SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Naphthalene Flakes
CAS number	91-20-3
Synonyms	N/A

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

Identified uses	Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable solids : Category 2
Carcinogenicity : Category 2
Short-term (acute) aquatic hazard : Category 1
Long-term (chronic) aquatic hazard : Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Warning

Hazard statements:
H228 Flammable solid.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection and face protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391 Collect spillage.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Naphthalene	-	91-20-3	>=98%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice Show this safety data sheet to the doctor in attendance.

If inhaled After inhalation: fresh air. Call in physician.

In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water, Foam, Carbon dioxide (CO2), Dry powder.

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

5.2 Specific hazards arising from the substance or mixture
Combustible.
Vapours are heavier than air and may spread along floors.
Forms explosive mixtures with air on intense heating.
Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Special protective equipment and precautions for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

5.4 Further information

Flash Point 173.3 °F / 78.5 °C (990 hPa)

Autoignition Temperature 979 °F / 526 °C

Explosion limits

Upper	5.9 %(V)
Lower	0.9 %(V)

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	2	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel:
Avoid inhalation of dusts.
Avoid substance contact.
Ensure adequate ventilation.
Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
Advice for emergency responders:
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Tightly closed. Keep away from heat and sources of ignition. Recommended storage temperature see product label.

Incompatibilities
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Naphthalene	TWA	10 ppm 50 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Naphthalene	TWA	10 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Naphthalene	TWA	10 ppm 50 mg/m3
	ST	15 ppm 75 mg/m3

Biological occupational exposure limits
No information available.

8.2 Exposure controls

Appropriate engineering controls
No data available.

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Wear safety glasses.

Skin protection
Nitrile Rubber gloves.

Body Protection
Flame retardant antistatic protective clothing.

Respiratory protection
Required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure
Do not allow product to enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Flake/granule solid
Appearance	White
Odor	Aromatic

Odor Threshold	No data available
pH	No data available
Melting Point/Range	176 - 180 °F / 80 - 82 °C
Boiling Point/Range	424 °F / 218 °C
Evaporation Rate	No data available
Flammability (solid)	Flammable solid, category 2
Flammability or explosive limit	
Upper	5.9 %(V)
Lower	0.9 %(V)
Vapor Pressure	0.072 hPa (68 °F / 20 °C)
Vapor Density	No data available
Density	1.08 g/cm3 (76.5 °F / 24.7 °C)
Solubility	0.0308 g/l slightly soluble in water (77 °F / 25 °C) pH: 7 - 7.5
Partition coefficient; n-octanol/water	log Pow: 3.4 (77 °F / 25 °C) pH: 7 - 7.5
Autoignition Temp	979 °F / 526 °C
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	C10H8
Molecular Weight	127.18
VOC Content(%)	No data available
Oxidizing properties	None.

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reactions possible with:
Oxidizing agents
chromium(VI) oxide
benzoyl chloride
aluminium chloride
Risk of explosion with:
nitrogen oxides

10.4 Conditions to avoid

Heat, flames and sparks.
Strong heating.

10.5 Incompatible materials
No data available.

10.6 Hazardous decomposition products
In the event of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Naphthalene	-	Rabbit - 20,000 mg/kg	Rat - male and female - 4 h - > 0.4 mg/l

Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation - 24 h

Serious eye damage/eye irritation
Eyes - Rabbit
Result: No eye irritation - 24 h

Respiratory or skin sensitization
Maximisation Test - Guinea pig
Result: negative

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster ovary cells
Metabolic activation: Metabolic activation
Method: OECD Test Guideline 473
Result: positive

Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat
Cell type: Liver cells
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

Test Type: Micronucleus test
Species: Mouse
Cell type: Bone marrow
Application Route: Intraperitoneal
Method: US-EPA
Result: negative

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Naphthalene	91-20-3	2B	RAHC	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Reproductive toxicity

No data available.

Chronic effects

No data available.

11.2 Additional Information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.6 mg/l

End point: mortality
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.16 mg/l

End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 2.96 mg/l

Exposure time: 4 h
Test Type: static test
Analytical monitoring: yes
Method: US-EPA

Toxicity to fish (Chronic toxicity) : LC50 (Oncorhynchus kisutch (coho salmon)): 2.1 mg/l

End point: mortality
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus kisutch (coho salmon)): 0.37 mg/l

End point: Growth inhibition
Exposure time: 40 Days
Test Type: flow-through test
Analytical monitoring: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia pulex (Water flea)): 0.59 mg/l

End point: mortality
Exposure time: 125 d
Test Type: static test
Analytical monitoring: yes

12.2 Persistence and degradability

aerobic
Inoculum: activated sludge, non-adapted
Concentration: 100 mg/l
Result: Not readily biodegradable.
Biodegradation: 2 %
Exposure time: 28 d
Method: OECD Test Guideline 302C

12.3 Bio accumulative potential

Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 36.5 - 168
Exposure time: 56 d
Temperature: 77 °F / 25 °C
Method: OECD Test Guideline 305
Remarks: Bioaccumulation is unlikely.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

DOT (US)

UN Number	UN 1334
Proper Shipping name	Naphthalene, refined
Hazard Class	4.1
Packaging Group	III

IMDG

UN Number	UN 1334
Proper Shipping name	NAPHTHALENE, REFINED
Hazard Class	4.1
Packaging Group	III

IATA

UN Number	UN 1334
Proper Shipping name	Naphthalene, refined
Hazard Class	4.1
Packaging Group	III

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Naphthalene, 91-20-3: 100 lb RQ

SARA 304 Emergency release notification
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313 (TRI reporting)
Not listed.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Naphthalene 91-20-3 >= 90 - <= 100 %

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not listed.

Safe Drinking Water Act
Naphthalene 91-20-3 >= 90 - <= 100 %

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List
Naphthalene, 91-20-3.

US. New Jersey Worker and Community Right-to-Know Act

Naphthalene, 91-20-3.

US. Pennsylvania Worker and Community Right-to-Know Law
Naphthalene, 91-20-3.

California Proposition 65
Naphthalene, 91-20-3, cancer.

SECTION 16: Other information

Date of Issue: 6/4/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.