SAFETY DATA SHEET

Version 3.10 Revision Date 11/24/2015 Print Date 02/08/2016

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : ASTM® D5134 Qualitative Reference Naphtha

Standard

Product Number : 48265-U Brand : Supelco

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 1), H224 Germ cell mutagenicity (Category 1B), H340 Carcinogenicity (Category 1A), H350 Aspiration hazard (Category 1), H304

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H224 Extremely flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.

H340 May cause genetic defects. H350 May cause cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

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P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. P242 P243 Take precautionary measures against static discharge. P280 Wear protective gloves/ protective clothing/ eye protection/ face P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P331 Do NOT induce vomiting. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Component		Classification	Concentration	
Low boiling point naphtha	A complex			
CAS-No. EC-No. Index-No.	64741-42-0 265-042-6 649-265-00-X	Carc. 1B; Asp. Tox. 1; H304, H350	>= 90 - <= 100 %	
Benzene				
CAS-No. EC-No. Index-No. Registration number	71-43-2 200-753-7 601-020-00-8 01-2119447106-44-XXXX	Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2A; Muta. 1B; Carc. 1A; STOT RE 1; Asp. Tox. 1; Aquatic Acute 3; Aquatic Chronic 3; H225, H304, H315, H319, H340, H350, H372, H412	>= 0.1 - < 1 %	

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

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4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

6.2

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Low boiling point naphtha A complex	64741-42-0	TWA	500.000000 ppm 2,000.000000 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
	Remarks	The value in mg/m3 is approximate.		
Benzene	71-43-2	TWA	0.5 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Leukemia	3	

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(see BEK Confirme	Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed human carcinogen Danger of cutaneous absorption		
STEL	2.5 ppm	USA. ACGIH Threshold Limit Values (TLV)	
Substand (see BEK Confirme	Leukemia Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed human carcinogen Danger of cutaneous absorption		
TWA	10 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2	
Z37.40-1	Z37.40-1969		
CEIL	25 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2	
Z37.40-1	Z37.40-1969		
Peak	50 ppm	USA. Occupational Exposure Limits (OSHA) - Table Z-2	
Z37.40-1	Z37.40-1969		
operation The final exposure exposure and sale oil and ga percentag subsegme	s or sectors exclubenzene standards to benzene exclusion fuels, sealed coast drilling and proge exclusion for licents, the benzene	2.7-2 for the limits applicable in the ided in 1910.1028 applies to all occupational ept some subsegments of industry where under the action level (i.e., distribution ontainers and pipelines, coke production, duction, natural gas processing, and the quid mixtures); for the excepted a limits in Table Z-2 apply.	
TWA	0.1 ppm	USA. NIOSH Recommended Exposure Limits	
	Potential Occupational Carcinogen See Appendix A		
ST	1 ppm	USA. NIOSH Recommended Exposure Limits	
Potential See Appe	Occupational Car endix A		

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
Benzene	71-43-2	S- Phenylmerca pturic acid	0.0300 mg/g	In urine	ACGIH - Biological Exposure Indices (BEI)
	Remarks	End of shift (A	s soon as p	possible after expo	sure ceases)
		t,t-Muconic acid	0.5000 mg/g	In urine	ACGIH - Biological Exposure Indices (BEI)
		End of shift (As soon as possible after exposure ceases)			

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

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

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Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

7. 1	11111	offilation of basic	priysical and chemical properi		
	a)	Appearance	Form: clear, liquid		

Form: clear, liquid Colour: colourless

b) Odour No data available

No data available c) Odour Threshold

d) pH No data available

e) Melting point/freezing No data available

-16 °C (3 °F) at 1,013 hPa (760 mmHg) Initial boiling point and boiling range

g) Flash point 21 °C (70 °F)

h) Evaporation rate No data available

Flammability (solid, gas) No data available (i)

Upper/lower flammability or explosive limits No data available

k) Vapour pressure 667 hPa (500 mmHg) at 25 °C (77 °F)

No data available Vapour density m) Relative density No data available n) Water solubility No data available

o) Partition coefficient: noctanol/water

No data available

Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

No data available Viscosity r)

Explosive properties No data available No data available Oxidizing properties

9.2 Other safety information

No data available

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