

SOLVAY®

OZENE®

EMULSIFIABLE ORTHODICHLOROBENZENE

CONTROLS ODORS

SEWAGE SYSTEMS • INDUSTRIAL PLANTS • REFUSE CANS AND TRUCKS

REFUSE DISPOSAL AREAS • DRAINAGE DITCHES

FUEL OIL SLUDGE, TAR AND GREASE SOLVENT

SEE TECHNICAL BROCHURE FOR USE DIRECTIONS

50 LBS. NET

218-411

USDA REG. No. 218-411

FREIGHT CLASSIFICATION-EMULSIFIABLE ORTHODICHLOROBENZOL

MADE IN U.S.A. FOR MANUFACTURING USE ONLY

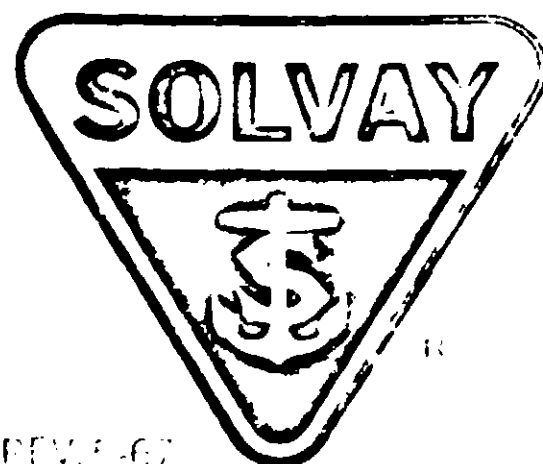
CAUTION!

ACTIVE INGREDIENTS—ORTHODICHLOROBENZENE—99%
INERT INGREDIENTS—1%

ANTIDOTE: CALL A PHYSICIAN AT ONCE—
TO INDUCE VOMITING DRINK WARM WATER
MIXED WITH SOAP OR MUSTARD. IN SEVERE
CASES OF INHALATION OR SWALLOWING
OXYGEN SHOULD BE ADMINISTERED AND/OR
STOMACH PUMPED.

VAPOR IRRITATING—KEEP OUT OF REACH OF CHILDREN

AVOID PROLONGED BREATHING OF VAPOR. AVOID CONTACT WITH SKIN, EYES OR CLOTHING. IF LIQUID GETS
ON EYES, IMMEDIATELY FLUSH THOROUGHLY WITH PLENTY OF WATER. WASH THOROUGHLY AFTER HANDLING.



INDUSTRIAL CHEMICALS DIVISION

MORRISTOWN, NEW JERSEY



CS-411 REV. 5-67

OZONE USAGE INSTRUCTIONS

GARBAGE CANS

4 ounces per gallon of water. Spray into cans as needed or at least once each time the receptacle is emptied to eliminate the insect nuisance (~~flies, maggots, etc.~~ ^{control}).

LATRINE OR COMMUNE PITS

12 ounces per gallon of water. Spray to cover the surface. For small privies, use one ounce of Ozone per square foot of surface area diluted in sufficient water.

UNPAINTED OR CERAMIC WALLS AND FLOORS

(except where food is handled or processed)

1 ounce per gallon of water. Applied with mop or brush. Wipe or flush with clear water. For garage floors or excessive soiling, use undiluted Ozone and allow to remain until organic material is solubilized (15-20 minutes).

TOOLS AND MAINTENANCE EQUIPMENT

Immerse or swab with concentrated Ozone and allow to soak (a few minutes to 1 hour depending on soil accumulation). A water rinse will flush away grease. Thoroughly dry and slightly oil to prevent rusting.

PAINT BRUSHES

Immerse brush in concentrated Ozone while still moist with paint. Hand agitate for a few minutes and water rinse.

TRUCK AND AUTO BUMPER AND CHROME SURFACES

Road tar and soils can be removed by moistening a soft cloth

with Ozone and rubbing the affected area until soil is removed. For grease spotting on bumpers, waxes or brush on concentrated Ozone, allow to soak and flush with water. Spot check painted surfaces since Ozone will block or solubilize certain paint systems.

LAVATORIES AND REST AREAS

For Sluggish Septic Tanks

Add concentrated Ozone directly to the tank or through a convenient plumbing line according to the following schedule:

Tank Capacity	Dosage
300 gallons	4 ounces
500 gallons	8 ounces
750 gallons	12 ounces
900 gallons	14 ounces
1000 gallons	16 ounces (1 pint)

For larger tanks add 8 ounces for each 500 gallons capacity. Repeat above shock treatment until a good flow rate is established.

FOR NORMAL SEPTIC TANK USE

When operating normally, 2 ounces of Ozone per week will be sufficient to maintain effective operation.

ROADSIDE ZOO AND ANIMAL SHELTERS

One to two ounces of Ozone per gallon of water. Scrub or mop unpainted floor and walls. Completely rinse or hose with fresh water and thoroughly air out before admitting the animals.

ALLIED CHEMICAL CORPORATION

INDUSTRIAL CHEMICALS DIVISION

MORRISTOWN, NEW JERSEY

OZENE

TRADE MARK OZENE REGISTERED U.S. PATENT OFFICE

EMULSIFIABLE ORTHODICHLOROBENZENE

CONTROLS ODORS - CONVERTS
SEWAGE SYSTEMS INTO
REFRESHING FRESH AIR

**Allied
Chemical**

INDUSTRIAL OILS



A handy check-list of the many uses of OZENE for

- effective odor control
- heavy duty solvent-cleaning



PACKAGED IN:



USE METHOD OF APPLICATION CONCENTRATION REMARKS

SEWAGE SYSTEMS

Intake streams	Drip into stream	1-2% in water	Retain 1-2 ppm in stream
Stream back up	Drip or spray	5-10% in water	Emergency use as directed
Trickling filters	Spray	8% in water	Apply at least every 10 days
Vacuum filters	Rotate filter blanket in Ozene emulsion with penetrant added	2% in water with 1% Oakite Penetrant	Periodical maintenance as required

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Trickling filters	Spray	8% in water	Apply at least every 10 days
Vacuum filters	Rotate filter blanket in Ozene emulsion with penetrant added	2% in water with 1% Oakite Penetrant	Periodical maintenance as required
Gas discharge from digesters	Goose-neck trap	100%	Continuous application
Sludge beds	Add to sludge before pumping to beds	1-2% in water	Retain 5-10 ppm in the sludge
Land fill (dried sludge)	Spray	1% in water	300 gal. per acre once every 10 days
Septic tanks and cesspools	Apply through drains	100%	1 1/2 oz. per day for each 200 gallons tank capacity

REFUSE

Garbage cans	Spray	10% in water	Periodic application at least every 10 days
Refuse trucks	Spray	10% in water	At least every 10 days or as needed
Incinerator plants	Spray entering refuse	10% in water	Controls odors of stored refuse until after burning
Refuse dumps	Spray	1% in water	300 gal. per acre once every 10 days

RENDERING PLANTS

Incinerator material	Spray	1% in water	As required to minimize odors
Rendering process			
(a) tank gases	Spray into stack	1-2% in water	Controls exhaust odors
(b) condensate	Drip	15-25% in water	As needed
(c) scrubbing water	Drip	100%	Prevents odors where gases are scrubbed

General housekeeping	Spray or mop	1% in water	Controls odors and cleans
Plant atmosphere	Pressure spray	1% in water	One quart per 100,000 cu. ft. space (Not to exceed 50 ppm)
AGRICULTURE			
Whey residue	Drip into waste	1-2% in water	Retain 4 ppm in waste
MISCELLANEOUS			
Textiles	Soak and rinse	2% in water	Controls odors
Animal kennels	Spray	1-2% in water	Apply when vacant—ventilate
Morgues	Spray	1-2% in water	—
Lagoon or settling pond	Spray or drip	1-2% in water	Retain 2 ppm in lagoon

Fuel oil additive <i>(See various applications)</i>	Add and mix	100%	1 pt. 5000 gal. #2 oil 1 pt. 3500 gal. #3 oil 1 pt. 2000 gal. #4 oil 1 pt. 1700 gal. #5 oil 1 pt. 600 gal. #6 oil
Engine cleaner	Spray or brush	75% in cresylic acid	Allow to soak. Remove rubber and plastic accessories
Steam jenny cleaning	Add to water tank	100%	Retain 1-2% in steam jenny tank
Tar removal	Brush	100%	Allow to soak and rinse
Cosmoline removal	Spray or brush	100% or 75% in kerosene	Allow to soak and rinse
Paint and plastic removal formulations	—	100%	Contact Selvey Representative
Removal of container linings	Spray	100% or 75% in kerosene	Apply after caustic wash and rinse
Concrete floor cleaning	Spray or mop	100% or 75% in kerosene	Allow to soak for one hour and rinse
Cleaning tools	Spray or brush	100% or 75% in kerosene	Allow to soak or brush and rinse
Removing grease	Soak	100%	—

Steam jenny cleaning	Add to water tank	100%	Retain 1-2% in steam jenny tank
Tar removal	Brush	100%	Allow to soak and rinse
Cosmoline removal	Spray or brush	100% or 75% in kerosene	Allow to soak and rinse
Paint and plastic removers formulations	--	100%	Contact Safety Representative
Removal of container linings	Spray	100% or 75% in kerosene	Apply after caustic wash and rinse
Concrete floor cleaning	Spray or mop	100% or 75% in kerosene	Allow to soak for one hour and rinse
Cleaning tools	Spray or brush	100% or 75% in kerosene	Allow to soak or brush and rinse
Removing grease from waste textile stock	Soak	2-5% in water	Rinse thoroughly
Grease traps	Soak overnight	3-5% in water	Once per week after initial manual cleaning
Sewage systems	When used as described under Odor Control, Ozene also frees the treated sections of the system from sludge and grease deposits.		

NOTE: For additional information on most of these uses contact the district office nearest you or write to Industrial Chemicals Division, Allied Chemical Corporation, P.O. Box 70, Morristown, N.J. 07960.

The International Chemists' Association Chemical Safety Data Sheet SD-54 reports as follows on its toxicity: "Ozene contains Orodichlorobenzene which is a colorless liquid having an aromatic, distinguishable odor. Its vapor at 1 ppm concentration is irritating to the eyes and upper respiratory system, and thus has good warning properties. Orodichlorobenzene is slightly toxic, but in

normal use and with application of diligent precautions, there is no unusual hazard involved. Prolonged and repeated skin contact can be irritating. Irritation from the vapors may result in mild intoxication. The ⁵⁰ accepted maximum allowable concentration is 25 ppm by volume in air for an eight-hour working day."

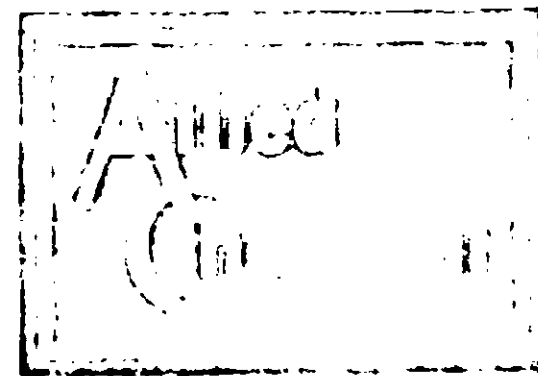
All statements herein are expressions of opinion which we believe to be accurate and reliable but are presented without guarantee or responsibility on our part. Statements concerning possible use of our products are not intended as recommendations for their use in the infringement of any patent. No patent warranty of any kind, explicit or implied, is made by our company.



INDUSTRIAL CHEMICALS DIVISION
P.O. Box 70, Morristown, N.J. 07960

For further information, write very specific
General information, contact your nearest
toy, products representative at one of
the district offices below:

ANDOVER, MASS. 01810, 160 Dascomb Rd.
BALACYNWYD, PA. 19004, 10 North Presidential Blvd.
CHARLOTTE, N. C. 28201, P. O. Box 877
CHICAGO, ILL. 60654, Merchandise Mart
CINCINNATI, O. 45202, 1014 Vine St.
DETROIT, MICH. 48217, 7501 W. Jefferson Ave.
HOUSTON, TEX. 77006, 3000 Richmond Ave.
NEW ORLEANS, LA. 70112, 1100 Tulane Ave.
NEW YORK, N. Y. 10036, One Times Square
PITTSBURGH, PA. 15222, One Gateway Center
SAN FRANCISCO, CALIF. 94104, 235 Montgomery St.
ST. LOUIS, MO. 63105, 232 S. Meramec
SYRACUSE, N. Y. 13201, Milton Ave.



INDUSTRIAL QUALITY TOYS DIVISION
P.O. Box 70, Morristown, N.J. 07960

Samples and Technical Service Available.

For additional information, free samples, or a qualified representative contact your local Solvay Distributor or write to Allied Chemical.

®

SOLVAY PROCESS DIVISION
49 Rector Street, New York, N.Y. 10036



PACKAGING

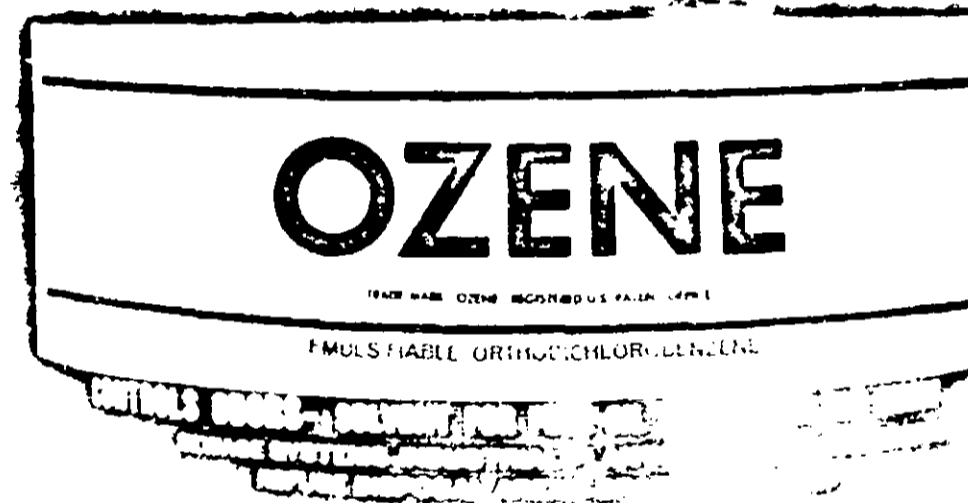
For information on packaging
and quantities, contact your
local Solvay Distributor.

**SAMPLES AND
TECHNICAL SERVICE**

For all technical information,
free samples or technical service,
an experienced representative,
contact your local Solvay Distributor.



INDUSTRIAL CHEMICALS DIVISION
P.O. Box 2000, Newark, N.J. 07102



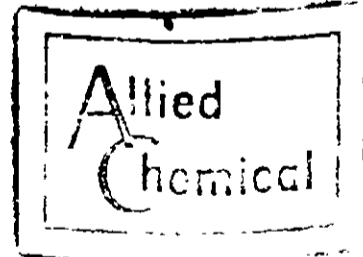
OZENE

TRADE NAME OZENE REG. U.S. PAT. & TM. OFF.

EMULSIFIABLE ORTHOCHLOROBENZENE

CONTROLS, DYES, POLYMERIZATION, PESTICIDES,
TEXTILES, WOOD PRESERVATION, WATER TREATMENT,
LEATHER TANNING, AND OTHER INDUSTRIAL APPLICATIONS.

330 (12.5 L)



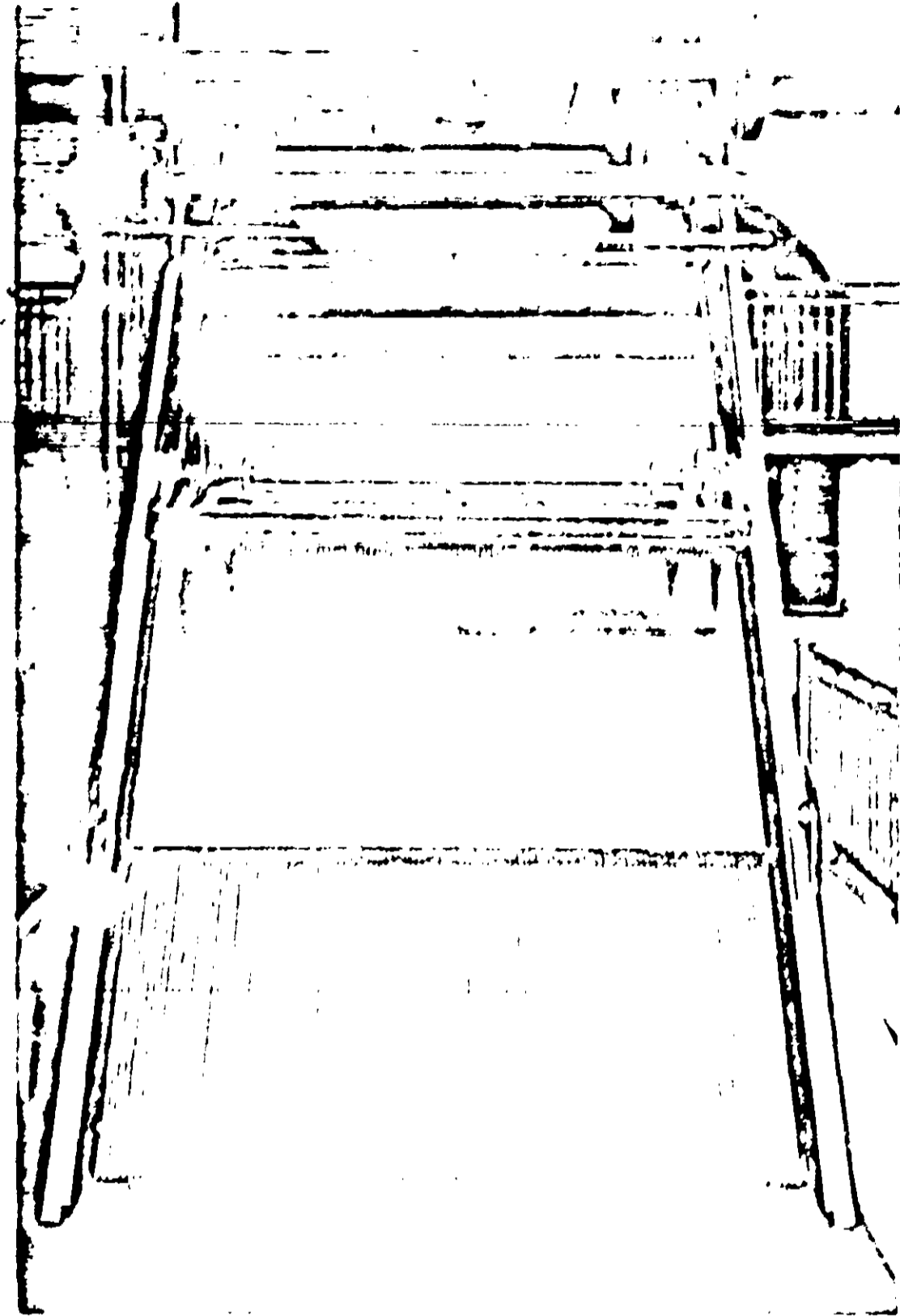
U.S. CONTROL NO. 100-100000-0000

SOLVAY OZENE

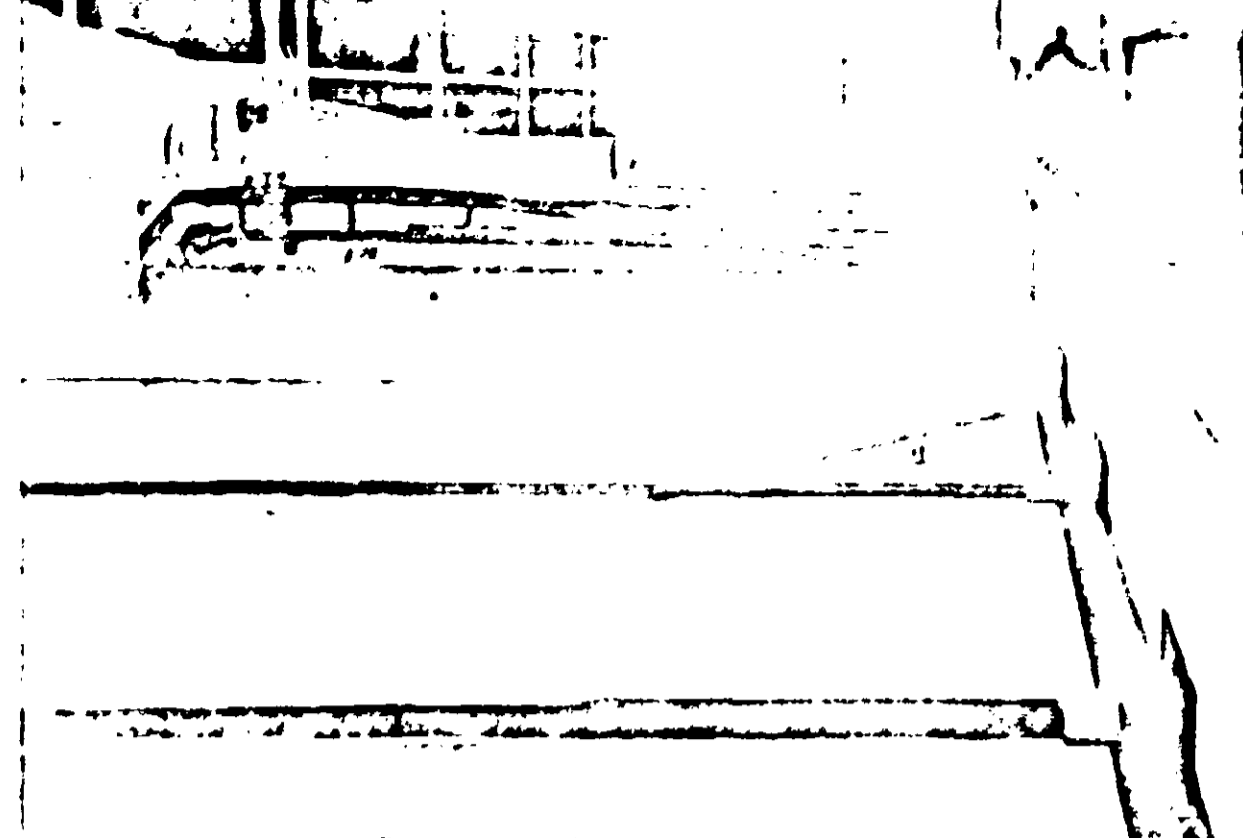
Concrete Floor	Spray or Brush	Full Strength	
Tar Removal (NOT on painted surfaces)	Brush	Full Strength	
Cleaning Tools	Spray or Brush	Full Strength	Rinse and flush
Engine Cleaner (External) (NOT on plastic or rubber or painted surfaces)	Spray or Brush	3 parts OZENE to 1 part Cresylic Acid	Apply after removing rubber and plastic materials.
Steam Jenny Cleaning	Add to Water Tank	Full Strength	Retain 2% in steam jenny tank

SOLVAY OZENE ODOR CONTROL APPLICATIONS

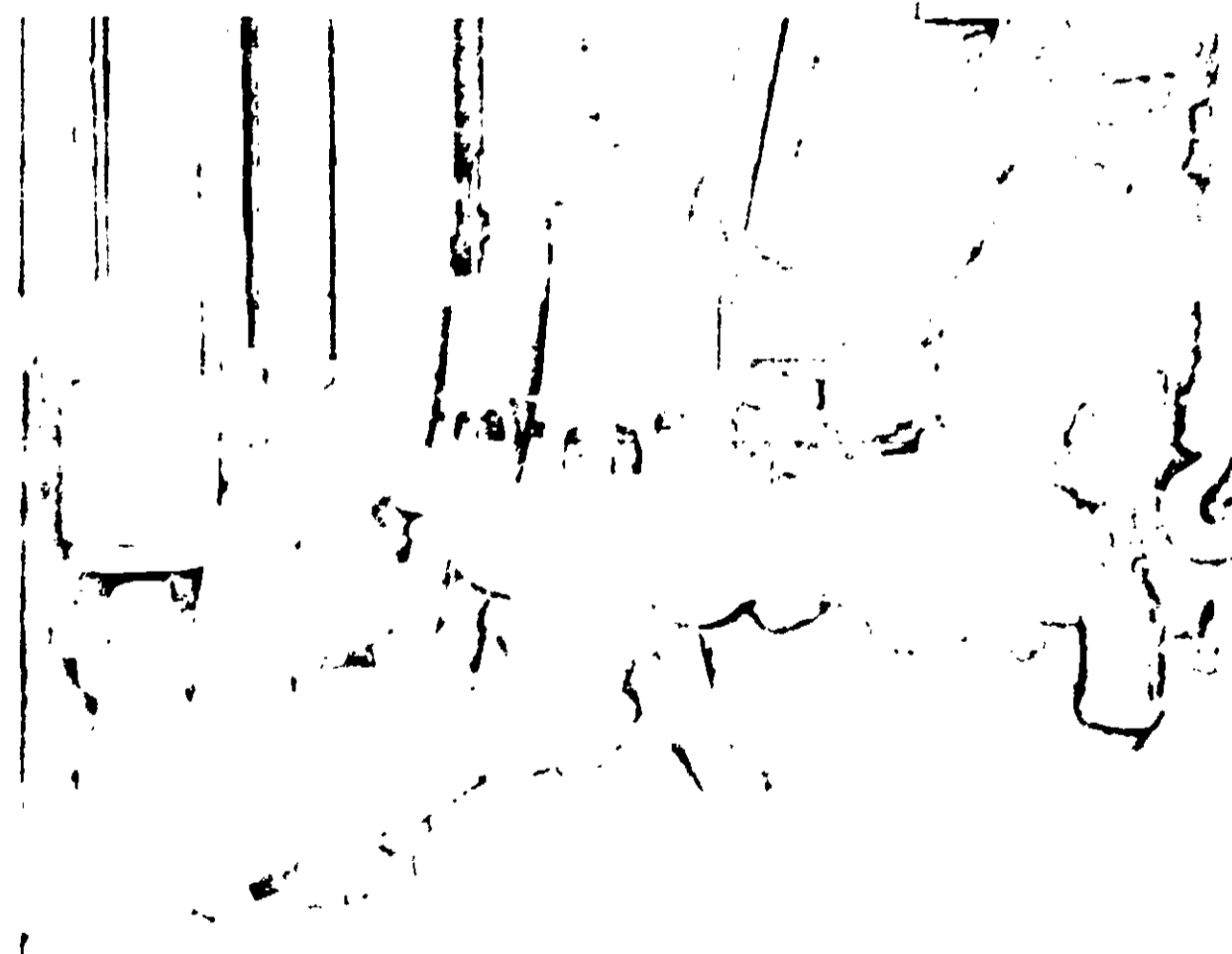
USES	METHOD	CONCENTRATION	REMARKS
Septic Tanks and Cesspools	Apply through drains	Full Strength	1/2 pint for each 500-gallon capacity per week.
Latrines	Spray	5-10% Water Solution	As needed
Garbage Cans	Spray	5-10% Water Solution	As needed
Lagoons or Settling Ponds	Spray or Drip	2% Water Solution	Retain 2 parts per million in lagoon or pond
Land Fills	Spray	1% Water Solution	Apply 300 gallons per acre as needed, or every 10 days to break the fly cycle
Refuse Dumps	Spray	1% Water Solution	Apply 2,000 gallons per acre as needed, or every 10 days to break the fly cycle
Refuse Tracks	Spray	10% Water Solution	As needed



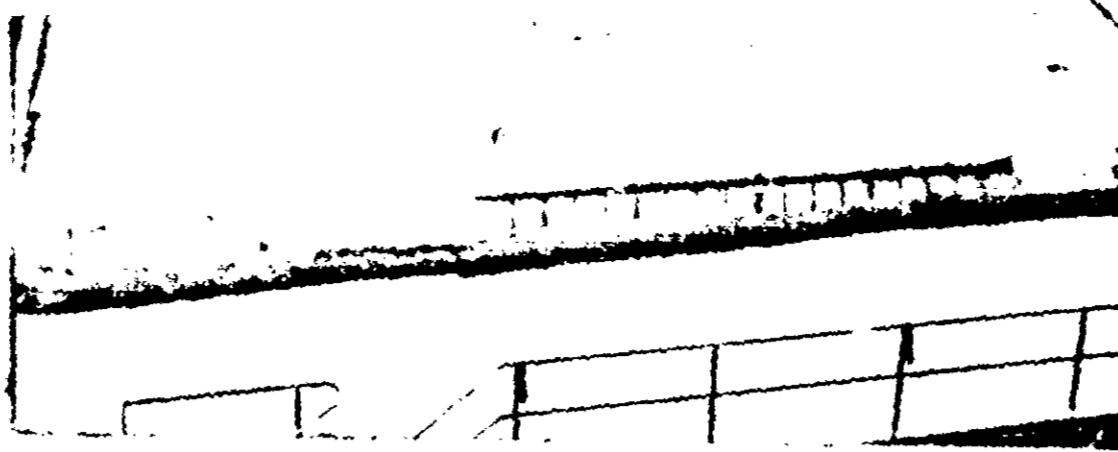
BAR SCREEN AND COMMINUTOR controls odor, removes grease. Addition of air at this point is also beneficial. Good air provides good chamber conditions to reduce maintenance frequency.



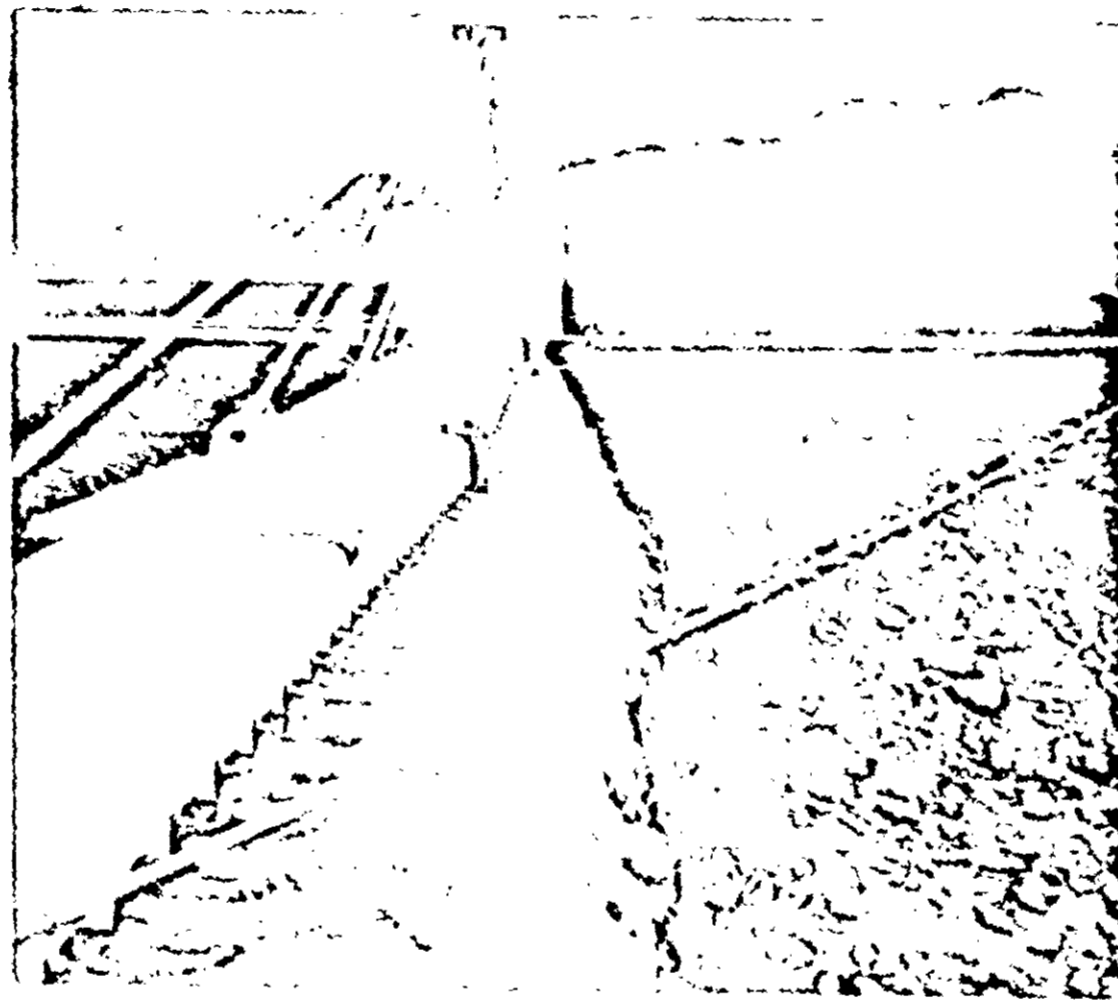
PRIMARY SETTLING TANK—Eliminates putrefaction on side walls—loosens grease build-up.



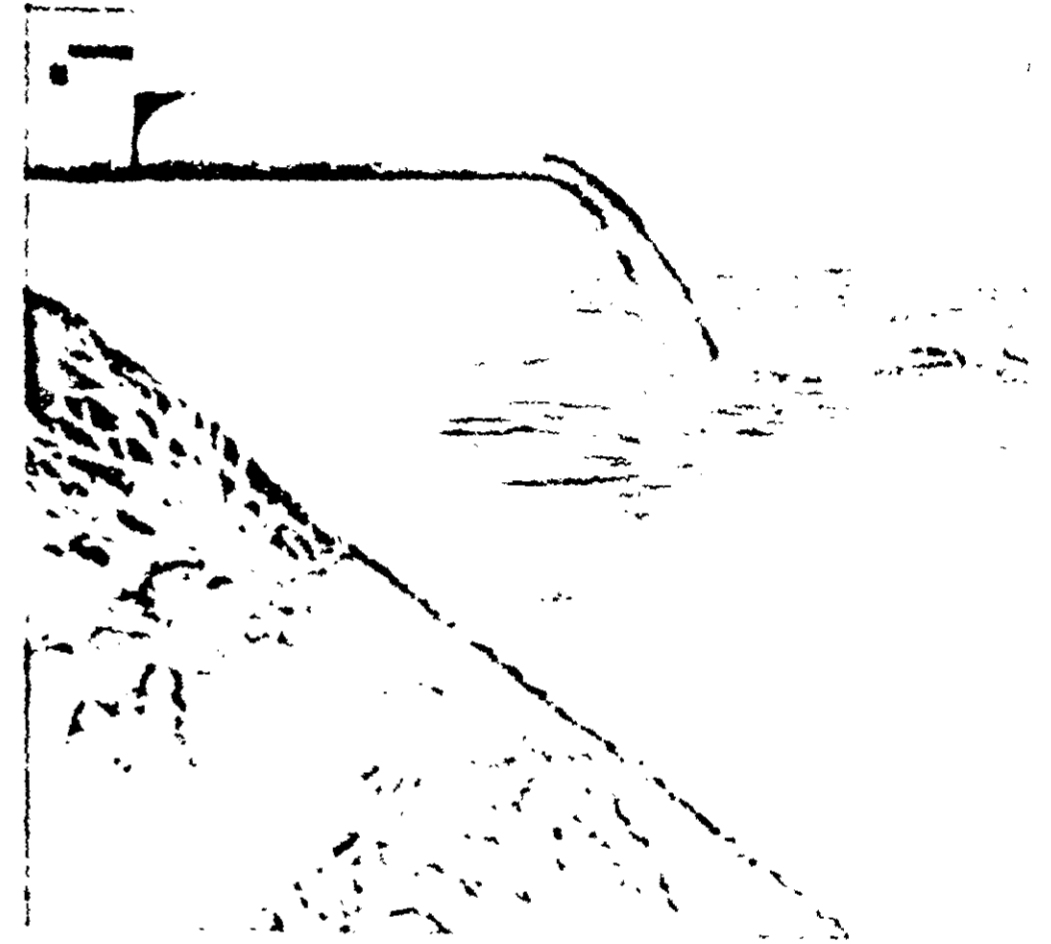
MAIN SEWAGE PUMPS, PIPES AND HANDLING EQUIPMENT—Grease build-up problem eliminated. Clean maintenance and down time are drastically reduced.



SLUDGE BED — Effective weapon against odors, insects, and maggots.



TRICKLING FILTERS — Removes excess slime buildup, reduces putrefaction on walls, and destroys psychoda larvae. High solventy reduces clogging in spray nozzles. Equally effective in high rate trickling filters.



AND IN LAGOONS — Prevents build-up of odor-producing gases and slime. Does not affect growth of oxygen-producing algae.

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Copy A

TRICKLING FILTERS - Removes
excessive slime build-up
and reduces putrefaction
on walls.

How low cost SOLVAY OZENE controls sewage grease and odor

Clogging grease build-up and a flood of odor complaints are serious sewage plant problems. A few parts per million of OZENE trickled into the system economically controls both problems. Results: vastly improved neighborhood relations and reduced plant maintenance...especially in plants where over capacity prevents thorough treatment or where low flow rates permit septicity to occur in laterals.

Active Grease Solvent

OZENE is a special formulation of chlorobenzenes and emulsifier. While chlorobenzenes are powerful solvents, they are not water soluble. OZENE's emulsifier allows dilution with water to any concentration. In solution OZENE successfully removes grease to keep the sewage system free flowing. It can save money too by substantially reducing maintenance. There is less cleaning of settling tanks, lines and equipment...~~reduced filter-fly nuisance and less scarifying of filter bed stones.~~

Masks Odors...and Attacks Source

Not only is OZENE pleasantly aromatic to mask bad odors, but it inhibits growth of micro-organisms that produce hydrogen sulfide. OZENE removes slimes and sludges, and delays septicity...conditions under which micro-organisms breed rapidly. However, normal treatment volume of OZENE (1-5 ppm) has no adverse effect on anaerobic digestion, aerobic oxidation or the efficiency of activated sludge.

Low Cost Application

Effective odor control is usually obtained with one or two parts OZENE per million of sewage. Using a standard 55-gallon drum, a dilute OZENE solution is trickled into the influent as far upstream as practical. Dosage is controlled by solution concentration and stopcock metering. In persistent trouble spots, such as sludge beds, trickling filters or bar screens additional low rate drip or spray applications are extremely beneficial.

METHOD OF MANUFACTURE

OZENE is prepared by blending a special end-stamped benzene with technical orthodichlorobenzene.

PHYSICAL PROPERTIES

There is some OZENE which is available from other sources, but the quality of this material is not as good as that of OZENE readily miscible with water while orthodichlorobenzene is not.

Some of its physical properties which differ from those of orthodichlorobenzene are listed below:

melting point	19.0
maximum stable temperature	
below which separation	
occurs	90 F
Physical form	dark brown clear liquid

QUALITY

SOLOVAY OZENE is prepared from high quality orthodichlorobenzene and every effort is expended to prepare a consistently uniform product.

PACKAGING DATA

Container	Grade	Approximate Net Wt. (Lbs.)	Approximate Capacity (Gal.)
1 Gall. Drum (ICC 11B) sample trip, 2 Gall. Drum No. 109	Technical	50	5
1 Gall. Drum (ICC 11B) sample trip, 6 Gall. Drum Nos. 131, 131D	Technical	500	50
Tank Car (ICC 103, ICC 103W)	Technical	60,000 80,000 100,000	6,000 8,000 10,000
Tank Truck	Technical		2,000 min.

SAMPLES

Samples of OZENE are available from the Sample Distribution Center of the Service Plant in one pint and quart sizes, top can. One gallon samples are also available, but Central Office authorization is required.

STORAGE AND HANDLING PRECAUTIONS

OZENE is non-corrosive to most metals, and can be handled safely in carbon mild steel equipment. Because it is a powerful solvent, the use of plastic or rubber material should be avoided unless they are specifically recommended for this service. Solvay offers assistance in the design of bulk storage and handling systems.

PACKAGING

5 gal. Cans • 55 Gall. Tots
55 Gall. Drums • 500 Gall. Tots
Tank Cars

**SAMPLES AND
TECHNICAL SERVICE
AVAILABLE**

*For additional information,
free samples or technical
service by an experienced
representative, contact
your local Solecity.*

Distributor or write to:



INDUSTRIAL CHEMICALS DIVISION
P.O. Box 70, Morristown, N.J. 07960

Branch Sales Offices:

Andover, Mass. • Atlanta • Bala Cynwyd, Pa.
Bridgeport • Buffalo • Charlotte • Chicago
Cincinnati • Cleveland • Denver • Detroit
Fairfield, Ala. • Houston • Jacksonville • Los
Angeles • Minneapolis • New Orleans • New York
Pittsburgh • River Rouge, Mich. • St. Louis
San Francisco • Seattle • Solway, N.Y.

**FOR
EFFECTIVE
ODOR
CONTROL**

