NEODECANOIC ACID

NEA

CAUTIONARY RESPONSE INFORMATION

Common Synonyms		
2,2-Dimethyl octanoic acid	Liquid	Colorless

Avoid contact with liquid and vapor.
Keep people away.
Wear protective clothing.
Call fire department.
Notify local health and pollution control agencies.
Protect water intakes.

Fire	Combustible. POISONOUS GASES MAY BE PRODUCED IN FIRE. Extinguish with dry chemical, alcohol foam, or CO_2 and/or water sprays. Use water spray to cool fire exposed surfaces and to protect personnel.
Exposure	CALL FOR MEDICAL AID. LIQUID OR SOLID Will burn skin and eyes. Harmful if swallowed. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, induce vomiting.
Water Pollution	Effect of low concentrations on aquatic life is unknown. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge
Dilute and disperse

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: 4; Organic acids.
2.2 Formula: $CH_3(CH_2)_5C(CH_3)_2COOH$
2.3 IMO/UN Designation: UN 1760
2.4 DOT ID No.: Not listed
2.5 CAS Registry No.: 26896-20-8
2.6 NAERG Guide No.: Not listed.
2.7 Standard Industrial Trade Classification: 51377

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: When contact is likely wear long sleeves, chemical resistant gloves, and chemical goggles. Where contact may occur wear safety glasses with side shields. Where overexposure by inhalation may occur, wear approved respirator.
3.2 Symptoms Following Exposure: Irritating to eyes and respiratory tract in high concentrations. May cause hair disorder or damage.
3.3 Treatment of Exposure: INHALATION: Use proper respiratory protection. Remove the victim from the exposure. Administer artificial respiration if breathing stops. Keep at rest. Call for prompt medical attention. INGESTION: If conscious, INDUCE VOMITING, get prompt medical attention. If unconscious, do not give anything by mouth. SKIN: Flush with large amount of water. Use soap if available. EYES: Immediately flush with large amounts of water. Get prompt medical attention.
3.4 TLV-TWA: Not listed.
3.5 TLV-STEL: Not listed.
3.6 TLV-Ceiling: Not listed.
3.7 Toxicity by Ingestion: Currently not available
3.8 Toxicity by Inhalation: Currently not available.
3.9 Chronic Toxicity: Currently not available
3.10 Vapor (Gas) Irritant Characteristics: Vapors/mists cause severe irritation of eyes and throat and can cause eye and lung injury. They cannot be tolerated even at low concentrations.
3.11 Liquid or Solid Characteristics: Severe skin irritant. Causes second and third degree burns on short contact and is very injurious to the eyes.
3.12 Odor Threshold: Currently not available
3.13 IDLH Value: Not listed.
3.14 OSHA PEL-TWA: Not listed.
3.15 OSHA PEL-STEL: Not listed.
3.16 OSHA PEL-Ceiling: Not listed.
3.17 EPA AEGL: Not listed

4. FIRE HAZARDS

4.1 Flash Point: 201°F C.C.
4.2 Flammable Limits in Air: Currently not available
4.3 Fire Extinguishing Agents: Water spray, alcohol foam or dry chemical.
4.4 Fire Extinguishing Agents Not to Be Used: Currently not available
4.5 Special Hazards of Combustion Products: Flammable toxic gas may be released, if thermally decomposed.
4.6 Behavior in Fire: Currently not available
4.7 Auto Ignition Temperature: Currently not available
4.8 Electrical Hazards: Currently not available
4.9 Burning Rate: Currently not available
4.10 Adiabatic Flame Temperature: Currently not available
4.11 Stoichometric Air to Fuel Ratio: 66.6 (calc.)
4.12 Flame Temperature: Currently not available
4.13 Combustion Molar Ratio (Reactant to Product): 20.0 (calc.)
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: No reaction
5.2 Reactivity with Common Materials: May corrode metals.
5.3 Stability During Transport: Stable
5.4 Neutralizing Agents for Acids and Caustics: Sodium bicarbonate or lime.
5.5 Polymerization: Will not occur
5.6 Inhibitor of Polymerization: Not pertinent.

6. WATER POLLUTION

6.1 Aquatic Toxicity: Currently not available
6.2 Waterfowl Toxicity: Currently not available
6.3 Biological Oxygen Demand (BOD): Currently not available
6.4 Food Chain Concentration Potential: Currently not available
6.5 GESAMP Hazard Profile:
Bioaccumulation: 0
Damage to living resources: 2
Human Oral hazard: 1
Human Contact hazard: II
Reduction of amenities: XX

7. SHIPPING INFORMATION

7.1 Grades of Purity: 79-100%
7.2 Storage Temperature: Ambient
7.3 Inert Atmosphere: No requirement
7.4 Venting: Open
7.5 IMO Pollution Category: C
7.6 Ship Type: 2
7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Not listed.
8.2 49 CFR Class: Not pertinent.
8.3 49 CFR Package Group: Not listed.
8.4 Marine Pollutant: No
8.5 NFPA Hazard Classification: Not listed
8.6 EPA Reportable Quantity: Not listed.
8.7 EPA Pollution Category: Not listed.
8.8 RCRA Waste Number: Not listed
8.9 EPA FWPCA List: Not listed

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15° C and 1 atm: Liquid
9.2 Molecular Weight: 172.27
9.3 Boiling Point at 1 atm: 482-494°F = 250-256.7°C = 523.2-529.9°K
9.4 Freezing Point: <104°F = <40°C = <313.2°K
9.5 Critical Temperature: Currently not available
9.6 Critical Pressure: Currently not available
9.7 Specific Gravity: 0.92
9.8 Liquid Surface Tension: Currently not available
9.9 Liquid Water Interfacial Tension: Currently not available
9.10 Vapor (Gas) Specific Gravity: 6.0
9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available
9.12 Latent Heat of Vaporization: Currently not available
9.13 Heat of Combustion: Currently not available
9.14 Heat of Decomposition: Currently not available
9.15 Heat of Solution: Currently not available
9.16 Heat of Polymerization: Currently not available
9.17 Heat of Fusion: Currently not available
9.18 Limiting Value: Currently not available
9.19 Reid Vapor Pressure: Currently not available

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE		CURRENTLY NOT AVAILABLE	68	35.800

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
	NEGLIGIBLE	284 367	0.276 1.929		CURRENTLY NOT AVAILABLE	0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600	0.313 0.327 0.341 0.355 0.369 0.382 0.395 0.407 0.420 0.432 0.444 0.456 0.467 0.478 0.489 0.500 0.510 0.521 0.531 0.540 0.550 0.559 0.569 0.578 0.586