SAFETY DATA SHEET

Preparation Date: 2/5/2014 **Revision Date:** 10/10/2018 **Revision Number:** G3

1. IDENTIFICATION

Product identifier

Product code: H1005
Product Name: HEPTANE, REAGENT

Other means of identification
Synonyms: Dipropyl methane
Gettysolve-C
Heptane
Heptyl hydride
Heptano (Spanish)
CAS #: 142-82-5
RTECS # MI7700000
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: Solvent. In organic synthesis.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable liquids	Category 2

Label elements

Danger

Hazard statements
Causes skin irritation

Causes eye irritation
May cause respiratory irritation. May cause drowsiness or dizziness
May be fatal if swallowed and enters airways
Highly flammable liquid and vapor

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Very toxic to aquatic life with long lasting effects
Very toxic to aquatic life
May be harmful in contact with skin

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/.../equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response

In case of fire: Use CO2, dry chemical, or foam to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
n-Heptane	142-82-5	100

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms

Causes skin irritation
Moderate skin irritation
Causes eye irritation
Mild eye irritation
Irritating to respiratory system
Central nervous system effects
May cause nausea, headache, vomiting
Headache
Inhalation of vapors may cause dizziness or suffocation
Dyspnea (Shortness of breath and difficulty breathing)

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO_2). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide.

Specific hazards: Flammable. May be ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Fire may produce irritating, corrosive and/or toxic gases.

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice
Wear personal protective equipment. Use only in well-ventilated areas. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:
Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
n-Heptane	142-82-5	500 ppm TWA 2000 mg/m³ TWA	85 ppm TWA 350 mg/m³ TWA 440 ppm Ceiling 15 min 1800 mg/m³ Ceiling 15 min	500 ppm STEL 400 ppm TWA	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
n-Heptane	142-82-5	400 ppm TWA 1640 mg/m³ TWA 500 ppm STEL 2050 mg/m³ STEL	400 ppm TWA 500 ppm STEL	500 ppm STEL	400 ppm TWAEV 1640 mg/m³ TWAEV 500 ppm STEV 1640 mg/m³ STEV

Australia and Mexico

Components	CAS-No.	Australia	Mexico
n-Heptane	142-82-5	500 ppm STEL 2050 mg/m³ STEL 400 ppm TWA 1640 mg/m³ TWA	400 ppm TWA 1600 mg/m³ TWA 500 ppm STEL 2000 mg/m³ STEL

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles

Skin and body protection: Chemical resistant apron
Long sleeved clothing
Gloves

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Liquid

Appearance:
No information available.

Color:
Clear. Colorless.

Odor:
Gasoline-like.

Taste
No information available.

Formula:
C7-H16

Molecular/Formula weight (g/mole): 100.20	**Flammability:** No information available	**Flash point (°C):** -4
Flashpoint (°C/°F): -4.°C/25 °F -1 °C/30 °F	**Flash Point Tested according to:** Closed cup Open cup	**Autoignition Temperature (°C/°F):** 204-285 °C/399-545 °F
Lower Explosion Limit (%): 1.05%	**Upper Explosion Limit (%):** 6.7%	**Melting point/range(°C/°F):** -90.7 °C/-131.3 °F
Decomposition temperature(°C/°F): No information available	**Boiling point/range(°C/°F):** 98.4 °C/209.1 °F	**Bulk density:** No information available
Density (g/cm3): No information available	**Specific gravity:** 0.6838	**pH:** No information available
Vapor pressure @ 20°C (kPa): 5.3 @ 22.3 °C	**Evaporation rate:** No information available	**Vapor density:** 3.5
VOC content (g/L): 684	**Odor threshold (ppm):** No information available	**Partition coefficient (n-octanol/water):** 4.66
Viscosity: No information available	**Miscibility:** Miscible with Ether Miscible with Acetone Miscible with Benzene Miscible with Chloroform Miscible with Petroleum Ether	**Solubility:** Insoluble in water Soluble in Carbon tetrachloride Very soluble in Ethanol

10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents
Violent reaction with phosphorus + chlorine

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials.

Incompatible Materials: Oxidizing agents

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. When heated to decomposition it emits acrid smoke and irritating fumes.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Skin. Eyes. Inhalation.

Acute Toxicity

Component Information

n-Heptane	
CAS-No.	142-82-5

LD50/oral/rat = No information available
LD50/oral/mouse = 5000 mg/kg Oral LD50 Mouse
LD50/dermal/rabbit = 3000 mg/kg Dermal LD50Rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = 103 g/m^3 Inhalation LC50 Rat 4 h
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 17000 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 5000 mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = 3000 mg/kg

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = 103000 (4-hr) mg/m^3
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Irritating to skin. Moderate skin irritation.

Eye Contact: Causes eye irritation. Mild eye irritation.

Inhalation Irritating to respiratory system. Inhalation of high concentrations of vapors may cause dizziness or suffocation. May cause nausea and headache. May cause loss of appetite. May affect behavior/central nervous system (cheerfulness followed by central nervous system depression, somnolence, loss of judgement, hallucinations, convulsions, lightheadedness, weakness, lassitude, incoordination, stupor, coma). May affect the cardiovascular system (cardiac arrhythmias).

Ingestion Causes digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting. May cause abdominal pain. May cause abdominal distension. Aspiration hazard if swallowed. Aspiration into the lungs can cause chemical pneumonitis.

Aspiration hazard Aspiration hazard. May be fatal if swallowed and enters airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged skin contact may defat the skin and produce dermatitis. Prolonged or repeated ingestion may affect the bladder. Prolonged or repeated ingestion may affect the blood (changes in serum composition). Prolonged or repeated ingestion may affect the liver. Prolonged or repeated ingestion may cause hypoglycemia. Prolonged or repeated ingestion may cause loss of appetite. Prolonged or repeated inhalation may cause loss of appetite. Prolonged or repeated inhalation may cause difficulty breathing, shortness of breath. Prolonged or repeated inhalation may affect the liver. Prolonged or repeated inhalation may affect the peripheral nervous system (weakness, peripheral neuropathy with paresthesia - a tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles) generally of the hands and feet (extremities)). Prolonged or repeated inhalation may affect the blood (anemia, leukopenia, neutropenia). Prolonged or repeated inhalation may affect the brain. Prolonged or repeated inhalation may cause central nervous system effects.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
n-Heptane	142-82-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure Respiratory system. central nervous system.
STOT - repeated exposure No information available.
Target Organs: Central nervous system. Peripheral nervous system. Skin. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

n-Heptane - 142-82-5
Freshwater Fish Species Data: 375.0 mg/L LC50 Cichlid fish 96 h 1
Water Flea Data: 10 mg/L EC50 Daphnia magna 24 h

Persistence and degradability: No information available

Bioaccumulative potential: Potential for bioconcentration in aquatic organisms is high.

Mobility: It is expected to have a moderate mobility in soil based upon estimated Koc.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
n-Heptane	142-82-5	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	UN1206
Proper Shipping Name:	Heptanes
Hazard Class:	3
Subsidiary Class	No information available
Packing group:	II
Emergency Response Guide Number	128
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	IB2, T4, TP2
Symbol(s):	No information available
Description:	UN1206,Heptanes ,3,,PG II UN1206, Heptanes, 3, II

TDG (Canada)

UN-No:	UN1206
Proper Shipping Name:	Heptanes
Hazard Class:	3
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No Information available
Description:	HEPTANES,3,UN1206,PG II UN1206, Heptanes, 3, II

ADR

UN-No:	UN1206
Proper Shipping Name:	Heptanes
Hazard Class:	3
Packing Group:	II
Subsidiary Risk:	No information available
Description:	UN1206 Heptanes,3,II UN1206, Heptanes, 3, II, ENVIRONMENTALLY HAZARDOUS

IMO / IMDG

UN-No:	UN1206
Proper Shipping Name:	Heptanes
Hazard Class:	3
Subsidiary Risk:	No information available

Packing Group: II
Marine Pollutant No information available
EMS: F-E
Description UN1206, Heptanes, 3, II, Marine pollutant

RID

UN-No: UN1206
Proper Shipping Name: Heptanes
Hazard Class: 3
Subsidiary Risk: 3
Packing Group: II
Description: UN1206 Heptanes,3,II,RID UN1206, Heptanes, 3, II, ENVIRONMENTALLY HAZARDOUS

ICAO

UN-No: UN1206
Proper Shipping Name: Heptanes
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: Heptanes,3,UN1206,PG II
UN1206, Heptanes, 3, II

IATA

UN-No: UN1206
Proper Shipping Name: Heptanes
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 3H
Special Provisions No information available
Description: UN1206,Heptanes,3,PG II
UN1206, Heptanes, 3, II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
n-Heptane	142-82-5	PresentACTIVE	Present KE-18271	Present	Present (2)-7	Present	Present	Present 205-563-8

U.S. Regulations

n-Heptane

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1339
Pennsylvania RTK: Present
Minnesota - Hazardous Substance List: Present
California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male	Female

				Reproductive Toxicity	Reproductive Toxicity:
n-Heptane	142-82-5	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
n-Heptane	142-82-5	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
n-Heptane	142-82-5	Not Applicable	01/26/199406/30/1998

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: .

Component
n-Heptane
142-82-5 (100)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Skin corrosion/irritation - Category 2: H315 Causes skin irritation.; Specific target organ toxicity - Single exposure - Category 3: H336 May cause drowsiness or dizziness.; Aspiration hazard - Category 1: H304 May be fatal if swallowed and enters airways.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

Components	WHMIS Ingredient Disclosure List -
n-Heptane	1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
n-Heptane	142-82-5	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
n-Heptane	142-82-5	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
n-Heptane	142-82-5	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
n-Heptane	142-82-5	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.; Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation.; Specific target organ toxicity - Single exposure - STOT SE 3: H336 May cause

		drowsiness or dizziness.; Aspiration hazard - Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.; Hazardous to aquatic environment - acute hazard - Aquatic Acute 1: H400 Very toxic to aquatic life.; Hazardous to aquatic environment - chronic hazard - Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects.601-008-00-2

EU - CLP (1272/2008)

R-phrase(s)
R11 - Highly flammable.
R38 - Irritating to skin.
R65 - Harmful: may cause lung damage if swallowed.
R67 - Vapors may cause drowsiness and diziness.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S -phrase(s)
S 9 - Keep container in a well-ventilated place.
S16 - Keep away from sources of ignition - No smoking.
S29 - Do not empty into drains.
S33 - Take precautionary measures against static discharges.
S60 - This material and its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.
S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Components	CAS-No.	**Classification**	**Concentration Limits:**	**Safety Phrases**
n-Heptane	142-82-5	F; R11 Xi; R38 N; R50-53 Xn; R65 R67	No information	S2 S9 S16 S29 S33 S60 S61 S62

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
F - Highly flammable.
Xi - Irritant.
Xn - Harmful.
N - Dangerous for the environment.

16. OTHER INFORMATION

Preparation Date: 2/5/2014
Revision Date: 10/10/2018
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet