater: *(Check all that apply)*

- ☐ To storm sewer system *(provide name of storm sewer system operator: _____)*
☐ Directly to any surface waters of Washington State *(e.g., river, lake, creek, estuary, ocean).*

Specify waterbody name(s) _____

- ☐ Indirectly to surface waters of Washington State *(i.e., flows over adjacent properties first).*
☐ ☐ To a Sanitary Sewer
☐ Directly to ground waters of Washington State via:
☐ ☐ Dry well
☐ Drainfield
☐ Other

3. Areas with industrial activities at facility: *(check all that apply)*

- ☐ ☐ Manufacturing Building
☐ ☐ Material Handling
☐ ☐ Material Storage
☐ ☐ Hazardous Waste Treatment, Storage, or Disposal *(Refers to RCRA, Subtitle C Facilities Only)*
☐ ☐ Waste Treatment, Storage, or Disposal
☐ ☐ Application or Disposal of Wastewaters
☐ ☐ Storage and Maintenance of Material Handling Equipment
☐ ☐ Vehicle Maintenance
☐ ☐ Areas Where Significant Materials Remain
☐ ☐ Access Roads and Rail Lines for Shipping and Receiving

☐☐

Other (please specify): _____

4. Material handling/management practices

a. Types of materials handled and/or stored outdoors: *(check all that apply)*☐☐

Solvents

☐☐

Hazardous Wastes

☐☐

Scrap Metal

☐☐

Acids or Alkalies

☐☐

Petroleum or Petrochemical Products

☐☐

Paints/Coatings

☐☐

Plating Products

☐☐

Woodtreating Products

☐☐

Pesticides

☐☐Other *(please list)*: _____b. Identify existing management practices employed to reduce pollutants in industrial stormwater discharges: *(check all that apply)*☐☐

Oil/Water Separator

☐☐

Detention Facilities

☐☐

Containment

☐☐

Infiltration Basins

☐☐

Spill Prevention

☐☐

Operational BMPs

☐☐

Surface Leachate Collection

☐☐

Vegetation Management

☐☐

Overhead Coverage

☐☐Other *(please list)*: _____5. Attach a facility site map showing stormwater drainage/collection areas, disposal areas and discharge points. This may be a hand-drawn map if no other site map is available *(See example on page 16 of this application)*. Label this as attachment H.5.

SECTION I. OTHER INFORMATION

1. Describe liquid wastes or sludges being generated by your facility that are not disposed of in the waste stream(s) and how they are being disposed of. For each type of waste, provide type of waste and the name, address, and phone number of the hauler.

ALL LIQUID AND SLUDGE WASTES GENERATED BY THE FACILITY THAT DESIGNATE AS DANGEROUS WASTE ARE STORED AND TRANSPORTED IN ACCORDANCE WITH THE PERMIT FOR THE STORAGE AND TREATMENT OF DANGEROUS WASTE.

2. Describe storage areas for raw materials, products, and wastes.

HAZARDOUS MATERIALS ARE STORED IN BLDG 1006, SPECIFICALLY DESIGNED AND OPERATED AS A HAZARDOUS MATERIAL STORAGE BUILDING. ALL DANGEROUS WASTES ARE STORED IN BLDG 1051, THE TREATMENT, STORAGE AND DISPOSAL BUILDING. ALL MATERIALS, PRODUCTS AND WASTES ARE STORED AS SET FORTH IN THE SANITARY SPILL PREVENTION PLAN

3. Have you designated the wastes described above according to the applicable ☒ YES ☐ NO procedures of Dangerous Waste Regulations, Chapter 173-303 WAC?

SECTION J. CERTIFICATIONS

1. Approval by Publicly-Owned Treatment Works [required by WAC 173-216-070(4)(b)]

I approve of the discharge as described in this application. The applicant is:

(Please check the appropriate box below.)

☒ ☐ ☐ A Significant Industrial User (see Definitions at the end of this Section)

☒ ☐ ☐ A Categorical Industrial User

☐ ☐ ☐ Neither of the above

Name and location of sewer system to which this project will be tributary:

CENTRAL KITSAP WASTEWATER TREATMENT PLANT

12351 BROWNSVILLE HWY NE, POULSBOROUGH, WA 98370

Treatment Works Owner: KITSAP COUNTY PUBLIC WORKS

Street: 614 DIVISION ST MS-27

City/State: PORT ORCHARD, WA

Zip: 98366

Signature of Treatment Works Authority

Date

Title

John Gardner

Printed Name

2. Application review by Intermediate Sewer Owner at point of discharge (if applicable)

I hereby acknowledge that I have reviewed the application for discharge to this sewer system.

Name and location of sewer system to which this project will be tributary:

Sewer System Owner:

Street:

City/State:

Zip:

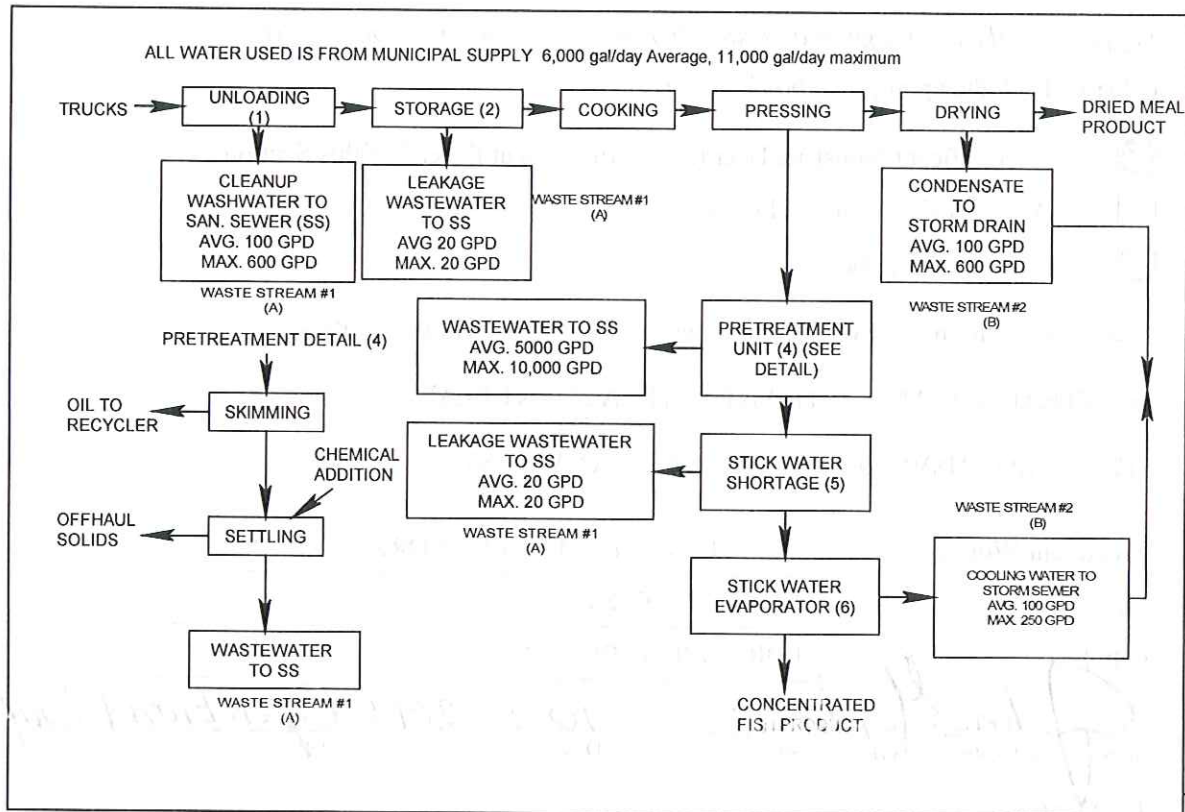
Signature of Sewer System Authority

Date

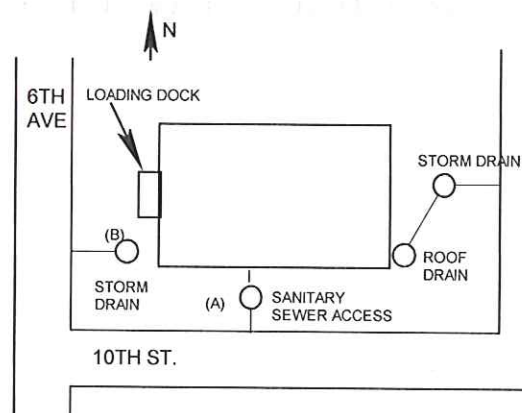
Title

Printed Name

Example 1 for application section C.2. (SCHEMATIC DIAGRAM)



Example 2 for application section F1 or H8 (FACILITY SITE MAP)



DEFINITIONS

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

Control Authority - means the Washington State Department of Ecology in the case of non-delegated POTWs or means the POTW in the case of delegated POTWs.

Categoric Industrial User (CIU): An industrial user subject to national categorical pretreatment standards promulgated by EPA (40 CFR 403.6 and 40 CFR parts 405-471).

Summary of Attachments That May be Required for This Application:

(Please check those attachments that are included)

- | | | | |
|-------------------------------------|--------------------------|------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | C.2. | Production schematic flow diagram and water balance |
| <input type="checkbox"/> | <input type="checkbox"/> | C.4. | Wastewater treatment improvements |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | C.7. | Additional incidental materials |
| <input type="checkbox"/> | <input type="checkbox"/> | E.8. | Additional results of effluent testing |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | F.1. | Facility site map |
| <input type="checkbox"/> | <input type="checkbox"/> | H.5. | Stormwater drainage map |

If you need this document in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

ATTACHMENT B1 TO THE
APPLICATION TO RENEW NUWCDIVKPT PERMIT # 7353
TO DISCHARGE INDUSTRIAL WASTEWATER TO A POTW

Briefly describe all the manufacturing processes and products, and/or commercial activities at this facility.

- a) Building 38 contains two deburring machines that discharge their process water into a wastewater collection sump that is pumped directly to Bldg 825, the Industrial Wastewater pre-Treatment Plant (IWTP). A water jet cutter treats process water by retention and sedimentation. Clarified wastewater is discharged directly to the sanitary sewer.
- b) Building 81 is the Cable repair Shop. Connectors are molded to electrical cables and hydro tested in pressure vessels. Hydro test water is recycled and stored in a 50-gallon holding tank. The test water is sampled and disposed of at a nearby sewer lift station if it meets the sewer discharge standards. If the water does not meet the discharge standards it is transported to the industrial wastewater collection sump outside the northeast corner of Bldg 233 and pumped to Bldg 825 (IWTP) for pretreatment.
- c) Building 82 is the Target refurbishment Shop. Target propulsion systems are tested in a test tank. Hydro test water is recycled and stored in an adjacent 300-gallon storage tank. Approximately once a year the test water is sampled and disposed of at a nearby sewer lift station if it meets the sewer discharge standards. If the water does not meet the discharge standards it is transported to the industrial wastewater collection sump outside the northeast corner of Bldg 233 and pumped to Bldg 825 (IWTP) for pretreatment. Targets returning from ranging are washed down on a covered patio east of the building. Washwater is collected in a 600-gallon underground tank. When the tank nears capacity, (approximately once a year), the wastewater is sampled and disposed of at a nearby sewer lift station if it meets the sewer discharge standards. If the water does not meet the discharge standards it is transported to the industrial wastewater collection sump outside the northeast corner of Bldg 233 and pumped to Bldg 825 (IWTP) for pretreatment. Building 82 also contains a battery maintenance shop. Wet cell batteries are washed down, recharged and reissued at this facility. Liquid potassium hydroxide (KOH) from expired batteries and washwater from recycled batteries is collected in a sink that discharges to a 330-gallon portable tank located outside, adjacent to the building. The tank is transported to the industrial wastewater collection sump outside the northeast corner of Bldg 233 and pumped to Bldg 825 (IWTP) for pretreatment. Building 82 also contains a non-destructive test laboratory. All sinks and metallurgical sample polishing and grinding processes discharge to the sanitary sewer.
- d) Building 84 is the depainting and painting shop. The Torpedo shell repair process generates a small volume of chromic acid (Alodine) wastewater that is transported in 5-gallon containers to Bldg 825 (IWTP) for pretreatment.
- e) Building 514 is the Mk 48 ADCAP Torpedo IMA/Depot facility. Torpedo fuel tanks are drained of Otto Fuel II mixed with seawater. This liquid is piped directly to a 1500-gallon settling tank where the denser Otto Fuel II sinks to the bottom and is separated and pumped to a 2000-gallon holding tank for drying and reclamation at Bldg 209. Water is skimmed from the top of this first settling tank into a second 150-gallon settling tank. Otto Fuel II is pumped from the bottom of this second settling tank to the first 1500-gallon settling tank and water is skimmed from the top of this second settling tank

and pumped to a third 3000-gallon settling tank. Otto Fuel II is pumped from the bottom of this third settling tank to the first 1500-gallon settling tank and water is skimmed from the top of this third settling tank and pumped through two 330-gallon carbon filters in series to remove the last traces of Otto Fuel II. Wastewater samples are collected at the outfall of each of the carbon filters at the end of each batch, and tested for Otto Fuel II. If breakthrough occurs on the lead filter, it is removed for recycling, the lag filter is moved to the lead position, and a new lag filter is installed. Wastewater from the carbon filters is pumped to the Bldg 825 (IWTP) where it is treated prior to disposal to the sanitary sewer.

- f) Building 825 is the Industrial Wastewater Treatment Plant (IWTP). The IWTP accomplishes standard metal removal on contaminated industrial wastewaters by chromium reduction, flocculation, filtration and solids dewatering. The IWTP discharges to the sanitary sewer.
- g) Building 1058 is the Regional Metal Finishing Facility. The facility performs metal cleaning, anodizing and coating services. Cleaning operations include alkaline degreasing, caustic cleaning, and acid pickling of ferrous and non-ferrous metals and the passivation of stainless steels. The anodizing process for aluminum includes standard and hard-coat anodize employing sulfuric acid solutions. The coating and sealing processes include chromate conversion coating of aluminum as well as dyes and sealing solutions for anodize. Wastewater from the rinse tanks contaminated with plating chemicals gravity drain to a 1000-gallon acid waste storage tank located in the basement of the building. Wastewater is automatically pumped from this tank to a 10,000-gallon tank located outside the NE corner of the building. Wastewater from this tank is pumped to the industrial wastewater lift station outside the northeast corner of Bldg 233 and pumped to Bldg 825 (IWTP) for pretreatment.
- h) Building 1059 is the travel office. A high-efficiency furnace generates a very small wastestream of acidic condensate. The condensate is pumped through a 30-gallon container of calcium carbonate to buffer the wastewater and ensure the pH is within discharge limits prior to discharging to the sanitary sewer. The container is checked twice annually to replenish the calcium carbonate.

ATTACHMENT B2 TO THE
APPLICATION TO RENEW NUWC DIVKPT PERMIT #7353
TO DISCHARGE INDUSTRIAL WASTEWATER TO A POTW

List the raw materials and products used at the facility.

The Naval Undersea Warfare Center (NUWC) Division, Keyport performs testing and evaluation, engineering assembly, maintenance and repair, and fleet and industrial base support for undersea warfare systems, countermeasures and sonar systems.

The 340-acre facility has numerous industrial buildings, 21 single family housing units, a barracks, and supporting utility systems and facilities. General industrial activities include metal working, metal finishing, machining, electrical assembly, electronic and mechanical systems maintenance and repair, depainting and painting, torpedo teardown and refurbishment, weapons testing, and Naval vessel operation and maintenance. NUWC Division, Keyport support activities include utility shops, chemistry and non-destructive test laboratories, and a hazardous waste treatment and storage facility.

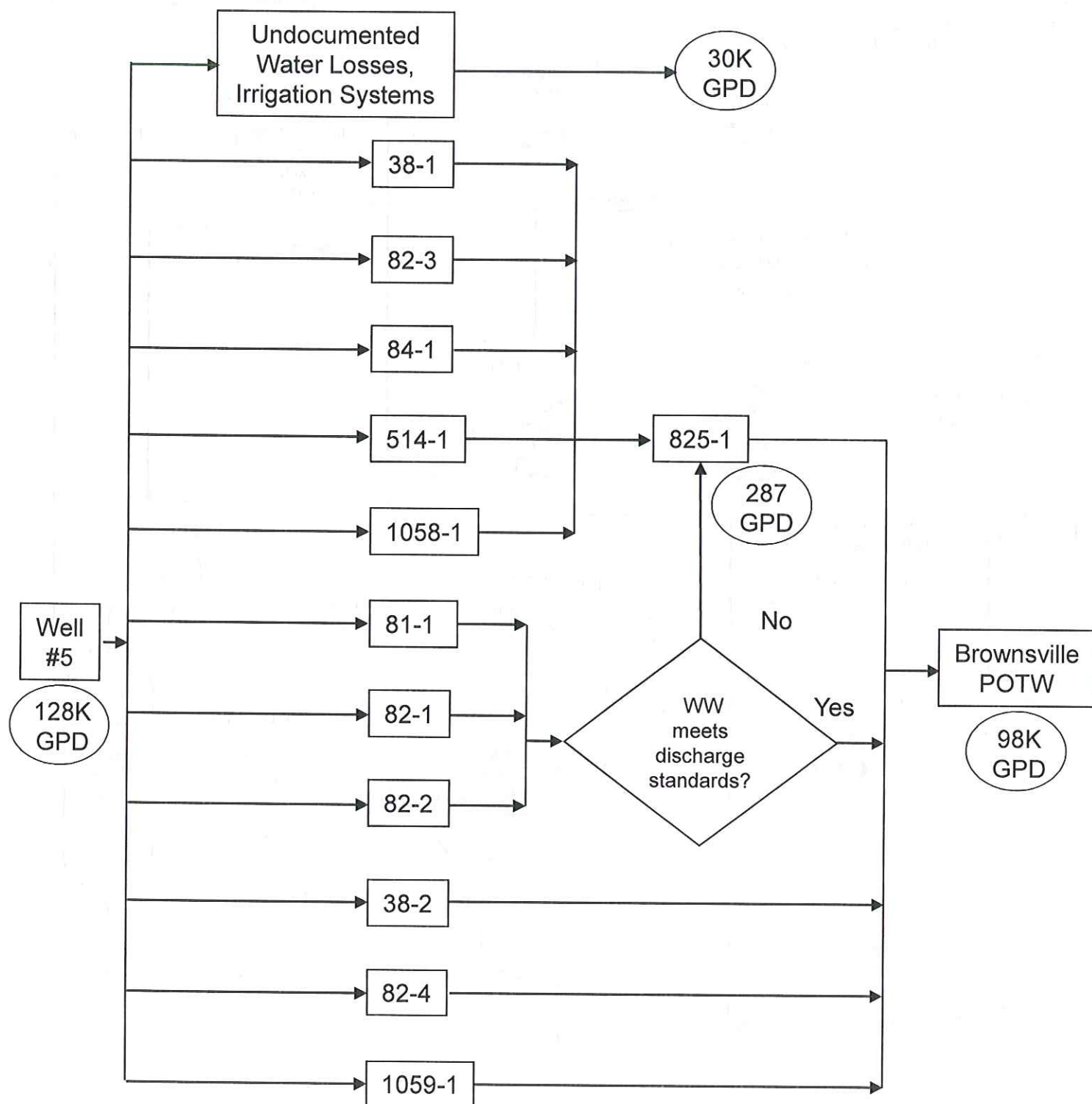
NUWC Division, Keyport receives, stores and transports hundreds of types of raw materials each week to support various weapons programs, command support requirements, maintenance tasks, and fleet repair and reissue requirements.

The major products produced at NUWC Division, Keyport are the parts to support the overhaul of Mk 48, Mk 48 ADCAP and Mk 54 Torpedoes. Mobile targets, as well as automated test equipment and electronic components for numerous sonar and weapon control systems are supported by the Division. No warheads are manufactured or stored onsite.

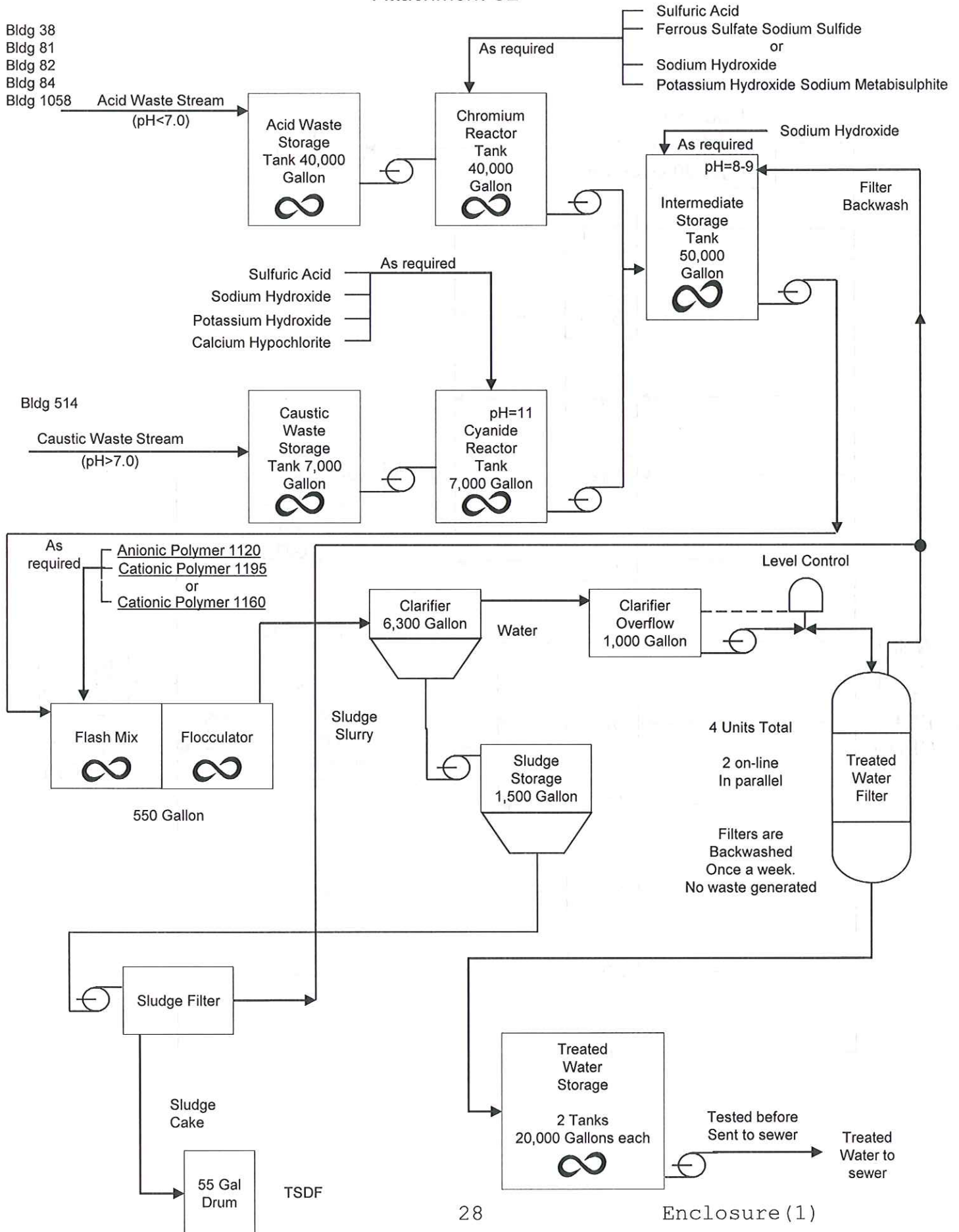
The torpedo propulsion system presently in use are all Otto Fuel II powered systems.

Attachment C1 Processes that generate industrial wastewaters

process location	waste stream name	waste stream ID#	batch or continuous
Bldg 38	deburring WW	38-1	continuous
Bldg 38	water jet cutter	38-2	continuous
Bldg 81	cable hydro test WW	81-1	batch
Bldg 82	Target propulsion system test WW	82-1	batch
Bldg 82	Target washdown WW	82-2	batch
Bldg 82	battery fluid WW	82-3	batch
Bldg 82	sample polishing and grinding WW	82-4	continuous
Bldg 84	Torpedo shell repair WW	84-1	batch
Bldg 514	Otto Fuel II recovery WW	514-1	batch
Bldg 825	IWTP discharge WW	825-1	batch
Bldg 1058	plating WW	1058-1	batch
Bldg 1059	furnace condensate WW	1059-1	continuous



Attachment C2



Attachment C7 Hazardous material storage locations and quantities

MSDS	TRADE NAME	CONTAINER SIZE	CURRENT LOCATION
HCXYGW	BALLOTINI IMPACT BEADS	50 LB CO	K0478-521
HCXNYG	DENATURED ALCOHOL (55 GL DR)	55 GL DR	K0489/K0514
HDGCQH	SHEILDED METAL ARC WELDING (SMAW) ELECTRODES	8@10 LB BX	K0233-501
HCSTTY	DESICCANT ACTIVATED	200 LB DR	K0489/K0514
HDCMNH	METHYL ETHYL KETONE	6@5 GL CN	K0084-512
HDCPXF	CHLORINE, TECHNICAL	5@150 LB CY	K0010-502
HCXHBX	ISOPROPYL ALCOHOL	5@5 GL CN	K0082-509
HCZQNW	SUPER AGITENE 141 (50 GL DR)	50 GL DR	K0489/K0514
HCXBMQ	BEL-RAY TERMALENE GREASE 2	2@5 GL CN	K0478-521
HCYPBS	CHEVRON TURBINE OIL SYMBOL 2190 TEP	10 GL CN	K0478-521
HCZBBQ	ARPOLUBE 629 SHC SYNTHETIC GEAR & BEARING OIL	2@5 GL CN	K0489-528
HCXLBW	ARPOLSOLV PRF 680 TY 2	55 GL DR	K0209-502
HCTLGW	MOBIL DELVAC 1 5W-40	55 GL DR	K0489/K0514
HCVVMQ	MOBIL DELVAC MX 15W-40	55 GL DR	K0489/K0514
KDFRYD	EPOXY KIT SA1600/SB1609	20@16.7 LB CN	K0489/K0514
HDFYXM	SPECIALTY COPPER PCN38	50 LB CO	K1058-503
HDBMJK	INSTANT OCEAN SYSTHETIC SEA SALT	14@5 GL CO	K0098-501
HCZMBJ	BENGAL BAY GARNET ABRASIVE GRAINS AND POWDERS #80	50 LB BG	K0233-502
HCZXYH	SEMI GLOSS ENAMEL, COLOR #26622 GRAY	5@5 GL CN	K0478-521
HCZXYH	SEMI GLOSS ENAMEL, COLOR #26622 GRAY	11@5 GL CN	K0489/K0514
HDDDNM	SODIUM CHLORIDE (SALT)	21@40 LB BG	K0233-502
HDBLGZ	DESI PAK	225 LB DR	K0489-K0514
HDBDDZ	MILLED FIBER	50 LB BG	K0084-513
HDBNQX	NYLON POWDER	40@22 LB BX	K0233-502

CAGE: 4N760

55 FL DR

6810-00-201-0904

HGXNYG

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: DENATURED ALCOHOL
NEW MSDS DATE: 03/03/2005

DATE: 03/03/05
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MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.
THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this MSDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: DENATURED ALCOHOL
COMPANY IDENTITY: CSD/STARTEX
COMPANY ADDRESS: P O BOX 3087
COMPANY CITY: CONROE, TX 77305
COMPANY PHONE: 1-936-228-0865
CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 65-75% ETHANOL (64-17-3) [200-578-6],
15-25% METHANOL (67-56-1) [200-659-6],
0- 5% ETHYL ACETATE (141-78-6) [205-500-4],
0- 1% HEPTANE (142-82-5) [205-563-8]

Number in parentheses is CAS #, number in brackets is European EC #.

SECTION 3. HAZARDS IDENTIFICATION

RISK STATEMENTS:

R11 Highly Flammable.
R18 In use, may form flammable/explosive vapor-air mixture.
R41 Risk of serious damage to eyes.
R65 Harmful; may cause lung damage if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R39/25 Toxic: danger of very serious irreversible effects if swallowed.

SAFETY STATEMENTS:

S7 Keep container tightly closed.
S9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition. No smoking.
S23 Do not breathe gas, fumes, vapor, or spray.
S24 Avoid contact with skin.
S29 Do not empty into drains.
S33 Take precautionary measures against static discharges.
S45 In case of accident, or if you feel unwell, seek medical advice immediately. (Show the label where possible).

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: DENATURED ALCOHOL
NEW MSDS DATE: 03/03/2005

DATE: 03/03/05
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SECTION 4. FIRST AID MEASURES

EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing.
Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration.

SWALLOWING:

Induce vomiting promptly using physician's instructions or by having patient stick finger down throat. After vomiting has been induced, give two teaspoonsful of baking soda in a glass of water. CALL A PHYSICIAN. Never give anything by mouth to an unconscious person. Have patient lie down & keep warm. Cover eyes to exclude light.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

NFPA Class B extinguishers (Carbon Dioxide or foam) for Class I B liquid fires.

SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield, bunker coat, gloves & rubber boots).
Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES

HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE

Keep container tightly closed.
Isolate from oxidizers, heat, sparks, electric equipment & open flame.
Closed containers may explode if exposed to extreme heat.
Applying to hot surfaces requires special precautions.
Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES

Stop spill at source. Dike area & contain.

CLEAN-UP PROCEDURES:

Clean up remainder with absorbent materials. Mop up & dispose of. Persons without proper protection should be kept from area until cleaned up.

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: DENATURED ALCOHOL
NEW MSDS DATE: 03/03/2005

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SECTION 7. HANDLING AND STORAGE

HANDLING

Isolate from oxidizers, heat, sparks, electric equipment & open flame.
Use only with adequate ventilation. Avoid breathing of vapor or spray mist.
Avoid contact with skin & eyes.
Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.
Avoid free fall of liquid. Ground containers when transferring. Do not flame out, saw, drill, brake, or weld. Empty container very hazardous! Continue all label precautions!

STORAGE

Do not store above 49 C/120 F. Store large amounts in structures made for OSHA Class I B liquids. Keep container tightly closed & upright when not in use to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

RESPIRATORY EXPOSURE CONTROLS

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION

LOCAL EXHAUST	: Necessary
MECHANICAL (GENERAL)	: Acceptable
SPECIAL	: None
OTHER	: None

PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.
Wash at end of each workshift & before eating, smoking or using the toilet.
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: DENATURED ALCOHOL
NEW MSDS DATE: 03/03/2005

DATE: 03/03/05
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SECTION 9. PHYSICAL DATA

APPEARANCE :	Liquid, Water-White
ODOR :	Ester
BOILING RANGE :	63 75 79 C / 147 167 175 F
AUTO IGNITION TEMPERATURE :	293 C / 560 F (Lowest Component)
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	4.9
FLASH POINT (TEST METHOD):	-1 C / 29 F (TCC) (Lowest Component)
FLAMMABILITY CLASSIFICATION:	Class I B
GRAVITY @ 68/68 F / 20/20 C :	46.0
API :	0.797
SPECIFIC GRAVITY (Water=1) :	6.639
POUNDS/GALLON :	
VOC'S (>0.44 Lbs/8q In) :	100.0 Vol. % / 797.0 g/L / 6.638 Lbs/Gal
TOTAL VOC'S (TVOC) :	100.0 Vol. % / 797.0 g/L / 6.638 Lbs/Gal
NONEXEMPT VOC'S (CVOC) :	100.0 Vol. % / 797.0 g/L / 6.638 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS) :	23.7 Wt. % / 188.5 g/L / 1.570 Lbs/Gal
VAPOR PRESSURE (mm of Hg) @ 20 C	61.3
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	61.3
VAPOR DENSITY (air=1) :	1.5
WATER ABSORPTION :	Appreciable
REFRACTIVE INDEX :	1.355

SECTION 10. STABILITY & REACTIVITY

STABILITY

Stable under normal conditions.

CONDITIONS TO AVOID

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

MATERIALS TO AVOID

Isolate from strong oxidizers such as permanganates, chromates & peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Monoxide, Carbon Dioxide from burning.

HAZARDOUS POLYMERIZATION

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL	CAS #	TWA (OSHA)	TLV (ACGIH)	HAP
Ethanol	64-17-5	1000 ppm	1000 ppm A4	No
Methanol	67-56-1	200 ppm S	200 ppm S	Yes
Ethyl Acetate	141-78-6	400 ppm	400 ppm	No
Heptane	142-82-5	500 ppm	400 ppm	No

In addition to EPA Hazardous Air Pollutants showing 'Yes' under 'HAP' above, using manufacturers' data, based on EPA Method 311, the following EPA Hazardous Air Pollutants may be present in trace amounts (less than 0.1%):
Benzene

COMPANY IDENTITY: CSD/STARTEX
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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

MATERIAL	CAS #	CEILING	STEL (OSHA/ACGIH)
Methanol	67-56-1	None Known	250 ppm
Heptane	142-82-5	None Known	500 ppm

ACUTE HAZARDS

EYE & SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis.
Primary irritation to eyes, redness, tearing, blurred vision.
Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation. Acute overexposure can cause damage to kidneys, blood, nerves, liver & lungs. Repeated exposure over TLV can cause blindness.

SWALLOWING:

Can be fatal or cause blindness if swallowed. Cannot be made non-poisonous. POISON ! Can cause irreversible nervous system damage & death. Harmful or fatal if swallowed. Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED

Chronic overexposure can cause damage to kidneys, blood, nerves, liver & lungs. Persons with severe skin, liver or kidney problems should avoid use.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

Leukemia been reported in humans from Benzene. This product contains less than 1 ppm of Benzene. Not considered hazardous in such low concentrations. Absorption thru skin may be harmful. Studies with laboratory animals indicate this product can cause damage to fetus.

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: DENATURED ALCOHOL
NEW MSDS DATE: 03/03/2005

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SECTION 12. ECOLOGICAL INFORMATION

MAMMALIAN INFORMATION:

MATERIAL	CAS #	LOWEST KNOWN LETHAL DOSE DATA
		LOWEST KNOWN LD50 (ORAL)
Methanol	67-56-1	1000.0 mg/kg (Man)
		LOWEST KNOWN LC50 (VAPORS)
Ethyl Acetate	141-78-6	1500 ppm (Rats)
		LOWEST KNOWN LD50 (SKIN)
Methanol	67-56-1	20000.0 mg/kg (Rabbits)

AQUATIC ANIMAL INFORMATION:

The most sensitive known aquatic group to any component of this product is:
Goldfish 250 ppm/mg/L (24 hours). Keep out of sewers and natural water supplies.

MOBILITY

This material is a mobile liquid.

DEGRADABILITY

This product is partially biodegradable.

ACCUMULATION

This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws.
If questions exist, contact the appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

IF CONTAINER HAS > PRODUCT RQ (SEE SECTION 15) PUT "RQ," BEFORE SHIPPING NAME.
DOT SHIPPING NAME: Alcohols, n.o.s.

DRUM LABEL: (FLAMMABLE LIQUID)
IATA / ICAO: Alcohols, toxic, n.o.s.
IMO / IMDG: (Ethyl Alcohol, Methanol), 3, UN1986, PG-II, POISON
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 127

SECTION 15. REGULATORY INFORMATION

EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health, Fire

All components of this product are on the TSCA list.
SARA Title III Section 313 Supplier Notification
This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: DENATURED ALCOHOL
NEW MSDS DATE: 03/03/2005

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SECTION 15. REGULATORY INFORMATION (CONTINUED)

SARA TITLE III INGREDIENTS	CAS#	WT. % (REG. SECTION)	RQ (LBS)
Ethanol	64-17-3	71 (311,312)	None
*Methanol	67-56-1	23 (311,312,313,RCRA)	5000
Ethyl Acetate	141-78-6	< 5 (311,312)	5000
Heptane	142-82-5	< 1 (311,312)	None

> 21140 LB / 9609 KG OF THIS PRODUCT IN 1 CONTAINER EXCEEDS THE "RQ" OF METHANOL.

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

STATE REGULATIONS:

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS

INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical inventories of the following countries:
Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 3, FLAMMABILITY: 3, REACTIVITY: 0
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING

Employees should be made aware of all hazards of this material (as stated in this MSDS) before handling it.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process. Unless updated, this Material Safety Data Sheet is valid until 03/03/2008.

nexeo™
solutions
SAFETY DATA SHEETScience Applications International Corp.
105 Passaic Ave. Fairfield NJ 07004
Contract Number: 6PM4AR-07-D-0001
Cage Code: 78345

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METHYL ETHYL KETONE
20023

Revision Date: 06/16/2011

Print Date: 8/17/2011

MSDS Number: R0000017

Version: 1.10

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE
COMPANY/UNDERTAKING**

Nexeo Solutions	Regulatory Information Number	1-800-325-3751
PO Box 2458	Telephone	1-800-531-7106
Columbus, OH 43216	Emergency telephone number	1-855-639-3648

Product name METHYL ETHYL KETONE

Product code 20023

Product Use Description No data

2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance: liquid, Colorless

CAUTION! FLAMMABLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

Potential Health Effects**Exposure routes**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

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

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness)

Target Organs

Based on animal studies, exposure to methyl ethyl ketone (MEK) increases the onset of peripheral neuropathy caused by exposure to methyl butyl ketone (MBK), and/or n-hexane, and/or ethyl butylketone. MEK alone has not been shown to cause peripheral neuropathy. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No.	Concentration
METHYL ETHYL KETONE	78-93-3	<=100%

4. FIRST AID MEASURES

Eyes

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.

Ingestion

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.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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Dry chemical, Carbon dioxide (CO2), Water spray

Hazardous combustion products
carbon dioxide and carbon monoxide

Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification
Flammable Liquid Class IB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

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

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observed. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

METHYL ETHYL KETONE		78-93-3
ACGIH	time weighted average	200 ppm
ACGIH	Short term exposure limit	300 ppm
NIOSH	Recommended exposure limit (REL):	200 ppm
NIOSH	Recommended exposure limit (REL):	590 mg/m3
NIOSH	Short term exposure limit	300 ppm
NIOSH	Short term exposure limit	885 mg/m3
OSHA Z1	Permissible exposure limit	200 ppm
OSHA Z1	Permissible exposure limit	590 mg/m3

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

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Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	no data available
Colour	Colorless
Odour	characteristic, pleasant, acetone-like
Boiling point/boiling range	175.26 °F / 79.59 °C
Melting point/range	-123.95 °F / -86.64 °C
Sublimation point	no data available
pH	no data available
Flash point	24.1 °F / -4.4 °C Tag closed cup
Ignition temperature	no data available
Evaporation rate	5.70 n-Butyl Acetate
Lower explosion limit/Upper explosion limit	1.8 %(V) / 10 %(V)
Particle size	no data available
Vapour pressure	12.132 kPa @ 77 °F / 25 °C
Relative vapour density	2.41 AIR=1
Density	0.806 g/cm3 @ 68.00 °F / 20.00 °C 6.71 lb/gal @ 68 °F / 20 °C

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Bulk density	No data
Water solubility	partly soluble
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
log Pow	0.29
Autoignition temperature	759 °F / 404. °C
Viscosity, dynamic	0.4 mPa.s
Viscosity, kinematic	no data available
Solids in Solution	no data available
Decomposition temperature	no data available
Burning number	no data available
Dust explosion constant	no data available
Minimum ignition energy	no data available

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Heat, flames and sparks.

Incompatible products

Amines, Copper, Copper alloys, strong alkalis, strong mineral acids, Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

: LD 50 Rat : 2,300 - 3,500 mg/kg

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Acute inhalation toxicity : LC 50 Rat: 11,700 mg/l; 4 h

Acute dermal toxicity : LD 50 Rabbit:
> 5 g/kg

12. ECOLOGICAL INFORMATION

Biodegradability
METHYL ETHYL KETONE : no data available

Bioaccumulation
METHYL ETHYL KETONE : no data available

Ecotoxicity effects

Toxicity to fish
METHYL ETHYL KETONE : 96 h flow-through test LC 50 Fathead minnow
(Pimephales promelas): 3,130.00 - 3,320.00 mg/l ;
Mortality

Toxicity to daphnia and other aquatic invertebrates.
METHYL ETHYL KETONE : 48 h static test EC 50 Water flea (Daphnia magna):
4,025.00 - 6,440.00 mg/l Intoxication

Toxicity to algae
METHYL ETHYL KETONE : no data available

Toxicity to bacteria
METHYL ETHYL KETONE : no data available

Biochemical Oxygen Demand (BOD)
METHYL ETHYL KETONE : no data available

Chemical Oxygen Demand (COD)
METHYL ETHYL KETONE : no data available

Additional ecological information

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METHYL ETHYL KETONE : no data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT /LTD. QTY.
--------------	----------------------	------------------	-----------------------	------------------	-----------------------------------

U.S. DOT - ROAD

UN 1193	Methyl ethyl ketone	3		II	
---------	---------------------	---	--	----	--

U.S. DOT - RAIL

UN 1193	Methyl ethyl ketone.	3		II	
---------	----------------------	---	--	----	--

U.S. DOT - INLAND WATERWAYS

UN 1193	Methyl ethyl ketone	3		II	
---------	---------------------	---	--	----	--

TRANSPORT CANADA - ROAD

UN 1193	Methyl ethyl ketone	3		II	
---------	---------------------	---	--	----	--

TRANSPORT CANADA - RAIL

UN 1193	Methyl ethyl ketone	3		II	
---------	---------------------	---	--	----	--

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TRANSPORT CANADA - INLAND WATERWAYS

UN	1193	Methyl ethyl ketone	3	II
----	------	---------------------	---	----

INTERNATIONAL MARITIME DANGEROUS GOODS

UN	1193	Methyl ethyl ketone	3	II
----	------	---------------------	---	----

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	1193	Methyl ethyl ketone	3	II
----	------	---------------------	---	----

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	1193	Methyl ethyl ketone	3	II
----	------	---------------------	---	----

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	1193	METILETILCETONA	3	II
----	------	-----------------	---	----

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA Hazard Classification

Fire Hazard

Acute Health Hazard

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

New Jersey RTK Label Information

METHYL ETHYL KETONE

78-93-3

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Pennsylvania RTK Label Information
METHYL ETHYL KETONE

78-93-3

Notification status

Canada. Canadian Environmental Protection Act (CEPA).	y (positive listing)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	
China. Inventory of Existing Chemical Substances	y (positive listing)
Japan. Kashin-Hou Law List	y (positive listing)
US. Toxic Substances Control Act	y (positive listing)
Japan. Industrial Safety & Health Law (ISHL) List	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)

Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302) 5000 lbs

Reportable quantity-Components

METHYL ETHYL KETONE 78-93-3 5000 lbs

	HMIS	NFPA
Health	2	1
Flammability	3	3
Physical hazards	0	
Instability		0
Specific Hazard	--	--

16. OTHER INFORMATION

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



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information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by NEXEO's Environmental Health and Safety Department (1-800-325-3751).

P/N: TT-735A

6810-008556160

HCHHBX

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: ISOPROPYL ALCOHOL

(TT-I-735A)

DATE: 1/20/10
PAGE 1 OF 7

5 gal. CN

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)

IMPORTANT: Read this MSDS before handling & disposing of this product.

Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: ISOPROPYL ALCOHOL (TT-I-735A)
COMPANY IDENTITY: CSD/STARTEX
COMPANY ADDRESS: P O BOX 3087
COMPANY CITY: CONROE, TX 77305
COMPANY PHONE: 1-936-228-0865
CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 99-100% ISOPROPANOL (67-63-0) [200-661-7]

Number in parentheses is CAS #, number in brackets is European EC #.

SECTION 3. HAZARDS IDENTIFICATION

RISK STATEMENTS:

R36/37/38 Irritating to eyes, respiratory system and skin.
R11 Highly Flammable.
R67 Vapors may cause drowsiness and dizziness.

SAFETY STATEMENTS:

S24/25 Avoid contact with skin and eyes.
S7 Keep container tightly closed.
S16 Keep away from sources of ignition. No smoking.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

COMPANY IDENTITY: CSD/STARTEX
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SECTION 4. FIRST AID MEASURES

EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing.

Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

SWALLOWING:

Rinse mouth. Do NOT induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY.
Do NOT give liquids to an unconscious or convulsing person.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSION PREVENTIVE MEASURES

NO open flames, NO sparks, & NO smoking. Above flash point, use a closed system, ventilation, explosion-proof electrical equipment, lighting.

EXTINGUISHING MEDIA

Use dry powder, alcohol-resistant foam, water in large amounts, carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield, bunker coats, gloves & rubber boots).
Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES

HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE

Keep container tightly closed.
Isolate from oxidizers, heat, sparks, electric equipment & open flame.
Closed containers may explode if exposed to extreme heat.
Applying to hot surfaces requires special precautions.
Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES:

Vapors may ignite explosively & spread long distances. Prevent vapor buildup.
Keep unprotected personnel away.
Remove all ignition sources;
Filter respirator for organic vapors.

CONTAINMENT AND CLEAN-UP MEASURES:

Stop spill at source. Dike and contain.
Collect leaking liquid in sealable containers.
Absorb remaining liquid in sand or inert absorbent.
Wash away remainder with plenty of water.

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SECTION 7. HANDLING AND STORAGE

HANDLING

Isolate from oxidizers, heat, sparks, electric equipment & open flames.
Use only with adequate ventilation. Avoid breathing of vapor or spray mist.
Avoid contact with skin & eyes.
Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.
Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions!

STORAGE

Keep in fireproof surroundings. Keep separated from strong oxidants. Keep cool. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

RESPIRATORY EXPOSURE CONTROLS

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION

LOCAL EXHAUST	: Necessary
MECHANICAL (GENERAL)	: Acceptable
SPECIAL	: None
OTHER	: None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.
Wash at end of each workshift & before eating, smoking or using the toilet.
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

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SECTION 9. PHYSICAL DATA

APPEARANCE :	Liquid, Water-White
ODOR :	Alcohol
BOILING RANGE :	80 81 83 C / 177 179 182 F
AUTO IGNITION TEMPERATURE :	398 C / 750 F (Lowest Component)
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	2.0
FLASH POINT (TEST METHOD):	13 C / 56 F (TCC)
FLAMMABILITY CLASSIFICATION:	Class I B
GRAVITY @ 68/68 F / 20/20 C :	48.3
API :	0.787
SPECIFIC GRAVITY (Water=1) :	6.556
POUNDS/GALLON :	6.555 Lbs/Gal
VOC'S (>0.44 Lbs/Sq In) :	100.0 Vol. % / 787.0 g/L / 6.555 Lbs/Gal
TOTAL VOC'S (TVOC) :	100.0 Vol. % / 787.0 g/L / 6.555 Lbs/Gal
NONEXEMPT VOC'S (CVOC) :	100.0 Vol. % / 787.0 g/L / 6.555 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS) :	0.0 Wt. % / 0.0 g/L / 0.000 Lbs/Gal
VAPOR PRESSURE (mm of Hg) @ 20 C	33.0
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	33.0
VAPOR DENSITY (air=1) :	2.1
WATER ABSORPTION :	Complete
REFRACTIVE INDEX :	1.378

SECTION 10. STABILITY & REACTIVITY

STABILITY

Stable under normal conditions.

CONDITIONS TO AVOID

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

MATERIALS TO AVOID

Reacts with strong oxidants, causing fire & explosion hazard.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Monoxide, Carbon Dioxide from burning.

HAZARDOUS POLYMERIZATION

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL	CAS #	TWA (OSHA)	TLV (ACGIH)	HAP
Isopropanol	67-63-0	400 ppm	200 ppm A4	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

MATERIAL	CAS #	CEILING	STEL (OSHA/ACGIH)
Isopropanol	67-63-0	None Known	400 ppm

ACUTE HAZARDS

EYE & SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis.
Primary irritation to eyes, redness, tearing, blurred vision.
Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation. Acute overexposure can cause harm to kidneys, blood, nerves, liver, lungs.

SWALLOWING:

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED

Chronic overexposure can cause harm to kidneys, blood, nerves, liver, lungs. Persons with severe skin, liver or kidney problems should avoid use.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

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SECTION 12. ECOLOGICAL INFORMATION

MAMMALIAN INFORMATION:

MATERIAL

CAS #	LOWEST KNOWN LETHAL DOSE DATA
	LOWEST KNOWN LD50 (ORAL)
67-63-0	5840.0 mg/kg (Rats)
	LOWEST KNOWN LC50 (VAPORS)
67-63-0	16000 ppm (Rats)
	LOWEST KNOWN LD50 (SKIN)
67-63-0	16400.0 mg/kg (Rabbits)

Isopropanol

Isopropanol

Isopropanol

AQUATIC ANIMAL INFORMATION:

The most sensitive known aquatic group to any component of this product is:
Chub 1000 ppm or mg/L (24 hour exposure).
Keep out of sewers and natural water supplies.

MOBILITY

This material is a mobile liquid.

DEGRADABILITY

This product is completely biodegradable.

ACCUMULATION

This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options.
Recycle / dispose of observing national, regional, state, provincial and local
health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: Isopropyl alcohol, 3, UN1219, PG-II
DRUM LABEL: (FLAMMABLE LIQUID)
IATA / ICAO: Isopropyl alcohol, 3, UN1219, PG-II
IMO / IMDG: Isopropyl alcohol, 3, UN1219, PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 129

SECTION 15. REGULATORY INFORMATION

EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health, Fire

All components of this product are on the TSCA list.
This material contains no known products restricted under SARA Title III,
Section 313 in amounts greater or equal to 1%.

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: ISOPROPYL ALCOHOL

(TT-I-735A)

DATE: 1/20/10
PAGE 7 OF 7

SECTION 15. REGULATORY INFORMATION (CONTINUED)

STATE REGULATIONS:

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN
CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS

INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical
inventories of the following countries:
Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 2, FLAMMABILITY: 3, REACTIVITY: 0

This information is intended solely for the use of individuals
trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING

See Section 3 for Risk & Safety Statements. Employees should be made aware
of all hazards of this material (as stated in this MSDS) before handling it.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability
or fitness for a specific use, with respect to the product or the information
provided herein, except for conformation to contracted specifications.
All information appearing herein is based upon data obtained from manufacturers
and/or recognized technical sources. While the information is believed to be
accurate, we make no representations as to its accuracy or sufficiency.
Conditions of use are beyond our control, and therefore users are responsible
for verifying the data under their own operating conditions to determine
whether the product is suitable for their particular purposes and they assume
all risks of their use, handling, and disposal of the product. Users also
assume all risks in regards to the publication or use of, or reliance upon,
information contained herein.
This information relates only to the product designated herein, and does not
relate to its use in combination with any other material or process.

GRAYMILLS CORPORATION MATERIAL SAFETY DATA SHEET

HCZQNW

Conforms to OSHA form No. 1218-0072
Complies with OSHA hazard communication
standard, 29CFR1910.1200

50 GL DR

NFPA HAZARD RATING

HEALTH	1
FLAMMABILITY	2
REACTIVITY	0

IDENTITY: Super Agitene 141
CHEMICAL FAMILY: Cleaning compound (Combustible Liquid) 6850-01-098-0264

SECTION I

MANUFACTURERS NAME: ADDRESS:	Graymills Corporation 3705 North Lincoln Ave. Chicago, Illinois 60613	EMERGENCY #: DATE PREPARED: PREPARED BY: PREPARERS SIGNATURE:	1-800-424-9300 (CHEMTREC) July 1, 2008 Robert E. Schmalz, Jr. <i>Robert E. Schmalz, Jr.</i>
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SECTION II - INGREDIENTS/IDENTITY INFORMATION

SPECIFIC CHEMICAL IDENTITY/Common Name(s):	OSHA PEL	ACGIH TLV	CAS# (*1 or more)	CONCENTRATION RANGE %
Aliphatic Petroleum Distillate	100 ppm	100 ppm	64742-88-7*	>97%
DPM (Dipropylene Glycol Methyl Ether)	100 ppm	100 ppm	34590-94-8	<1%

SECTION III- PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE (FAHRENHEIT): 360°-410°F/182°-210°C	SPECIFIC GRAVITY (WATER=1): .8
VAPOR PRESSURE (mm Hg @ 68°F/20°C): .23	MELTING POINT: N/A
VOC CONTENT: 800 g/l	EVAPORATION RATE (n-Butyl acetate=1): .04
	pH: N/A

SOLUBILITY IN WATER: Insoluble
APPEARANCE & ODOR: Clear green liquid, mild mineral spirits odor.

SECTION IV- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): 142°F-145°F/61.1°C-62.8°C (Tag CC ASTM D56)

FLAMMABLE LIMITS:
LEL: 0.9%
UEL: 7.0%

EXTINGUISHING MEDIA: CO₂ foam, dry chemicals, water spray (fog)

SPECIAL FIRE FIGHTING PROCEDURES: Cool sealed drums with water to lessen chance of rupture. Wear self-contained breathing gear. Minimize breathing of gases, vapors or decomposition products.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible liquid, drums could fracture if heated. Auto ignition temperature approximately 450°F (232°C).

SECTION V- REACTIVITY DATA

STABILITY: Unstable ☐ Stable ☒

CONDITIONS TO AVOID: Keep away from heat, sparks, and open flame.

INCOMPATIBILITY (MATERIAL TO AVOID): Acids, strong oxidizers such as liquid chlorine, concentrated oxygen, sodium

HAZARDOUS DECOMPOSITION OF BYPRODUCTS: Carbon dioxide, carbon monoxide, fumes, smoke, and aldehydes upon incomplete combustion.

HAZARDOUS POLYMERIZATION: May Occur ☐ Will not Occur ☒

CONDITIONS TO AVOID: None

*CAS # for component could vary from different suppliers due to different manufacturing processes. Specs are per Shell MSDS 7.653-.1T

SA141.PUB

SECTION VI - HEALTH HAZARD DATA			
ROUTE(S) OF ENTRY:	INHALATION <input checked="" type="checkbox"/>	SKIN <input checked="" type="checkbox"/>	INGESTION <input checked="" type="checkbox"/>
HEALTH HAZARDS (ACUTE & CHRONIC):	Skin irritation Dermal: LD ₅₀ > 4 ml/kg - Rabbit Oral: LD ₅₀ > 25 ml/kg - Rat Inhalation: LC ₅₀ > 700 ppm /4H - Rat		
CARCINOGENICITY:	NTP <input type="checkbox"/>	IARC MONOGRAPHS <input type="checkbox"/>	OSHA REGULATED <input type="checkbox"/>
SIGNS & SYMPTOMS OF EXPOSURE: Skin or eye irritation, dizziness, or headache.			
MEDICAL CONDITIONING GENERALLY AGGRAVATED BY EXPOSURE: Skin or respiratory allergies.			
EMERGENCY & FIRST AID PROCEDURES:			
<u>Eye Contact:</u> High vapor concentration may be irritating. If liquid gets into eye, irrigate eye with water for 15 minutes with lid open. See doctor.			
<u>Skin contact:</u> Prolonged & repeated exposure may dry the skin. If clothing gets wet, remove and wash exposed area with water. Apply skin lotion or lanolin cream. If irritation results, see doctor.			
<u>Inhalation:</u> Vapors may result in irritation to nose, throat & respiratory tract. High vapor concentration can cause headache & dizziness, and result in central nervous system depression. Remove to fresh air. Use oxygen or artificial respiration if required.			
<u>Ingestion:</u> Do not induce vomiting. Call Doctor. If more than 2.0 ml/kg is ingested and vomiting has not occurred, then emesis could be induced with doctors supervision. If vomiting occurs, keep head below hip to prevent aspiration of liquid into lungs.			
SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:		Use absorbent material or sand. Shovel into waste container. Dispose of properly.	
WASTE DISPOSAL METHOD:		Reclaim by distillation or have disposal performed by a licensed waste hauler.	
PRECAUTIONS TO BE TAKEN IN HANDLING & STORING:		Store in cool area away from heat or open flames. All precautions apply to empty container.	
OTHER PRECAUTIONS:		Not biodegradable. Sufficient ventilation in volume and pattern to keep work area concentration below applicable safety levels.	
SECTION VIII - CONTROL MEASURES			
RESPIRATORY PROTECTION (SPECIFY TYPE):		None	
VENTILATION			
LOCAL EXHAUST: None. Sufficient ventilation in volume and pattern to keep work area concentration below applicable safety levels.			
SPECIAL: None		MECHANICAL (GENERAL): Well ventilated room	
PROTECTIVE GLOVES:		Nitrile	
EYE PROTECTION:		Chemical splash goggles	
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:		For constant use, Nitrile gloves and solvent resistant apron are recommended. Wear goggles as appropriate.	
WORK/HYGIENIC PRACTICES:		Use skin lotion or cream if gloves are not worn.	
SECTION IX - TRANSPORTATION INFORMATION			
DOMESTIC (DOT)			
GROUND:		Combustible liquid, N.O.S., not regulated under 49 CFR	
AIR:		Use international regulations	
INTERNATIONAL (ICAO/IATA)			
Petroleum distillates, N.O.S., Class 3, UN1268, Packaging Group III			
THE DATA PRESENTED IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF. NEITHER SELLER NOR PREPARER MAKES ANY WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE INFORMATION PRESENTED, MERCHANTABILITY OR FITNESS OF PURPOSE.			

34111 P10

CAGE: 4N760

55 GL DR

HCXLBW

6850-01-474-2316

COMPANY IDENTITY: CSD/STARTEX

PRODUCT IDENTITY: ARPOLSOLV PRF680 TYP2 (MIL-PRF-680B Type 2)

NEW MSDS DATE: 05/30/2008

DATE: 05/30/08

PAGE 1 OF 7

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1, using the International Chemical Safety Cards of the Global Harmonizing System.

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)

IMPORTANT: Read this MSDS before handling & disposing of this product.

Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: ARPOLSOLV PRF680 TYP2 (MIL-PRF-680B Type 2)

COMPANY IDENTITY: CSD/STARTEX

COMPANY ADDRESS: P O BOX 3087

COMPANY CITY: CONROE, TX 77305

COMPANY PHONE: 1-936-228-0865

CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 100% NAPHTHA(PETROLEUM), HEAVY ALKYLATE (64742-48-9) [265-200-4]

Number in parentheses is CAS #, number in brackets is European EC #.

This product has a mixture of n- and iso- paraffins, aromatic hydrocarbons, & naphthenes. Depending on the raw material & production processes, the composition & physical properties of this solvent can vary considerably.

SECTION 3. HAZARDS IDENTIFICATION

RISK STATEMENTS:

R36/37/38 Irritating to eyes, respiratory system and skin.

R65 Harmful: may cause lung damage if swallowed.

SAFETY STATEMENTS:

S2 Keep out of the reach of children.

S23 Do not breathe gas, fumes, vapor, or spray.

S24 Avoid contact with skin.

S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

COMPANY IDENTITY: CSD/STARTEX

PRODUCT IDENTITY: ARPOLSOLV PRF680 TYP2 (MIL-PRF-680B Type 2)

NEW MSDS DATE: 05/30/2008

DATE: 05/30/08

PAGE 2 OF 7

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing.

Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

SWALLOWING:

Rinse mouth. Do NOT induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY.

Do NOT give liquids to an unconscious or convulsing person.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSION PREVENTIVE MEASURES

NO open flames. Above flash point, use a closed system, ventilation, explosion-proof electrical equipment, lighting.

EXTINGUISHING MEDIA

Use dry powder, AFFF, carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters

& cool closed containers. Use fog nozzles if water is used.

Do not enter confined fire-space without full bunker gear.

(Helmet with face shield, bunker coats, gloves & rubber boots).

Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES

COMBUSTIBLE!

Keep container tightly closed.

Isolate from oxidizers, heat, & open flame.

Closed containers may explode if exposed to extreme heat.

Applying to hot surfaces requires special precautions.

Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES:

Keep unprotected personnel away.

Filter respirator for organic vapors.

CONTAINMENT AND CLEAN-UP MEASURES:

Stop spill at source. Dike and contain.

Absorb remaining liquid in sand or inert absorbent.

Do NOT wash away into sewer.

COMPANY IDENTITY: CSD/STARTEK

PRODUCT IDENTITY: ARFOLSOLV PRE680 TYP2 (MIL-PRE-680B Type 2)

NEW MSDS DATE: 05/30/2008

DATE: 05/30/08

PAGE 3 OF 7

SECTION 7. HANDLING AND STORAGE

HANDLING

Isolate from oxidizers, heat, & open flame.

Use only with adequate ventilation. Avoid breathing of vapor or spray mist.

Avoid contact with skin & eyes.

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.

Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, braze, or weld. Empty container very hazardous! Continue all label precautions!

STORAGE

Isolate from strong oxidants. Keep container tightly closed & upright when not in use to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

RESPIRATORY EXPOSURE CONTROLS

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION

LOCAL EXHAUST

: Necessary

MECHANICAL (GENERAL)

: Acceptable

SPECIAL

: None

OTHER

: None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.

Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.

Wash at end of each workshift & before eating, smoking or using the toilet.

Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

COMPANY IDENTITY: CSD/STARTEX

DATE: 05/30/08

PRODUCT IDENTITY: ARPOL SOLV PRF680 TYP2 (MIL-PRF-680B Type 2)

PAGE 4 OF 7

NEW MSDS DATE: 05/30/2008

SECTION 9. PHYSICAL DATA

APPEARANCE :	Liquid, Water-White
ODOR :	Mild
BOILING RANGE :	185 196 211 C / 365 385 412 F
AUTO IGNITION TEMPERATURE :	335 C / 635 F (Lowest Component)
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	0.9
FLASH POINT (TEST METHOD):	62 C / 144 F (TCC)
FLAMMABILITY CLASSIFICATION:	Class IIIA
GRAVITY @ 68/68 F / 20/20 C :	
API :	53.0
SPECIFIC GRAVITY (Water=1) :	0.767
POUNDS/GALLON :	6.389
VOC'S (>0.44 Lbs/Sq In) :	0.0 Vol. % / 0.0 g/L / 0.000 Lbs/Gal
TOTAL VOC'S (TVOC) :	100.0 Vol. % / 767.0 g/L / 6.389 Lbs/Gal
NONHEMPT VOC'S (CVOC) :	100.0 Vol. % / 767.0 g/L / 6.389 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS) :	0.0 Wt. % / 0.0 g/L / 0.000 Lbs/Gal
VAPOR PRESSURE (mm of Hg) @ 20 C	0.8
NONHEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	0.8
VAPOR DENSITY (air=1) :	5.2
WATER ABSORPTION :	Negligible
REFRACTIVE INDEX :	1.426
MIXED ANILINE POINT (Acid Insol):	76 C / 170 F

SECTION 10. STABILITY & REACTIVITY

STABILITY

Stable under normal conditions.

CONDITIONS TO AVOID

Isolate from oxidizers, heat, & open flame.

MATERIALS TO AVOID

Reacts with strong oxidants, causing fire & explosion hazard.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Monoxide, Carbon Dioxide from burning.

HAZARDOUS POLYMERIZATION

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL	CAS #	TWA (OSHA)	TLV (ACGIH)	HAP
Naphtha(Petroleum), Heavy Alkylate	64742-48-9	500 ppm	5 mg/m3	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

COMPANY IDENTITY: CSD/STARTEX

DATE: 05/30/08

PRODUCT IDENTITY: ARFOLSOLV PRF680 TYPE2 (MIL-PRF-680B Type 2)

PAGE 5 OF 7

NEW MSDS DATE: 05/30/2008

SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

MATERIAL

CAS #

CEILING

STEL (OSHA/ACGIH)

None Known None Known

ACUTE HAZARDS

EYE & SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis.

Primary irritation to eyes, redness, tearing, blurred vision.

Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.

SWALLOWING:

Harmful or fatal if swallowed.

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

The symptoms of chemical pneumonitis may not show up for a few days.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED

Persons with severe skin, liver or kidney problems should avoid use.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

Leukemia been reported in humans from Benzene.

This product contains less than 1 ppm of Benzene.

Not considered hazardous in such low concentrations.

Absorption thru skin may be harmful.

COMPANY IDENTITY: CSD/STARTEX

DATE: 05/30/08

PRODUCT IDENTITY: ARPOL SOLV PRF680 TYP2 (MIL-PRF-680B Type 2)

PAGE 6 OF 7

NEW MSDS DATE: 05/30/2008

SECTION 12. ECOLOGICAL INFORMATION

MAMMALIAN INFORMATION:

No mammalian information is available on this product.

AQUATIC ANIMAL INFORMATION:

No aquatic environmental information is available on this product.

Environmental effects of the substance have not been investigated adequately.

MOBILITY

This material is a mobile liquid.

DEGRADABILITY

This product is nonbiodegradable.

ACCUMULATION

This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: NONBULK: None

BULK: UN1268, Petroleum Distillates, n.o.s.

, Combustible liquid, PG-III

Combustible liquid. Not DOT regulated on trucks in containers of < 119 gallons.

DRUM LABEL: None (Combustible Liquid)

IATA / ICAO: None

IMO / IMDG: None

EMERGENCY RESPONSE GUIDEBOOK NUMBER: 128

SECTION 15. REGULATORY INFORMATION

EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health, Fire

All components of this product are on the TSCA list.

This material contains no known products restricted under SARA Title III, Section 313 in amounts greater or equal to 1%.

COMPANY IDENTITY: CSD/STARTEX
PRODUCT IDENTITY: ARFOLSOLV ERF680 TYP2 (MIL-ERF-680B Type 2)
NEW MSDS DATE: 05/30/2008

DATE: 05/30/08
PAGE 7 OF 7

SECTION 15. REGULATORY INFORMATION (CONTINUED)

STATE REGULATIONS:

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN
CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS

INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical
inventories of the following countries:
Australia, Canada, China, Europe (EINECS), Japan, Korea, United Kingdom.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 1, FLAMMABILITY: 2, REACTIVITY: 0
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals
trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING

See Section 3 for Risk & Safety Statements. Employees should be made aware
of all hazards of this material (as stated in this MSDS) before handling it.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability
or fitness for a specific use, with respect to the product or the information
provided herein, except for conformation to contracted specifications.
All information appearing herein is based upon data obtained from manufacturers
and/or recognized technical sources. While the information is believed to be
accurate, we make no representations as to its accuracy or sufficiency.
Conditions of use are beyond our control, and therefore users are responsible
for verifying the data under their own operating conditions to determine
whether the product is suitable for their particular purposes and they assume
all risks of their use, handling, and disposal of the product. Users also
assume all risks in regards to the publication or use of, or reliance upon,
information contained herein.
This information relates only to the product designated herein, and does not
relate to its use in combination with any other material or process.
Unless updated, this Material Safety Data Sheet is valid until 05/30/2011.

ATTACHMENT E6 TO THE
APPLICATION TO RENEW NUWCDIVKPT PERMIT # 7353
TO DISCHARGE INDUSTRIAL WASTEWATER TO A POTW

Does the facility use any of the chemicals specified as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater.

Ethyl benzene (CAS #100-41-4) occurs in lacquer thinner used in various paint processes in small quantities. Large quantities are stored in Bldg 1006, the hazardous material storage building. Building 1006 does not have any sewer service.

Toluene (CAS #108-88-3) occurs in aromatic naphtha which is used for circuit board cleaning in buildings 98, 489 and 514, and in lacquer thinner used in paint processes in various buildings. Large quantities are stored in Bldg 1006, the hazardous material storage building. Building 1006 does not have any sewer service.

1,2-Trans-Dichloroethylene (CAS #156-60-5) occurs in engineered fluid stored in 55-gallon drums in Bldg 82 and used in the Target refurbishment process.

Antimony (CAS #7440-36-0) occurs in lead acid batteries used in various processes and motor vehicles.

Arsenic (CAS #7440-38-2) occurs in trace quantities in IWTP wastewater.

Cadmium (CAS #7440-43-9) occurs in trace quantities in IWTP wastewater.

Chromium (CAS #7440-47-3) occurs in trace quantities in IWTP wastewater.

Copper (CAS #7440-50-8) occurs in trace quantities in IWTP wastewater.

Lead (CAS #7439-92-1) occurs in trace quantities in IWTP wastewater.

Nickel (CAS #7440-02-0) occurs in trace quantities in IWTP wastewater.

Silver (CAS #7440-22-4) occurs in trace quantities in IWTP wastewater.

Zinc (CAS #7440-66-6) occurs in hydraulic oil stored in 55-gallon drums and in trace quantities in IWTP wastewater.

Cyanide (CAS #57-12-5) occurs in trace quantities in IWTP wastewater.

The facility also tests each batch of treated industrial wastewater for total toxic organics and propylene glycol dinitrate (Otto Fuel II) but neither have ever been detected at measurable levels.

ATTACHMENT E6 TO THE
APPLICATION TO RENEW NUWCDIVKPT PERMIT # 7353
TO DISCHARGE INDUSTRIAL WASTEWATER TO A POTW

Does the facility use any of the chemicals specified as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater.

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Cadmium (CAS #7440-43-9) occurs in trace quantities in IWTP wastewater.

Chromium (CAS #7440-47-3) occurs in trace quantities in IWTP wastewater.

Copper (CAS #7440-50-8) occurs in trace quantities in IWTP wastewater.

Lead (CAS #7439-92-1) occurs in trace quantities in IWTP wastewater.

Nickel (CAS #7440-02-0) occurs in trace quantities in IWTP wastewater.

Silver (CAS #7440-22-4) occurs in trace quantities in IWTP wastewater.

Zinc (CAS #7440-66-6) occurs in hydraulic oil stored in 55-gallon drums and in trace quantities in IWTP wastewater.

Cyanide (CAS #57-12-5) occurs in trace quantities in IWTP wastewater.

The facility also tests each batch of treated industrial wastewater for total toxic organics and propylene glycol dinitrate (Otto Fuel II) but neither have ever been detected at measurable levels.

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